A Case Study of the Evolution of Ophthalmic Nurse Practitioner (as an instance of Advanced Practice Nursing) Roles in Palestine

Ahmad Ma’ali, RN, BSN, MPH.

Submitted in Partial Fulfilment of the requirements of the award of

DOCTOR OF PHILOSOPHY

DE MONTFORT UNIVERSITY

Thesis

Abstract

Ahmad Ma’ali

A Case Study of the Evolution of Ophthalmic Nurse Practitioner (as an instance of Advanced Practice Nursing) Roles in Palestine.

This thesis investigated the evolution of the Ophthalmic Nurse Practitioner (ONP) role in Palestine. The study aimed to explore and explain how and why the ONP role developed and what were the contextual factors that both hindered and or facilitated this role development. It also aimed to explore the possibility of transferring similar roles to other health care settings in Palestine.

A qualitative approach was used to answer the research questions based on the principles of constructivism with qualitative case study methodology to collect and analyze multiple sources of data. This qualitative research employed three data collection methods, a) focus group, b) individual interviews and c) reviewing and analyzing health care policy, historical and official documents.

Advanced practice nursing roles development globally with emphasis on two countries (the USA and UK) was critical analyzed. This included rationale for role development in addition to contextual factors that facilitated and or hindered such development.

Four themes emerged that explain why and how the ONP role developed as well as its impact. Three themes explained how and why ad hoc nursing roles developed in an accident and emergency setting. A conceptual framework was developed to guide the introduction of future roles within in the Palestinian health care system. The framework identifies the key conditions and pre-requisites for the potential introduction and development of APN in other health care settings in Palestine as well as factors which are able to frustrate and or facilitate such development.

This study confirms the existing international body of knowledge that APN roles development is a complex phenomenon that is contextually based. The research provides operational information for the future introduction of APN roles in Palestine. This builds on previous work and takes debate in the field further to include countries with complex environmental and contextual settings. This contribution in itself provides the basis for further research to validate the proposed conceptual framework.
List of contents

Abstract
List of tables
List of figures
List of appendices
Abbreviations
Author declaration
Acknowledgement

Chapter one : Introduction

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Introduction</td>
<td>16</td>
</tr>
<tr>
<td>1.2</td>
<td>Key concepts</td>
<td>17</td>
</tr>
<tr>
<td>1.3</td>
<td>The development of the ONP role in Jerusalem</td>
<td>21</td>
</tr>
<tr>
<td>1.4</td>
<td>Personal reflection</td>
<td>28</td>
</tr>
<tr>
<td>1.5</td>
<td>Research aim</td>
<td>32</td>
</tr>
<tr>
<td>1.6</td>
<td>Thesis structure</td>
<td>33</td>
</tr>
<tr>
<td>1.7</td>
<td>Conclusion</td>
<td>35</td>
</tr>
</tbody>
</table>

Chapter two Advanced Practice Nursing

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Introduction</td>
<td>36</td>
</tr>
<tr>
<td>2.2</td>
<td>Literature review strategy</td>
<td>37</td>
</tr>
<tr>
<td>2.3</td>
<td>Definitions</td>
<td>39</td>
</tr>
<tr>
<td>2.4</td>
<td>Development of APN in the USA</td>
<td>40</td>
</tr>
<tr>
<td>2.5</td>
<td>The UK experience</td>
<td>44</td>
</tr>
<tr>
<td>2.6</td>
<td>APN context</td>
<td>49</td>
</tr>
<tr>
<td>2.7</td>
<td>Factors influencing the development of APN globally</td>
<td>55</td>
</tr>
<tr>
<td>2.7.1</td>
<td>APN terminology confusion</td>
<td>55</td>
</tr>
<tr>
<td>2.7.2</td>
<td>Role purpose and scope of practice</td>
<td>60</td>
</tr>
<tr>
<td>2.7.3</td>
<td>Role conflict</td>
<td>61</td>
</tr>
<tr>
<td>2.7.4</td>
<td>Stakeholders’ acceptance of the role</td>
<td>65</td>
</tr>
<tr>
<td>2.7.5</td>
<td>Role value</td>
<td>67</td>
</tr>
<tr>
<td>2.7.5.1</td>
<td>The value of the ONP role</td>
<td>69</td>
</tr>
<tr>
<td>2.7.6</td>
<td>Managing environmental factors</td>
<td>70</td>
</tr>
<tr>
<td>2.8</td>
<td>Models of APN</td>
<td>73</td>
</tr>
<tr>
<td>2.9</td>
<td>APN in developing countries</td>
<td>76</td>
</tr>
<tr>
<td>2.10</td>
<td>Need for future research</td>
<td>81</td>
</tr>
<tr>
<td>2.11</td>
<td>Conclusion</td>
<td>81</td>
</tr>
</tbody>
</table>

Chapter three Choosing a research paradigm and strategy
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>83</td>
</tr>
<tr>
<td>3.2</td>
<td>Choosing and inquiry paradigm</td>
<td>84</td>
</tr>
<tr>
<td>3.3</td>
<td>Choosing a methodology</td>
<td>93</td>
</tr>
<tr>
<td>3.4</td>
<td>Case study as a research methodology</td>
<td>100</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Types of case study</td>
<td>102</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Generalizing from case study</td>
<td>104</td>
</tr>
<tr>
<td>3.5</td>
<td>Research design and methods</td>
<td>106</td>
</tr>
<tr>
<td>3.5.1</td>
<td>Research aim</td>
<td>107</td>
</tr>
<tr>
<td>3.5.2</td>
<td>Research questions</td>
<td>107</td>
</tr>
<tr>
<td>3.5.3</td>
<td>Defining the case</td>
<td>108</td>
</tr>
<tr>
<td>3.5.4</td>
<td>Defining the unit of analysis</td>
<td>109</td>
</tr>
<tr>
<td>3.5.5</td>
<td>Methods</td>
<td>110</td>
</tr>
<tr>
<td>3.5.6</td>
<td>Data collection</td>
<td>111</td>
</tr>
<tr>
<td>3.5.6.1</td>
<td>Focus group</td>
<td>114</td>
</tr>
<tr>
<td>3.5.6.2</td>
<td>Individual interviews</td>
<td>115</td>
</tr>
<tr>
<td>3.5.7</td>
<td>Reflection on data collection</td>
<td>117</td>
</tr>
<tr>
<td>3.5.8</td>
<td>Expanding data collection</td>
<td>120</td>
</tr>
<tr>
<td>3.5.9</td>
<td>Sampling</td>
<td>122</td>
</tr>
<tr>
<td>3.5.10</td>
<td>Research environment</td>
<td>124</td>
</tr>
<tr>
<td>3.5.11</td>
<td>Data analysis</td>
<td>125</td>
</tr>
<tr>
<td>3.5.11.1</td>
<td>Using thematic analysis</td>
<td>126</td>
</tr>
<tr>
<td>3.5.12</td>
<td>Situation and policy analysis of the PHC system</td>
<td>134</td>
</tr>
<tr>
<td>3.5.13</td>
<td>Maintain rigor</td>
<td>137</td>
</tr>
<tr>
<td>3.5.14</td>
<td>Researcher's role</td>
<td>139</td>
</tr>
<tr>
<td>3.5.15</td>
<td>Ethical considerations</td>
<td>139</td>
</tr>
<tr>
<td>3.5.16</td>
<td>Reporting the results</td>
<td>142</td>
</tr>
<tr>
<td>3.6</td>
<td>Conclusion</td>
<td>143</td>
</tr>
</tbody>
</table>

**Chapter four**

**Palestinian health care system**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>145</td>
</tr>
<tr>
<td>4.2</td>
<td>Contextual and policy analysis</td>
<td>146</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Values of policy analysis</td>
<td>146</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Contextual background</td>
<td>152</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Historical and political perspectives</td>
<td>152</td>
</tr>
<tr>
<td>4.2.4</td>
<td>The economic situation</td>
<td>155</td>
</tr>
<tr>
<td>4.2.5</td>
<td>Social and demographic characteristics</td>
<td>157</td>
</tr>
<tr>
<td>4.3</td>
<td>Health status of the Palestinians</td>
<td>158</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Disease patterns</td>
<td>160</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Non communicable diseases</td>
<td>161</td>
</tr>
<tr>
<td>4.4</td>
<td>Structure of the health care system</td>
<td>163</td>
</tr>
<tr>
<td>4.4.1</td>
<td>Health care provisions and governance</td>
<td>166</td>
</tr>
<tr>
<td>4.4.2</td>
<td>Financing and expenditure of the health care system</td>
<td>169</td>
</tr>
<tr>
<td>4.4.3</td>
<td>Health insurance</td>
<td>170</td>
</tr>
<tr>
<td>4.4.4</td>
<td>Health care workforce</td>
<td>170</td>
</tr>
<tr>
<td>4.4.5</td>
<td>Challenges facing the health care system</td>
<td>173</td>
</tr>
<tr>
<td>4.4.6</td>
<td>Nursing in Palestine</td>
<td>177</td>
</tr>
<tr>
<td>4.4.6.1</td>
<td>The development of ONPs role</td>
<td>179</td>
</tr>
<tr>
<td>4.5</td>
<td>Conclusion</td>
<td>183</td>
</tr>
</tbody>
</table>

**Chapter five**

**Development of the ONP role**

| 5.1 | Introduction | 184 |
| 5.2 | Participants and their practice environment | 185 |
| 5.3 | Interviewing other stakeholders | 190 |
| 5.4 | Analysis of data | 190 |
| 5.5 | Rationale for role development | 193 |
| 5.5.1 | Perceived increase in eye care demand | 193 |
| 5.5.2 | Advancing nursing roles | 196 |
| 5.5.3 | Learning from experience elsewhere | 198 |
| 5.6 | Facilitating factors | 202 |
| 5.6.1 | Support during role transfer | 203 |
| 5.6.2 | Support during training | 204 |
| 5.6.3 | Environmental support | 207 |
| 5.6.4 | Personal characteristics of ONPs | 208 |
| 5.6.5 | Role acceptance by stakeholders | 210 |
| 5.7 | Challenges for role development | 212 |
| 5.7.1 | Role regulation | 214 |
| 5.7.2 | Role confusion | 220 |
| 5.7.3 | Resistance | 222 |
| 5.8 | ONPs’ role impact | 228 |
| 5.8.1 | Holistic care | 229 |
| 5.8.2 | Quality care | 230 |
| 5.8.3 | Collaborative care | 233 |
| 5.8.4 | Nurse-led services | 235 |
| 5.8.5 | Advanced nursing status | 236 |
Chapter six  
**Ad hoc advanced nursing roles**

6.1 Introduction  
6.2 Participants and their practice setting  
6.3 Analysis of data  
6.4 Ad hoc substitution  
6.4.1 Learning on the job  
6.4.2 Confused accountability  
6.4.3 Response to increased workload  
6.5 Support and resistance  
6.5.1 Doctors’ ambivalent attitudes  
6.5.2 Organizational flaccidity  
6.6 Nurses’ motivation  
6.8 Conclusion

Chapter seven  
**A conceptual framework for the introduction of APN roles in Palestine**

7.1 Introduction  
7.2 Conceptual framework  
7.2.1 Elements of the conceptual framework  
7.2.2 Prepositions of the conceptual framework  
7.3 Other conceptual frameworks and models  
7.4 Assessing the need for APN roles  
7.4.1 Assessing the population health care needs  
7.4.2 APN role introduction rationale  
7.5 Planning the introduction of APN roles  
7.5.1 Identification of stakeholders  
7.5.2 Advocacy group  
7.5.3 Health care culture  
7.5.4 Education for APN roles  
7.5.5 Regulation  
7.6 Implementing APN roles  
7.7 Outcome of APN roles  
7.7.1 Patient/ population outcomes  
7.7.2 Nursing profession outcomes  
7.7.3 Health care system outcomes
<table>
<thead>
<tr>
<th>Section No.</th>
<th>Section Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>Introduction</td>
<td>318</td>
</tr>
<tr>
<td>8.2</td>
<td>Contribution to the body of knowledge</td>
<td>318</td>
</tr>
<tr>
<td>8.3</td>
<td>Strengths of the framework and implications for practice</td>
<td>320</td>
</tr>
<tr>
<td>8.4</td>
<td>Implication of the study globally</td>
<td>324</td>
</tr>
<tr>
<td>8.5</td>
<td>Reflection on conducting the study</td>
<td>325</td>
</tr>
<tr>
<td>8.6</td>
<td>Recommendations</td>
<td>328</td>
</tr>
<tr>
<td>8.7</td>
<td>Conclusion</td>
<td>331</td>
</tr>
</tbody>
</table>

References: 332
## List of tables

### Chapter one

1.1 Globally used APN titles .................................................. 20

### Chapter two

2.1 Attributes of APN .......................................................... 43
2.2 Advanced nurse practitioner skills .................................... 46
2.3 APN education regulation in the UK. ................................. 49
2.4 Shared values amongst nurse consultants ............................ 51
2.5 Competencies defining APN roles ...................................... 58
2.6 Core competencies of APN ................................................. 59

### Chapter three

3.1 Composition of paradigms ................................................. 84
3.2 Basic beliefs of the various enquiry paradigms ...................... 92
3.3 Strengths and weaknesses of the various qualitative methodologies ........................................................... 99
3.4 Six phases of thematic analysis ........................................... 127
3.5 Data sources and emerging themes. .................................... 136

### Chapter four

4.1 GDP of Palestine, Jordan and Israel .................................... 155
4.2 Comparable health indicators with other countries .................. 158
4.3 Comparable health indicators with neighboring countries ....... 159
4.4 Types of health services .................................................... 167
4.5 Comparable human resources indicators with other countries 171
4.6 MoH strategic objectives .................................................... 173
5.1 Summary profile for participating ONPs ............................... 189

### Chapter five

5.2 Research questions and emerging primary themes .................. 191
5.3 Average number of patients in various hospital departments .......... 231
## Chapter six

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Profile for participating nursing staff</td>
<td>248</td>
</tr>
</tbody>
</table>

## Chapter seven

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Sets of data used to construct the conceptual framework</td>
<td>275</td>
</tr>
<tr>
<td>7.2</td>
<td>Challenges facing the Palestinian health care system</td>
<td>285</td>
</tr>
<tr>
<td>7.3</td>
<td>Impact of APN roles and their evaluation indications</td>
<td>309</td>
</tr>
</tbody>
</table>
# List of figures

## Chapter one

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Relationship between APN and ANP</td>
<td>19</td>
</tr>
<tr>
<td>1.2</td>
<td>Attributes and clinical skills of NPs</td>
<td>23</td>
</tr>
<tr>
<td>1.3</td>
<td>Hierarchy of clinical nursing prior to the development of the ONP roles</td>
<td>24</td>
</tr>
<tr>
<td>1.4</td>
<td>Hierarchy of clinical nursing after the development of the ONP roles</td>
<td>25</td>
</tr>
</tbody>
</table>

## Chapter two

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Pillars of APN</td>
<td>72</td>
</tr>
</tbody>
</table>

## Chapter three

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Data analysis</td>
<td>132</td>
</tr>
<tr>
<td>3.2</td>
<td>Data analysis</td>
<td>133</td>
</tr>
</tbody>
</table>

## Chapter four

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>West Bank and Gaza Strip Map</td>
<td>164</td>
</tr>
<tr>
<td>4.2</td>
<td>Palestinian health care triangle</td>
<td>165</td>
</tr>
</tbody>
</table>

## Chapter five

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Roles of the ONP</td>
<td>187</td>
</tr>
<tr>
<td>5.2</td>
<td>Training of nurses prior to ONP role development</td>
<td>188</td>
</tr>
<tr>
<td>5.3</td>
<td>Refined themes and subthemes</td>
<td>192</td>
</tr>
<tr>
<td>5.4</td>
<td>Rationale for role development</td>
<td>193</td>
</tr>
<tr>
<td>5.5</td>
<td>Facilitating factors</td>
<td>202</td>
</tr>
<tr>
<td>5.6</td>
<td>Challenges for role development</td>
<td>213</td>
</tr>
<tr>
<td>5.7</td>
<td>ONP role impact</td>
<td>228</td>
</tr>
<tr>
<td>5.8</td>
<td>Framework for the ONP role evolution in Palestine</td>
<td>242</td>
</tr>
</tbody>
</table>

## Chapter six

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Emerging themes and associated subthemes</td>
<td>249</td>
</tr>
</tbody>
</table>
6.2 Advanced skills procedures performed by A&E nurses

Chapter seven

7.1 Conceptual framework for the introduction of APN roles in Palestine 281
7.2 Regulation of APN roles in Palestine 303
## List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Focus group protocol</td>
<td>352</td>
</tr>
<tr>
<td>2</td>
<td>Example of personal interview protocol with ONPs</td>
<td>354</td>
</tr>
<tr>
<td>3</td>
<td>Example of personal interview protocol with accident and emergency nurses</td>
<td>357</td>
</tr>
<tr>
<td>4 &amp; 5</td>
<td>University and local ethical approvals</td>
<td>360</td>
</tr>
<tr>
<td>6 &amp; 7</td>
<td>Introduction letter to participant and participants’ information sheet</td>
<td>363</td>
</tr>
<tr>
<td>8</td>
<td>Example of a consent form</td>
<td>368</td>
</tr>
<tr>
<td>9</td>
<td>Dealing with negative and challenging cases</td>
<td>370</td>
</tr>
<tr>
<td>10 (a &amp; b)</td>
<td>Example of data analysis (from script to framework)</td>
<td>373</td>
</tr>
<tr>
<td>11</td>
<td>Example of extracts from various data sources reflecting shortage of medical workforce.</td>
<td>375</td>
</tr>
<tr>
<td>12</td>
<td>University ethical approval for the extension of data collection</td>
<td>376</td>
</tr>
</tbody>
</table>
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANA</td>
<td>American nurses association</td>
</tr>
<tr>
<td>ANP</td>
<td>Advanced nursing practice</td>
</tr>
<tr>
<td>APN</td>
<td>Advanced practice nursing</td>
</tr>
<tr>
<td>CAN</td>
<td>Canadian nurses association</td>
</tr>
<tr>
<td>CNS</td>
<td>Clinical nurse specialist</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GHI</td>
<td>Government health insurance</td>
</tr>
<tr>
<td>ICN</td>
<td>International council of nursing</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of health</td>
</tr>
<tr>
<td>NA</td>
<td>Nurse anesthetist</td>
</tr>
<tr>
<td>NC</td>
<td>Nurse consultant</td>
</tr>
<tr>
<td>NCD</td>
<td>Non communicable diseases</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>NM</td>
<td>Nurse midwife</td>
</tr>
<tr>
<td>NMC</td>
<td>Nursing and midwifery council</td>
</tr>
<tr>
<td>NP</td>
<td>Nurse practitioner</td>
</tr>
<tr>
<td>ONP</td>
<td>Ophthalmic nurse practitioner</td>
</tr>
<tr>
<td>OPT</td>
<td>Occupied Palestinian territories</td>
</tr>
<tr>
<td>PBCS</td>
<td>Palestinian bureau of central statistic</td>
</tr>
<tr>
<td>PMH</td>
<td>Palestinian ministry of health</td>
</tr>
<tr>
<td>PNA</td>
<td>Palestinian national authority</td>
</tr>
<tr>
<td>RCN</td>
<td>Royal college of nursing</td>
</tr>
<tr>
<td>UNRWA</td>
<td>United nations relief and works agency</td>
</tr>
<tr>
<td>USAID</td>
<td>United States agency for international development</td>
</tr>
<tr>
<td>WBGS</td>
<td>West bank and Gaza strip</td>
</tr>
<tr>
<td>WHO</td>
<td>World health organization</td>
</tr>
</tbody>
</table>
Author Declarations

1. For the duration of this study and preparation of this thesis, the author has not been registered for any other academic award or qualification.

2. The content in this thesis has not been submitted for any academic award or qualification other than that for which it is now submitted.

Ahmad Ma’ali, 2017
Acknowledgements

I would like to acknowledge the help I have received from the following people and institutions:

The St. John Eye Hospital, for providing partial sponsorship for this study.

Dr. Sally Ruane and Dr. Abigail Moriarty, for their marvelous and continuous supervision, encouragement and support.

Mrs. Meg Dibsy, for proof reading earlier scripts of the thesis.

The Ophthalmic Nurse Practitioners and other informants, who were willing to share their experiences and enabled me to have an insight into the introduction and development of APN roles in Palestine.

Ahmad Ma’ali, 2017
Chapter one: Introduction

1.1 Introduction

Advanced nursing roles have proliferated worldwide in the past few decades (Pulcini et al 2010) in an attempt to find health care models that meet the increasing challenges and demands of health care systems. Advanced Practice Nursing (APN) is a generic term used to define the clinical work nurses carry out that is more advanced than that undertaken in the traditional nurses’ roles (Hamric, 2013). Within this generic term, many labels exist but the literature refers largely to four distinct and frequently used roles namely, Nurse Practitioners (NP), Nurse Anaesthetists, (NA), Clinical Nurse Specialists (CNS) and Nurse Midwives (NM) (Hamric, 2013). These four roles have been uniquely developed in the United Sates while other countries have developed NP, CNS in addition to other roles. (Hamric, 2013; Sheer and Wong, 2008).

Advanced nursing roles appeared first in the United States of America (USA) and as a consequence, it is seen as the leader in this respect (Canadian Nurses Association, 2008). Other countries around the world both developed and developing, have adopted advanced practice nursing roles (International Council of Nursing (INC) 2008, MacDonald, et al 2006; Sheer and Wong, 2008). The literature identifies that such roles have been crafted differently in ways that were unique to each country (Hamric, 2013, ICN, 2008). Several circumstantial factors have influenced such a development and practice patterns of APN roles. As a result, there have been discrepancies in models of APN worldwide. Such models of APN have ranged from those that offer advanced nurses independent practice to those models of practice where advanced nurses undertake delegated duties (MacDonald et al, 2006). Such discrepancy is also echoed in the
training for such roles which varies from on the job training, de facto preparation to a graduate and doctoral degree level education (Sheer and Wong, 2008).

This thesis explores the development of APN role in Palestine, specifically, in the form of Ophthalmic Nurse Practitioners (ONPs). This chapter defines key concepts related to APN roles and highlight how the researcher has become interested in this phenomenon providing a rationale for the investigation. This will be followed by the aim and objectives of the study. The final section of this chapter will outline structure of the remainder of this thesis and outlines an overview of content of each chapter.

1.2 Key Concepts

It is essential to distinguish between first level nursing and advanced practice nursing. First level nurses are those who achieve entry to the nursing registry following graduation from a recognised school or college of nursing. Those nurses have a general level of competency which is gained at the point of entry to the profession. The advanced level of nursing practice (APN) which is a level of nursing that is gained both by advancing the knowledge and clinical competencies gained usually through experience, further education and training. Advanced nurses have clinical, research, management and educational skills that they gain by undertaking further training and education (Hamric, 2013; Nursing and Midwifery Council, 2005).

International literature provides a number of definitions for advanced nursing roles which will be analyzed in chapter two of this thesis. The International Council of Nursing (ICN) defines a “Nurse Practitioner/Advanced Practice Nurse as a registered nurse who has acquired the expert knowledge base, complex decision making skills and clinical competencies for expanded
practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice” (ICN, 2008, p 29).

This definition highlights the fact of registration (advanced practice nurses must be registered nurses), advanced knowledge and clinical skills, and the expansion of work undertaken as core characteristics of advanced roles. It allows for flexibility and stresses on individual contextual climate in which such roles may develop. Although, the International Council of Nursing has no regulatory authority over the practice of nursing worldwide, it has a great deal of international credibility and consultancy/advisory role. It is appropriate to suggest that such definition appears to accommodate individual country’s unique needs and circumstances and provides a flexible approach for the implementation and recognition of APN roles.

It however, needs to be indicated that there has been a lot of debate in the literature (mainly American and Canadian nursing literature) that differentiates two key terminologies: Advanced Practice Nursing (APN) and Advanced Nursing Practice (ANP). The two terms are used interchangeably however, there is a major difference between the two (Bryant-Lukosius et al, 2004). APN is the whole field of advanced nursing, its values, its personnel, its principles and the whole aspects and functions that make the principle of nursing (Bryant-Leukosis et al, 2004; Canadian Nurses Association (CNA), 2008). However, ANP is seen as one aspect of APN that supports the organization and the heart of the profession of nursing. If we visualize APN as a pyramid with its practicalities and associate pillars, ANP is seen at the apex of the pyramid (Styles and Lewis 2000). Bryant-Lukosius et al (2004) take this discussion to the next level when they elaborated that APN provides the necessary conducive environments, resources and contextual factors that facilitate the development and functions of ANP. Please refer to figure 1.1 for illustration.
This conceptual discussion necessitates that we use the accurate terminology as ANP roles cannot exist without the support that APN as a whole pyramid provides. From this discussion, it is clear that we need to refer to the whole essence of APN and not only the apex of the pyramid which is ANP.

**Figure 1.1: Relationship between APN and ANP.**

As advanced nursing roles have flourished worldwide, several terms have been used to describe such roles. Such difference in terminology was pointed out in the result of a survey conducted by Pulcini et al (2010). This was an international Web-based survey that was sent to 174 key informants and active members of the International Nurse Practitioner-Advanced Practice Nursing Network of the International Council of Nursing. Ninety-one nurses in 32 countries responded to the survey. The study found 13 different titles used internationally to describe APN roles. One common theme evident in all titles used globally was that APN was seen as the practice of nursing at a higher level than those of basic nursing practice. Table 1.1 outlines some of the most commonly used titles and countries that use them. It is interesting to...
note that none of the countries included in the survey were in the Middle East. This in itself is a
good indication of the scarcity of APN roles in this region. However, Kleinpell et al (2014)
pointed out two countries in the Middle East have started exploring the introduction of APN
roles. In Israel, one group of nurse specialist in palliative care has been trained. Saudi Arabia has
recently accredited a programme in Enterostomal therapy (wound, ostomy and continence) that
prepares nurses to function at an advanced level (Kleinpell et al, 2014).

Table 1.1 some globally used APN titles, Adapted from: Pulcini et al, (2010).

<table>
<thead>
<tr>
<th>APN roles title</th>
<th>country /continent in which title is used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clinical Nurse Specialists</td>
<td>USA, Canada, China, Japan, Australia, New Zealand, Europe (Nordic countries), UK</td>
</tr>
<tr>
<td>2. Nurse practitioner</td>
<td>USA, Canada, Latin America, China, Thailand, Australia, New Zealand, Europe (Belgium and Germany), UK</td>
</tr>
<tr>
<td>3. Nurse anaesthetist</td>
<td>USA</td>
</tr>
<tr>
<td>4. Nurse midwife</td>
<td>USA</td>
</tr>
<tr>
<td>5. Nurse case manager</td>
<td>USA</td>
</tr>
<tr>
<td>6. Advanced practice nurse</td>
<td>Canada, China, Singapore, Thailand, Australia, Belgium, Germany, Europe (Nordic countries), UK</td>
</tr>
<tr>
<td>7. Nurse consultant</td>
<td>UK</td>
</tr>
<tr>
<td>8. Clinical nurse consultant</td>
<td>Australia</td>
</tr>
</tbody>
</table>

In their meta-analysis of international literature on APN roles, Dowling et al (2012)
found four main attributes of APN roles: “clinical expertise, leadership, autonomy and role
development” (Dowling et al, 2012, P 132). Clinical expertise is characterised by superior
clinical skills and theoretical knowledge that constitute such advanced practice. Leadership on
the other hand, is a fundamental characteristic of APN as it is associated with the transformation
and revolution of practice which are essential elements that constitute the foundation of the role
development Manley et al, 2011).
Autonomy describes the ability of the professional to work independently and is seen as a central attribute to APN. The ability to work independently is seen here as one of the main pillars that enable advanced nurses to function and fulfil their advanced roles (Daly and Carnwell, 2003; Dowling et al, 2012; Sheer and Wong, 2008).

Role development has two main dimensions namely expansion and extension of nursing roles (Dowling et al, 2012). Role expansion describes the enlargement of nursing knowledge and skills from other professionals mainly medicine, but maintaining the principle of nursing and its boundaries (Mantzoukas and Watkinson, 2007). On the other hand, extension of the role is seen as out-spreading of nursing practice outside its traditional boundaries and undertaking roles that are traditionally performed by the medical profession (Daly and Cranwell, 2003). One of the main criticism for APN roles centres on the extension side of the roles where it is seen as a deviation from the principles of nursing by undertaking medical roles (Hamric, 2013). However, it is evident that for APN roles to develop nurses need to undertake both an extension (outside traditional boundaries) and an expansion (by enhancing knowledge and skills) of the basic nursing roles that are acquired by newly graduate nurses (Dowling et al, 2013).

1.3. The Development of the Ophthalmic Nurse Practitioner Role in Jerusalem

There is an agreement within the nursing literature that nurse practitioner (NP) roles are a recognised type of APN roles. The literature offers a variety of definitions for NP however, there is a consensus that NPs are experienced, highly skills nurses who have advanced knowledge and skills to enable them meet the need of patients particularly in the primary and secondary care levels (Barton et al, 2012a; Hain and Fleck, 2014; Lowe et al, 2011).
The Ophthalmic Nurse Practitioner (ONP) role was established in Jerusalem at the St. John Eye Hospital, where the researcher works, in the year 2000. This role is unique to the organization, to the Palestinian health care system and also to other Middle Eastern countries. The researcher has not been able to locate any literature that describes such roles in any other countries in the Middle East. To date no such role has been established in other specialities within the Palestinian care system.

Prior to the role development at the Hospital, some experienced nurses were allowed to undertake advanced procedures that were traditionally performed by the medical staff. This could have been influenced by the perceived shortage of medical staff by the Hospital management and also reflected the expertise nurses had at the time.

One distinctive feature of the role of NPs is the crossing of the professional boundaries between other health care professionals mainly medical and the nursing profession where NPs undertake both advanced nursing and medical skills/practices (Lowe et al, 2011). However, in order for such boundaries to be crossed, a prerequisite of societal change including the status of women needs to exist (Bryant-Lukosius et al, 2004; DiCeno et al, 2007). The nature of advanced nursing practice in the form of ONPs challenges the status quo as well as professional boundaries (Lowe et al, 2011), yet little is known about how such a role has developed in an environment where male dominance in the society and medical staff dominance in the health care settings are very prominent.

As identified in figure 1.2, one of the essential functions of the NPs is their contribution to health promotion activities and illness prevention at both community and hospital levels.
However, it remains unclear as how the ONP role has developed and what are the attributes of such a role.

Figure 1.2: Attributes and clinical skills of NPs. Adapted from: (Lowe et al, 2011; DiCeno et al 2007; Bryant-Lukosius et al, 2004).

- Pathological diagnosis
- Physical assessment
- Decision making
- Health education and counselling
- Autonomy
- Patients case management
- Primary care and community settings
- Mixed nursing and medical skills

Prior to the formal development of the explicitly labelled ONP role, experienced nurses at St. John Eye Hospital undertook some procedures that they learned on the job from the medical and senior nursing staff. It was not uncommon to see nurses even those who were not registered to undertake such procedures and roles traditionally performed by the medical staff. Such a phenomenon of ad hoc roles may still exists in other parts of the Palestinian health care system, where nurses in various settings both community and hospital may undertake responsibilities and carrying out tasks traditionally performed by the medical staff. However, this latter form of advanced practice may neither be organised nor planned. Typically, such
nurses either substitute for the medical staff in their absences or assist them to perform certain medical procedures to aid in the delivery of care to a large number of patients.

At the time of the ONP role development, nurses joined the St. John Eye Hospital as student nurses and progressed to reach either charge nurse or tutors’ positions. Figure 1.3 outlines the structure of clinical nursing hierarchy prior to the ONP role development.

Figure 1.3: Hierarchy of clinical nursing prior to ONP role development.

Following the introduction of the ONP role, the hierarchy of clinical nursing positions has changed where ONPs have adopted a senior clinical position parallel to that of nurse tutors and charge nurses/nurse managers. This prestigious promotion has encouraged many nurses to compete in order to undertake the ONP course. In addition, following the ONP role
development, the Hospital management has regulated nursing advanced practices carried out at the Hospital to ensure that only those who are qualified ONPs are given a scope to undertake such advanced roles. This has given greater pronunciation to the separate and advanced role of the ONP giving rise to greater status and authority (as outlined in Figure 1.4) and are at a parallel salary scale to other senior nurses working in management i.e. charge nurses. ONPs are also represented in the department clinical governance and research committees. This inclusion of ONPs in the various committees that discuss clinical and research plans in the Hospital highlights the seniority and status enjoyed by ONPs at the Hospital.

**Figure 1.4: hierarchy of clinical nursing after ONP role development**
The development of the ONP role could have been influenced by the shortage of medical staff at the time and the increase in the demand for eye care as the hospital was and still is the only charitable eye care provider for the Palestinians. The large number of patients is influenced by the high prevalence of eye disease resulting from consanguinity and various chronic diseases (St John Eye Hospital, 2014). According to the Palestinian Ministry of Health (2012) consequence marriage occurs in 28% of all marriages. This may increase the incidence of congenital eye disorders with a subsequent increase in the prevalence of blindness and visual impairment. It has been reported that the prevalence of diabetes was 12% amongst the Palestinians, most of whom are poorly controlled (Hunsseni, 2003). This has led to diabetic related eye diseases being one of the principle causes of blindness amongst the working age group in Palestine (Ma'ali, 2004; St. John Eye Hospital, 2014).

With this in mind, and if the role of the ONP has been developed to meet the patients’ health care needs, it remains unclear as how the ONP role development has impacted the care of patients both at the community and Hospital levels. Exploring role development rationale and the impact of such development forms two main questions of this research project.

The ONP course commenced in 2000 where it originally involved the education and training of one nurse at a time as part of an in house development programme. Training in this context refers to clinical instructions ONP receive from their clinical mentors and supervisors during the course in order to master core competencies. This training involved in addition to clinical instructions, mentoring, assessment and feedback (students learn to master ophthalmic skills). Education, on the other hand, refers to theoretical lectures and seminars ONP received through the course in order to enhance their theoretical knowledge in ophthalmic related subjects. In general, two nurses underwent the ONP training course annually. The ONP training
course was delivered in-house for a period of six months followed by a further six months of consolidation. To date, 12 ONPs have been trained with a strategic plan to train additional ONPs in the future.

The ONPs course has two main components; theoretical and clinical both of which are delivered by medical and nursing staff. Involving the medical staff has been critical to enable them to have a sense of ownership for the role. This development hasn’t been without its difficulties particularly with the junior medical staff. Local medical staff have been very hesitant to accept the role and may remain sceptical about its values.

Ophthalmic Nurse Practitioners work mainly in the primary care clinic, mobile outreach, retinal, and in a nurse led minor operations clinic. In these settings, ONPs assess, diagnose, treat and discharge patients under agreed clinical protocols. These protocols are informed by the ONPs’ education and training and reflects ONPs competencies and scope of clinical practice. The role however, enjoys no prescribing authority due to lack of legislations. ONP have the authority to order certain diagnostic tests and refer patients to other health care professionals within the organization.

Despite that the ONP is unique to the Middle East, and particularly to Palestine and that the role has been established for more than 14 years, very little is known about the nature of the job provided by the Palestinian ONPs. In addition, the role has been established in a developing world context which has been little researched and where the health care needs and professional relationships are different from those in developed counties. It is vital to explore the reasons for such development, methods of implementation, driving and constraining factors for such an
initiative. Answering such questions should inform international literature about APN role developments in a developing world context.

In addition, it is believed that certain forms of unregulated advanced nursing roles may be practiced within the Palestinian health care system. These roles however, are without titles and it is believed such roles are also not regulated. Understanding the nature of such roles, will provide essential knowledge and understanding as how such ad hoc roles have developed and how such roles are being managed. This should inform how formally recognized APN roles can be transferred to other health care environments within the Palestinian health care system.

From this it is clear that a credible qualitative research exploring the nature and scope of the ONP role in Palestine as a developing nation is needed to illustrate the possibilities and potential gains from transferring APN roles to other health care settings within the Palestinian health care system.

1.4. Personal reflection

The researcher started to work at the St. John Eye Hospital in 1996 as a charge nurse in the outpatients department. I then travelled to England to undertake further nurse education. I first became interested in APN roles in the year 2000, when I returned to Jerusalem following the completion of my Nurse Tutor’s education in England. During my nurse teaching experience at two eye departments in the UK, I became aware of the role of accident and emergency ophthalmic nurse practitioners particularly at the Manchester Royal Eye Infirmary Hospital.
During this period I was aware of the debate that was taking place amongst ophthalmic nurse educationalists about such roles and their values.

To my surprise, when I return to the Eye Hospital in Jerusalem, one nurse was undertaking an in-house ONP training. I then started working as an outreach charge nurse and was not involved in the training or implementation of the role. However, I witnessed the confusion that was taking place when the first ONP graduated and started his work at the primary care clinic. This confusion was related to the nature of the ONP’s role, its values, and scope of practice and how such role fits within the health care provision system. In this skeptical climate, my interest in APN roles started to surface particularly when I was made aware of the conflicting messages nurses were given about the ONP role and its scope of practice at the Hospital. With this in mind, I wanted to further explore the context in which the role developed, why and how the role evolved at the Hospital.

In 2002, I started teaching as the junior tutor at the school responsible for ophthalmic nurse education but my senior tutor who was a lecturer practitioner was responsible for the ONP curriculum development and implementation. I however, was skeptical about the usefulness of the role as I felt that the contextual factors such as APN education, power of nurses as well as regulations that were then present in the UK were different from those in Jerusalem. This belief prompted me to explore the contextual factors that both facilitated and hindered the role evolution.

On the other hand, I also believed that APN roles, when properly introduced into a conducive health care environment, could advance the quality of patient care as well as promote the status of the nursing profession. In addition, I envisaged that APN roles functioning in the right context
can play a major role in meeting the health care challenges facing developing health care systems similar to that of Palestine. These beliefs were based on my knowledge and experience of APN roles that have been introduced in pioneering countries in the field of APN, such as the USA and UK.

Based on my previous UK experience, I also had a vision that APN roles can provide nurses with the opportunity to play a more prominent and central part in the health care delivery system. Such advancement in the role of nursing, I envisaged, should lead to more satisfied health care professionals. As a result of these beliefs, I ensured that one of my study objectives was to examine the impact of the ONP role on the care of patients, nursing profession as well as the health care delivery system.

Training continued and one or two nurses were trained in house and I also watched how the ONP role was utilized in other clinical areas such as the outreach mobile clinic and minor procedures room. This prompted my curiosity to further understand the role, its origins, development, characteristics, its possible transfer as well as role regulation both locally and globally.

As this role was unique to the Hospital and Palestine, I decided to embark on an explorative qualitative approach to achieve the study objectives. As a result, a decision was made to study the phenomenon holistically by considering the context, rationale and experiences and views of multiple stakeholders.

As this study progressed my skepticism about the suitability of APN for the Palestinian context started to fade away. Such a change in this belief was gradual but was strengthened as the research findings prevailed. Data generated from the ONP practice setting clearly influenced the
values of the researcher with regards to the usefulness of APN roles in Palestine. Such shift in values and beliefs were further strengthened when analysis of data from the accident and emergency nurses revealed that although some unregulated advanced roles were practiced, those roles positively impacted the care of patients.

Furthermore, analyzing the situation and health policy in Palestine clearly indicated that APN roles can play a pivotal role in providing at least partial solution to many health care challenges faced by the Palestinian people. Poor accesses to health care, poverty, unemployment, the increased burden of chronic diseases and poor health awareness have led to unmet health care needs of the population. APN roles developed in many countries to meet similar health care needs. Such findings confirmed my advocacy for the role and I have become very enthusiastic about the introduction of such roles in Palestine.

As my beliefs and values changed over the duration of this study from being skeptical about APN roles function in a Palestinian context, to an active advocate, I made my beliefs and values clear at every stage by ensuring those were documented in a diary. Such a strategy has helped me to step back and keep track of events that could be traced and revisited if needed. This also has ensured that my evolving beliefs and values were not imposed on the findings of the study. In this regard, I was able to use my diary to challenge my findings and ensure that those were data driven.

Immersing myself with the data and the constant returning to the raw data when I felt that I was drifting towards a particular path enhanced my understanding of any potential influence I had on data and their interpretations (Probst, 2015). Checking my interpretations with the informants helped to clarify issues and ensured that I was listening to the voice of the informants. These
measures of reflexivity enhanced my awareness of the influences I may have had on the data, informants as well as interpretation of data.

1.5 Research Aim

The aim of this study is to explore the development of the ONPs as an instance of Advanced Practice Nursing (APN) role in Palestine with the view of exploring the possibility of developing APN roles in other specialties within the Palestinian health care context.

As this area has not been researched previously an explorative, descriptive and analytical approach appears appropriate (Holloway and Wheeler, 2002). In addition, critical review of literature on APN in other countries (mainly western counties) has indicated that such role development is both complex and context based. Therefore, exploring such a complex phenomenon requires a holistic, contextual approach rather than a reductionist one to aid in the understanding of such a complex phenomenon (Clark, 2004).

The following research questions have emerged to achieve the aim of the study:

- Why was the role of APN in the form of ONP developed in Palestine?
- How was this role developed? What educational, organizational and clinical input was required?
- In what context was the role developed and particularly what were the main factors that hindered and or facilitated such development, and how were these managed?
- How has the role impacted the care of patients/clients and the organization of care delivered in the setting it was employed?
• What other examples of ad hoc advanced nursing practice exist within the Palestinian health care setting and why and how such role developed?

• How can formally recognized APN roles be transferred to similar health services environments?

1.6 Thesis Structure

This thesis is structured in eight chapters. Chapter two presents a critical analysis of international literature on advanced Practice Nursing (APN) role development. This chapter provides a number of definitions for APN provided by international nursing councils and associations. The development of APN roles in USA and UK will be critically analysed with particular focus on development rationale, contextual factors influencing development and regulation of APN roles. Intentional literature will also be appraised for factors that have influenced APN role development and how the various contextual factors have been managed. Various models of APN roles will also be discussed with particular emphasis on their context. Finally the value of APN roles to developing countries’ health care systems will be outlined.

For this study, a qualitative explorative approach based upon the principles of case study research has been used. This methodology provided the opportunity to explore the phenomenon of APN in its context. Chapter three explored the methodology and methods I have adopted to explore the phenomenon holistically taking into consideration its contextual nature.

Chapter four provides an analysis of the main contextual factors that affect the Palestinian health care system. Highlighting health challenges facing the Palestinian people has provided the basis for exploring the need for APN roles development to meet the health care
needs in other Palestinian health care specialities. Human resources working within the Palestinian health care system will be also outlined with emphasis on the nursing works force, its structure and regulation.  

_Data from this analysis form an integral component of the study findings._

Chapter five presents evidence about the development of the ONP roles in Palestine. This evidence has been drawn from interviews with ONPs and other concerned stakeholders, and a focus group with ONPs along with reviewing historical documents pertinent to the role development. This evidence is presented in four themes: role development rationale, challenges, driving forces and role impact. This chapter concludes by providing a framework that explains how the ONP role has developed in Palestine.

Chapter six provides evidence form exploring ad hoc advanced nursing roles developed in a general accident and emergency department. The evidence will be drawn from interviews conducted with nurses working at an accident and emergency department in Palestine. Ad hoc substitution, willingness to expand role, resistance and support were three themes that surfaced from the data and categorized the experience of nursing undertaking ad hoc advanced practice nursing roles in the accident and emergency department.

Based on the empirical evidence presented in the previous two chapters, a conceptual framework for the development APN roles in Palestine has been developed and presented in chapter seven. The framework “introducing APN roles in Palestine” has four main elements (assessing the need for APN roles, planning for the introduction of APN roles, implementing APN roles, and outcomes of APN roles).
Chapter eight discusses strengths and shortcomings of the framework and its application to clinical practice both locally and internationally. The contribution of this thesis to international APN literature will be outlined followed by recommendations for future research.

1.7 Conclusion

This chapter has defined what is meant APN along with associated terminologies. With the proliferation of APN roles globally, various international titles and terms used to describe such roles were also explored. The development of ONP roles in Palestine was outlined along with attributes of the NP role globally. A reflective account of how I became interested in this area of nursing practice has been provided along with the importance of exploring this unique phenomenon holistically. Aim and questions of this research project were outlined providing a road map for conducting this research project.

While, this chapter has provide an overview of the key concepts associated with APN roles, chapter two will provide a more detailed analysis of literature that explores role development with particular emphasis on the USA and UK context.
Chapter two: Advanced Practice Nursing (APN)

2.1 Introduction:

The previous chapter provided definitions for APN and some related concepts. Characteristics and domains of APN were also outlined along with some titles that are used to describe various roles. The development of the ONP role in Jerusalem was also highlighted.

The researcher conducted a literature review on APN roles in order to provide a contextual background for the exploration of the ONP role in Palestine. This chapter begins by outlining the literature review strategy the researcher employed. This will be followed by an analysis of literature that informed the study. This review involved an in-depth analysis of APN, its origins and proliferation. The development of APN in two countries the USA (where the role first developed) and the UK (as the ONP role in Palestine may have been heavily influenced by such development) were explored. The concept of context at the micro level, with regards to APN roles function, has also been analysed and discussed. In addition, analysis of nursing literature has identified six themes that have influenced the introduction and development of APN roles globally. The unique circumstances of Palestine (country in conflict with developing health care system) made exploring APN in similar countries very difficult.

Selected APN models will be critically appraised outlining their values, philosophies and domains. The exploration of APN in developing counties will provide a rationale for further research to explore and understand APN roles in Palestine.
2.2 Literature review strategy

The strategy for literature review on APN was to conduct a systematic, comprehensive and in-depth analysis of all published literature on APN between 1995-2015. Although the preliminary literature review was carried out early when this study first commenced, the researcher conducted regular literature searches to take into considerations up-to-date pertinent literature.

For this, literature was reviewed by:

1. Searching Cumulative Index to Nursing and Allied Health (CINAHL), Academic Search Premier, e-journals, Eric, Medline, Psyc Info, Psyc Articles, Cochrane Library, e-Book Collection (EBSCO host) and Applied Social Sciences Index and Abstracts. For the search, six phrases were used:
   - Advanced Practice Nursing
   - Advanced Nursing Practice.
   - Clinical Nurse Specialist.
   - Advanced Nurse Practitioner
   - Nurse Consultant.
   - Nurse Practitioner.

Preliminary search revealed more than 12,000 sources including peer review journals, research reports, articles, textbooks, official documents and reports. A more focused research was then carried out. Literature was searched using the 6 phrases in conjunction with the following terms: definitions, role development, implementation, barriers, facilitators, values, impact, evaluation,
types of, conceptual models, frameworks, models, developing countries, UK, USA, scope of practice, education, preparation, attributes, competencies, role conflict and role acceptance and role effectiveness.

2. Other sources were also identified from reference lists of reviewed articles and these were manually searched.

3. Official websites for the Nursing and Midwifery Council, Royal College of Nursing, American Nurses Association, International Council of Nursing, and Canadian Nurses Association were also manually searched for pertinent articles and reports on APN/ANP. This search yielded 1745 references. Abstracts were reviewed and sources that were not pertinent to the study were excluded and as a result 417 articles/references were used in this literature analysis. Additional references where identified from the reference lists of certain review articles.

A systematic approach to the analysis was employed where copies of all relevant articles, reports, chapters were photocopied and filed according to the subject area, e.g. role development, barriers to APN role implementation, etc. Each article, chapter and report was read in detail and pertinent information was highlighted. Each source was then summarized on a sheet of paper attached to the front of each article, chapter and report.

From this analysis, various definitions of APN will be outlined and a discussion of APN role development in the USA and the UK should set the stage to explore global role development themes. Six themes have been identified as fundamental in APN role development globally: role terminology confusion, role scope, role conflict, role value, stakeholders’ acceptance and APN environments.

These factors along with selected models for APN will be debated and critically analysed.
2.3 Definitions

Advanced Practice Nursing (APN) is becoming a global phenomenon that has been adopted by many counties and it has influenced the evolution and development of nursing practice (Dowling et al, 2012; Bryant-Lukosius et al, 2004). The American Nurses Association (ANA) (1995) states that “advanced practice nurses have the knowledge base and practice experience that prepare them for specialization, expansion and advancement in practice” (ANA, P9). The International Council of Nursing (ICN) (2008) defines a “Nurse Practitioner/Advanced Practice Nurse as a registered nurse who has acquired the expert knowledge base, complex decision making skills and clinical competencies for expanded practice”. Both definitions highlight the concepts of advancement, expansion and clinical competencies. Embodied in the ANA’s definition is the notion of specialisation which refers to detailed knowledge and experience in a specific area of medicine such as ophthalmology (Lowe et al, 2001).

In the UK, the Nursing and Midwifery Council (NMC) (2004) offered a similar definition when it stated that an Advanced Practice Nurse is “a registered nurse who has a command of an expert knowledge base and clinical competence, is able to make complex clinical decisions using expert clinical judgement, is an essential member of an independent health care team and whose role is determined by the context in which s/he practices”. This definition highlights the central principles of the previous definitions, however, it departs from previous conceptualizations by highlighting the collaborative nature of role with other members of the health care team but emphasizing that advanced practice nurses are independent and autonomous practitioners. It is however, explicit in all the above conceptualizations, that APN is practice based.
Although there are clear similarities between such definitions and conceptualizations of APN, this lack of consensus on a global definition of APN will be later discussed as one of the hurdles that might have prevented and could prevent maximum use of APN roles.

To summarize the above conceptualizations, APN can be articulated as the totality of activities that advance the profession by developing new nursing knowledge and practices (by either expansion or extension), to respond to the needs of clients in a constantly changing health care environment.

2.4 Development of APN roles, the United States experience

Hamric (2013) points out that the role of APN was first established in the USA. The United States is therefore perceived as a leader in the development of four types of advanced practice nursing roles including Clinical Nurse Specialists (CNS), Nurse Midwives (NM), Nurse Anaesthetists (NAs) and Nurse Practitioners (NPs) (Bryant-Lukosius and DiCenso, 2004; Jokiniemi et al, 2012). According to Woods (1997) the first Nurse Practitioner (NP) course was launched at the University of Colorado in 1963. It is reported that Loretta Ford was the first paediatric NP and her role was developed in a response to shortages of medical staff, particular paediatricians (Barton et al, 2012). The first CNS role was established in the 1950’s when the first cardiac nurse specialists role was launched (Hamric, 2013; Jokiniemi et al, 2012). The first NM course was launched in 1935 while, the nurse anaesthetist is traced back to 1912 (Hamric, 2005; Stanley 2005).

According to Hamric (2013) the development of APN in the USA was complex and had three themes: (1) development was challenging and saw conflict amongst nurses themselves as to the
desirability of the development and also with medical staff which led to legal fights over the role, (2) societal influences that included wars, advancement in science and technology, availability of resources and the development regulating policies, (3) organizational efforts, regulation and recognition of APN roles.

The effects of war (during and after the second world war) on the development of APN roles was evident in two ways: first the nature of injuries during war and the demand of the battle field forced nurses to perform procedures that had up until then been performed only by medical staff, second was related to the subsequent legislations that aimed to regulate such advanced practices and enhance nursing education (Stanley, 2005). The effect of war was particularly evident in the case of the role development of the nurse anaesthetists who needed to undertake advanced procedures due to the shortages of anaesthetists witnessed during war (Barton et al, 2012a; Hamric, 2013).

It is further pointed out by Stanley (2005) and Contandrioppulos (2015) that although the above factors were instrumental, APN roles were also crafted to meet the health care needs of the marginalised, poor and undersupplied population predominantly those living in the countryside. Therefore APN role development was heavily influenced by societal (demand of better and accessible health care), governmental and financial forces (shortages of medical staff willing to work in the countryside and with the marginalised) (MacDonald et al, 2006; Bryant-Lukosius et al 2004). Hamric (2013) further asserts that at the time of APN roles development in the USA, patients’ demand for available and affordable health care was critical for the development of APNs as nurses were seen to be very well positioned to meet such demands.
From this it can be concluded that the scarcity of medical resources, the inequity in the provision of care and the geographical distribution were all positive influences on the APN role development in the USA (Contandriopoulos et al, 2015; Barton et al 2012a; Gardner et al, 2007). An added factor that facilitated the development of APN in the USA was the perceived value of such roles. Early positive evaluations of APN roles in the USA were important in facilitating the creation and proliferation of APN (Bryant-Lukosius et al 2004).

It is clear that many factors have facilitated the development of APN in the USA (political, financial and societal). However, these factors needed a visionary nursing leadership to enable such development. This is demonstrated by Stanley (2005) who argues that reliable national nursing leadership was of great importance to facilitate and govern the introduction and development of APN roles. It is further argued that the work of nurse academics such as Henderson and Peplue were influential in placing the fundamentals of APN (Hamric, 2013). As a consequence of such visionary nursing leadership, the USA witnessed the development of educational programmes that moved from graduate and Master’s degree to doctoral level that prepared nurses to undertake APN roles (Bryant-Lukosius, 2003; Gardner, et al, 2007).

From the above, it can also be concluded that advanced practice nurses responded to a need created by changes in health care demands and financing. These triggers have provided the means for nurses to respond by reaching their professional aspiration to develop knowledge and prepare skilled nurses who were visible to clients and well positioned to meet health care needs of the society. As a result it could be argued that the role of APN evolved in response to nurses’ own career aspiration (Gardner et al, 2007; Pastorino, 1998) and that ‘filling the gap’ in health care system was an added facilitating factor (Hamric et al, 2013; Gardner et al, 2007).
With regards to role regulation, APN titles are now protected (licenced and privileged to practice at advanced level) in 25 States where the nursing boards are responsible for determining scope of practices. Fifteen States have the title protection where APN scope of practice is governed by nursing and medical boards together and the remaining 4 States have no title protection (Rounds, et al, 2012). The 50 states have independent regulatory mechanisms that govern education and practice of APN roles (Rounds, 2012). However, the past few years have witnessed extensive debate to standardised APN regulations that are harmonised across the different States. As a result a Consensus Model of APN Roles was proposed by the Advanced Practice Register Nurses Joint Dialogue Group 2008 and called for standardization of licensure, accreditation, certification and education of APN roles (Rounds, 2012). Although, this model has been endorsed by many nursing and regulatory organizations, it has not been adopted in the USA. Such a model of regulation when implemented forms a major milestone in the development of advanced nursing (Rounds, 2012). Such development will give the opportunity for advanced practice nurses to undertake their professional duties across the various States without the need to be subjected to different licensure and regulatory mechanisms.

However, in the absences of such a regulatory mechanism across the States, the ANA, described various attributes for such level of practice. Master’s degree education is seen by the ANA as a prerequisite APN. Table 2.1 outlines the various characteristics of APN as outlined by the ANA (1995).

<table>
<thead>
<tr>
<th>Table 2.1: Attributes of APN as outlined by the ANA (1995).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Master’s degree education.</td>
</tr>
<tr>
<td>2. Clinical speciality.</td>
</tr>
<tr>
<td>3. Clinical expertise.</td>
</tr>
<tr>
<td>4. Superior knowledge and clinical skills.</td>
</tr>
<tr>
<td>5. Expansion and advanced practice.</td>
</tr>
<tr>
<td>6. Advanced level assessment, diagnosis and treatment skills.</td>
</tr>
</tbody>
</table>
2.5: The United Kingdom experience

Circumstances surrounding new nursing roles development in the UK were not very different from those in the USA. According to Barton et al (2012a) in the UK the concept of APN first came in to being in the 1970s in response to the Salmon Report which advocated the new nursing management structure such as the introduction of the nurse officers. However, the first NP role appeared in the 1980’s in a primary care setting by Stilwell (Rolfe, 2014) and the Royal College of Nursing introduced the first NP education programme in 1990, but the role became well established in 2000 (Barton et al, 2012a). The Nurse Consultant (NC) which is another form of APN was very much influenced by the DoH (1999) Making a Difference, which placed the NC at the top of the banding scheme for nurses (Wiseman, 2007; Castledine, 2002). Revelly et al (2002) indicated that in the UK the role of NPs gradually developed in the 1980s and has become widespread throughout England, Wales and North Ireland by the late 1990s. Others see the noticeable growth of APN roles and namely NP and NC movements in the UK, as a response to patients’ demand for quality care, new initiatives in the organization of care such as patients-focused care and the strive to make health services more efficient and acceptable to patients. (Por, 2008).

Furthermore, the New Deal for Junior Doctors (NHSME, 1991) and the Nursing Scope of Professional Practice (UKCC, 1992) were very instrumental in developing APN in the UK (Finlay, 2000). Workforce issues related to the reduction of junior doctors working hours and changes in medical education and recruitment created a gap in health care that nurses needed to plug (Barton et al, 2012a) by developing medical skills (Rolfe, 2014).
It is also argued that the Department of Health, England (DoH) (2004) introduction of the Knowledge and Skills Framework played a pivotal role in advancing nursing practice. Other DoH policies that were instrumental in shaping APN namely *Shifting the Balance of Power 2000, Agenda for Change 2003, Developing Key Roles for Nurses 2003 and Modelling Nursing Career 2006* (Castldine and McGee, 1998; Wiseman, 2007; Castledine, 2002; Pastorino, 1998).

It is evident in the literature that the role of APN and particularly NPs has been driven by various forces such as government targets for health outcomes and patients’ choice (Fotheringham et al, 2011; Por, 2008). It is also argued that shortages of medical staff in certain specialities started to affect the quality of patient care (Por, 2008; Castldine, 2002) which triggered the development of advanced nursing roles. This development was also driven by the professionalization and motivation of nurses to develop their role (Pearson and Peel, 2002) advances in university nursing education (Wiseman, 2007) and changes in health care delivery, and patients demands for better information and quality and coordinated care (Adams, 2013; Furlong and Smith, 2005).

In the UK, the Royal College of Nursing (RCN), which is a nursing union organization that represent nurses and nursing, promotes excellence in practice and shapes health policies, appears to assume the leadership role by leading debates and publishing guidelines on APN roles in the UK. In 1990, the Royal College of Nursing introduced the first educational course for NPs which reinforces the fundamental standards and principles of APN (Marsden et al, 2013). Other universities followed and introduced NP courses both at undergraduate and postgraduate levels (Barton et al, 2012b).

The RCN’s NP guidelines outlined:
• Education at first degree level.
• Be responsible for the admission and discharge of patients.
• Enjoy professional autonomy.
• Undertake roles previously carried out by the medical staff.

In 2008, the RCN confirmed what competencies are expected from NPs practice. According to the guidelines advanced NPs need to demonstrate competencies in 7 domains: “assessment and management of patients, nurse patient relationship, and education function, professional role, management role, quality care, respecting diversity and culture” (RCN, 2008, P). However, the RCN (2012) endorsed APN domains and competencies as outlined by the DoH England (2010), the Welsh Assembly Government (2010) and the Scottish Executive (2008) (RCN, 2012). In addition, NMC (2006) introduced skills required by Advanced Nurse Practitioner as outlined in Table 2.2. These skills comprised a mixture of general, expanded and extended nursing roles.

<table>
<thead>
<tr>
<th>Table 2.2: Based on NMC (2006) Advanced Nurse Practitioner Skills.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carry out holistic patient history.</td>
</tr>
<tr>
<td>2. Perform physical assessment.</td>
</tr>
<tr>
<td>3. Utilize superior knowledge and skills to make diagnosis.</td>
</tr>
<tr>
<td>4. Recommend further diagnostic examinations.</td>
</tr>
<tr>
<td>5. Be able to make firm diagnosis.</td>
</tr>
<tr>
<td>7. Ensure a holistic approach to care.</td>
</tr>
<tr>
<td>8. Enhance communication and care continuity.</td>
</tr>
<tr>
<td>9. Be able to evaluate effectiveness of intervention.</td>
</tr>
<tr>
<td>10. Be an independent practitioner.</td>
</tr>
<tr>
<td>11. Undertake leadership role.</td>
</tr>
<tr>
<td>12. Provide care to patients based on up to date knowledge.</td>
</tr>
</tbody>
</table>
According to Adams (2013) another significant progress that was instrumental in the APN role development in the UK was the government regulation of nurse prescribing (non-medical prescribing) (DoH, 2005). Prior to this, in the UK, NPs’ autonomy was inhibited by restrictions on nurse prescribing (Cullen, 2000). Whereas in the USA, advanced practice nurses enjoyed prescribing authority that enabled them to function independently. This inhibition of autonomy is also evident in the RCN definition of the NP which states that NPs work within agreed protocols (RCN, 2008). However, it is still acknowledged that guidelines for APN in the UK remain unclear (Currie and Grundy, 2011; Wiseman, 2007; Castledine, 2002) and that successful implementation of such roles requires policy, educational and regulatory standards (Pearson, 2011; Furlong and Smith, 2005). Such regulatory mechanisms and policies clearly identify scope of practice for APN roles and promote best and safe nursing practice. This lack of regulation and guidelines could have resulted in the proliferation of various ad hoc roles and titles. This was affirmed by McGee and Castledine (2000) who identified some 60 different ANP roles in the UK with activities ranging from clinical practice to providing leadership. The title of NP is not protected in the UK which has led to an ad hoc development of the role in many settings with no evident regulation (Lowe et al, 2011). This has resulted in the lack of consensus regarding educational standards and agreed set of competencies for such a role (Wilson and Bunnell, 2007).

The Departments of Health in England, Wales and Scotland reached a common ground stating that advanced level practice is not about a task/role performed but a level of practice that comprises elements of education, research, management and advanced clinical practice. However despite this, table 2.3 clearly demonstrates that guidelines governing advanced practice education and competencies vary within the UK.
It was only in 2010 that the DoH England published a position statement on APN identifying 4 benchmarks for APN: direct care, leadership, quality care and self-direction (DoH, 2010). These four themes encompass 28 elements which must be evident in the practice of such roles.

However, Rolfe (2014) and Marsden et al (2013) assert that after more than 25 years of APN roles development in the UK, there is still lack of clear regulation, governance and direction for such roles.


From this it has become apparent that the development of APN in the UK has been influenced by a number of complex factors, some of which are similar to that of the USA. Shortages in medical staff, demand for quality care, and government health care targets in addition to advancing nurse education to graduate level all favoured the development of APN in UK (Marsden et al, 2013; Yvonne, 2013). As a result, there is some consensus amongst academics that the development of APN was a response to health care needs, advancement in technology and health care development, in addition to monetary and economic constraints facing health care systems (Rolfe 2014; Barton et al, 2012a; Castledine and McGee, 1998; Wiseman, 2007; Castledine, 2002; Pastorino, 1998).
### Table 2.3 APN education regulations in the UK.

<table>
<thead>
<tr>
<th>Region</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>DoH published a position statement in 2010. It outlines 28 competencies for APN roles and expects nurses to have achieved a Master’s degree level of education.</td>
</tr>
<tr>
<td>Scotland</td>
<td>A tool Kit for APN was published in 2008 but no education requirement was identified.</td>
</tr>
<tr>
<td>Wales</td>
<td>Framework for advanced practice was published in 2010 expecting a Master’s degree level education.</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>Guidelines for advanced practice nursing roles was published by the department of health, social services and public safety (2014) and identified Masters’ degree level of education for APN roles.</td>
</tr>
</tbody>
</table>

### 2.6: APN context

The context in which health care is practiced can be very complex as it occurs in various locations, cultures and societies which are all influenced by “economic, social, political, fiscal, historical and psychosocial factors” (McCormack et al, 2001, P 95). For the purpose of this study context will be used as a concept to describe the environment within which APN roles function whereas, the wider political, economic and health care context has been analyzed and is presented in chapter four of this thesis.

Context in this regard is defined as the totality of the factors in the APN micro environment that influence how such roles operate and develop. Implementing APN in any clinical setting is considered a change process (Woods, 1998), which requires an adequate planning and careful implementation that take into consideration a number of contextual factors that affect such a change. It is further argued that any change process such as APN role implementation can be explained by the relationship between the change, the context and the role characteristics (Kilpatrick et al, 2012; Pulcini et al, 2010). McCormack et al (2001) explain that the context in which practice takes place has an influence not only on the professionals but also on the customers and organizational outcomes. Various studies have confirmed that APN roles are contextually based and therefore the role implementation and development are influenced by...
various factors operating with the APN context (Bryant-Leukosius and Di Censo, 2004; Kilpatrick et al, 2012; Manley, 1997; Pulcini et al, 2010; Woods, 1998).

Various concepts (organizational culture, organizational environment and context) have been used to describe the health care environment (Davies et al, 2000). In this regard, McCormack et al (2001) conceptualized that the context has three main elements: culture, leadership and measurement/evaluation. Although these were conceptualized in relation to the implementation of research guidelines, the three elements will form the basis for the discussion on APN context. As implementation of APN can be seen as a change process (implementing a new initiative) it requires careful planning and understanding of the local context.

Culture refers to the way things are done at the practitioner, team and organizational level, within the APN practice settings (Manley, 2000). McCormack et al (2001) view culture as a paradigm that manifests itself through the values and beliefs held by all participants in the clinical setting. Therefore, any culture is formed by shared beliefs, values, and behaviors of those operating within the organization/environment (Davies et al, 2000). Indeed, conflicting cultures may exist within a context therefore McCormack et al (2001) argue that understanding the culture within the context is fundamental to facilitate any change and achieve its optimal goals. Taking this further, it is applicable to argue that this understanding should assist leaders to create a culture that supports APN roles.

Within the organizational culture, Manley (1997) revealed two unique contextual conditions essential to the advanced practitioner/nurse consultant role operationalization. An open management structure and shared beliefs and values within the APN environment were all factors that facilitated role implementing and development (Manley, 1997). An open
management system that facilitates APN role development was described by Manley (2000) as an environment that values all, fosters leadership development and uses participatory approach to decision making and care delivery. In the practice environment, having shared values and beliefs (Table 5.8) facilitated staff having a shared vision that guided the work carried out by the practitioners as well as created a positive environment for the retention and recruitment of staff (Manley, 2000).

<table>
<thead>
<tr>
<th>Patient centeredness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff support</td>
</tr>
<tr>
<td>Shared decision making</td>
</tr>
<tr>
<td>Openness</td>
</tr>
<tr>
<td>Development of all</td>
</tr>
<tr>
<td>Role of nursing</td>
</tr>
</tbody>
</table>

McCormack et al (2001) identified leadership as the second element of the context. This refers to an effective leadership that functions within any health care context. Such a leadership values the contribution of all, facilitates teamwork and ensures that roles are clearly identified (Manley, 2000), and is referred to as transformational leadership that recognizes all as leaders in their roles (Manley, 2000). As culture is not static and can be influenced and even changed, it is this type of leadership that facilitates the creation of a context that support both the introduction and operationalization of APN roles (Manley, 2000). Such a transformational leadership empowers advanced nurse practitioners and leads to quality patient care (Manley, 1997).

Reay et al, (2003) have indicated that at the micro level, specific organizational and structural attributes operating at the APN environment, are critical elements for the ultimate development and utilization of the APN role. Full utilization and integration of APN requires a change to the
care delivery system where the collaboration within the team is needed to ensure that shared goals and objectives related to the care are achieved.

The availability of resources within the advanced practice environment plays a pivotal role in ensuring proper operationalization and full utilization of the advanced practice nurse’s role (Reay et al, 2003; Woods, 1998). Resources include the availability of physical resources such as office space, examination and diagnostic rooms and equipment essential for the advanced practice nurses roles (Bush and Walters, 2001). Adequate staffing levels, availability of clerical support and physician backup were reported by NPs as necessary facilitating factors that enabled them undertake their advanced duties (Woods, 1998).

Work professional relationships between advanced nurses and medical staff have been frequently reported as critical to the function of APN roles. Support, acceptance and appreciation of advanced practice nurses received from the medical staff were ranked amongst the first facilitating factors for APN roles (Bush and Walters, 2001; Sangester-Gromley et al, 2013; Woods, 1998). Jones (2005) carried out a systematic review of literature pertaining to barriers to APN role development, revealed that professional relationship with other staff was reported as the most critical element that can either facilitate or frustrate APN role implementations.

Support and acceptance of APN roles by administrators and nursing colleagues were also identified as essential elements that support the role. Nursing staff support was seen by NPs as an integral facilitating factor their role implementation (Woods, 1998). Nurse managers’ acceptance and understanding of APN roles were also found to be essential for the operationalization of such advanced nursing roles (Bush and Walters, 2001). Reay et al (2003) added that health care
Managers need to play a pivotal role in supporting and supervising advanced practice nurses to ensure full utilization of APN roles in the health care setting.

Manley (2000) points out that the advanced practitioner’s level of credibility, role status, practice autonomy and independence were all factors that influence how the role is perceived by other health care professionals operating within the organizational environment. It has been suggested by Twinn et al (2005) that advanced nurses who enjoy professional autonomy and collaborative relationships with colleagues/other practitioners are more likely to have positive impact on the quality of patient care. Advanced nurses own perception of their role and contribution to practice appear to influence how APN roles are utilized (Twinn et al, 2005). The practitioner’s level of knowledge, confidence, motivation and clinical competence in addition to superior communication and organizational skills were reported by NPs as essential for APN role implementation (Manley, 2000; Woods, 1998). Patients’ level of acceptance and their satisfaction of the APN roles have been reported to influence role implementation success (Twinn et al, 2005).

Role legitimacy in this context refers to the authority advanced practice nurses have in their clinical settings that enable them function at advanced levels. This legitimacy according to Brown (1998) is enhanced by the practitioner’s education, certification and licensure. Pulicini et al (2010) argue that it is this legitimacy which enables the advanced nurse practitioner to undertake advanced roles such as prescribing and referral. Lack of such legitimacy has been reported to inhibit the development of APN roles in the clinical settings (Barton, 2012; Bryant-Lekosius and DiCenso, 2004). Role legitimacy is also enhanced by regulation at the organizational level that governs the work of advanced nurses. Regulation leads to clear scope of practice ensuring high quality and safe care is provided by the advanced practitioners (Barton,
Bush and Walters (2001) assert that such governing policies and protocols at the micro level are essential to provide a clear scope of practice for the practitioners to enable them undertaking their privileged duties and fulfill their advanced roles.

Measurement or evaluation is the third element of the context as identified by McCormack et al (2001) which is a central theme in determining health care effectiveness. Measurement is complex and the culture itself influences the type of tools used for measurement/evaluation and how such findings are utilized by the organization (McCormack et al, 2001). Measurement/evaluation is achieved through multiple mechanisms such as feedback, peer reviews, appraisals, reflection on action and audits. This approach enhances a culture of openness that involves and values all and helps to enhance both individual and ultimately organizational accountability and effectiveness (McCormack et al, 2001). In this regard, measurement, as an integral component of APN context, can be seen as a means of determining the effectiveness of the care and added quality value that APN roles bring into the health care culture in which such roles operate. Evaluating the impact of APN roles on the quality of patient care, health care delivery and professional status of nurses are examples of elements that can be used as evaluation measures operating within the APN context.

In the next section of this thesis, various contextual factors affecting the development of APN roles globally will be critically analyzed. These factors include role terminology confusion, role purpose and scope of practice, role conflict, stakeholders’ acceptance of the role, role impact and value as well as APN role environment.
2.7 Factors influencing APN role development globally

The literature identifies various factors that have influenced the development and implementation of APN roles globally. These factors have been grouped in 6 themes: 1. role terminology confusion, 2. role purpose and scope, 3. role conflict, 4. stakeholders’ acceptance, 5. role value, and 6. APN environments (Bryant-Lukosius, 2003; Gardner et al, 2007; Hamric, 2013).

APN is now well documented in many countries around the world, but this has not been without delays and challenges. Despite the evident value of APN (Bousall and Cheater, 2008; Horrocks et al 2002; Kleinpell et al, 2014; Seale et al 2005), nursing literature recognises that there are still many challenges to the successful implementation of these roles (Bryant-Lukosius and DiCinso, 2004; Gardner et al, 2007; Irvine et al 2000; Pearson, 2000; Sangester-Gromley et al, 2010). Despite the attention APN has received over the last two decades, Woods (1999) asserts that such roles remain “contingent” and that emerging roles have not been clearly defined (Bryant-Lukosius, 2003; Gardner et al, 2007; ICN 2008 ) and that such confusion is a fundamental barrier to APN roles implementation (Hamric, 2013).

2.7.1 APN terminology confusion

The term “advanced” is not clearly described in the literature (Bryant-Lukosius, 2003). However, to advance means to develop skills and knowledge (Rolfe, 2014). The notion of advancements as a nursing concept is characterised by ‘the integration of broad theoretical, research-based and practical knowledge that occurs as part of graduate education in nursing’ (ANA, 1995, p.14). These characteristics of advancement in nursing practice indicate that APN roles require critical thinking, analysis and synthesis of both knowledge and skills necessary for
practice (Sangester-Gromley et al, 2010). However, it is argued that for nursing practice to be labelled advanced, such practice may need to extend to the medical domain (Dowling et al, 2011). The Canadian Nursing Association reiterated that the ‘practice component’ of what advanced practice nurses do, extends beyond the traditional scope of nursing, maximizing the use of nursing knowledge and skills in meeting patients health care needs (CNA, 2008).

Confusion in the use of terminologies that describe APN roles develops when there is a lack of precision about what is expected from such a role and when the boundaries of such a role are not clearly identified (Furlong and Smith 2005; Horrocks et al 2002). In addition, such confusion can result in unclear responsibilities and levels of knowledge, expertise and education needed for nurses to function at advanced level (Hamric, 2013). With the evolution of the role in an ever changing health care climate, the nursing profession has not been able to provide a singular definition for APN (Bryant-Lukosius, 2003). Confusion regarding APN terminology has led to misuse of terms, titles and educational requirements (Bryant-Lukosius, 2003; Pulicini et al, 2010; Styles and Lewis, 2005). Several authors have noted that APN and advanced nursing practice (ANP) are used as synonymous concepts in the nursing literature (Gardner et al, 2007; Styles and Lewis, 2000). But conceptualization of such terms is key to the effective progress and yet distinguishing between these two concepts is crucial to the effective development and utilization of APN roles (Bryant-Lukosius, 2003).

Inconsistency is apparent in the usage of designations and roles used to define APN. In the UK, Advanced Nurse Practitioners (ANP) and NP roles, CNS, nurse consultant are commonly recognised as having the characteristics of APN while in the USA, CNs, NPs, NMs and NAs are all recognised APN roles (Barton, 2012b; Hamric, 2013; MacDonald et al, 2006).
Pulcini et al (2010) carried out a survey for the ICN and identified 13 different APN titles that were used in 32 countries. To add to this confusion, other terms such as expanding nursing roles, expert nursing and specialization in nursing practice are sometimes muddled with APN roles (Hamric, 2013; MacDonald et al, 2006; Wadworth et al, 2002). An expanded nursing role refers to work undertaken by nurses that goes outside the traditional scope of their practice while expert practice refers to expertise gained through experience (although required but not sufficient for APN) however, speciality nursing refers to detailed knowledge of specialized area such as ophthalmology (MacDonald et al, 2006; Wadworth et al, 2002). It is apparent that all these terms share some form of characteristics of APN. However, APN includes in addition to clinical practice, domains related to education, leadership and practice development and innovation. (ANA, 1995; Hamric, 2013).

This confusion in the use of terminology and characteristics of APN, has clearly affected the full utilization of such roles. It is argued that at least in the UK, APN roles developed in an opportunistic and fragmented way which resulted in confusion over the use of many titles (Currie and Grandly, 2011). It needs to be emphasized that a shared vision for APN is required and that common fundamental features must be present in any role to be called APN. This poses the question that, what are the attributes of APN roles? In response to such a question, Hamric (2013) argue that certain conditions must be met before a nurse can be considered to function at an APN level. The three primary criteria for APN are: graduate education (masters or doctoral level), certification (professional certification to practice at APN level) and practice (advanced clinical practice) focused on patients and family (Furlong and Smith, 2005; Hamric, 2013). Macdonald et al (2006) added that fundamentals that create the core characteristics of APN are
knowledge, education, and scope of practice, regulatory issues and outcomes which are the hallmarks of APN. These elements are also highlighted by the American Nurses Association (2008), International Council of Nursing (2008) and, the NMC (2004), definitions of APN.

In addition to clinical practice as a core category, Hamric (2013) identify six competencies that further define APN, see table 2.5.

<table>
<thead>
<tr>
<th>Table 2.5: Competencies defining APN roles, Hamric (2013).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Expert guidance and coaching of patients, families and health care providers.</td>
</tr>
<tr>
<td>2. Research skills.</td>
</tr>
<tr>
<td>3. Consultation.</td>
</tr>
<tr>
<td>4. Clinical and professional leadership.</td>
</tr>
<tr>
<td>5. Collaboration.</td>
</tr>
<tr>
<td>6. Ethical decision making skills.</td>
</tr>
</tbody>
</table>

Examining these competencies against those outlined by the NMC (2005) and also the core competencies identified by the DoH (2010) reveals that core common attributes must be present for a role to be termed APN. These common characteristics of APN roles are summarized in table 2.6.

<table>
<thead>
<tr>
<th>Table 2.6: Core characteristics of APN as outlined by the ANA 1995, NMC 2005, and DoH (2010).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced clinical skills.</td>
</tr>
<tr>
<td>Clinical-based role.</td>
</tr>
<tr>
<td>Advanced knowledge.</td>
</tr>
<tr>
<td>Consultancy role.</td>
</tr>
<tr>
<td>Leadership and agent of change role.</td>
</tr>
<tr>
<td>Research role.</td>
</tr>
<tr>
<td>Focus on health promotion and education.</td>
</tr>
</tbody>
</table>
With regard to education there appear to be consensus that a Master’s degree level of education is desirable (ANA 1995; ICN 2008). However, the NMC (2005) stopped short of demanding this level of education and appears to accept a graduate level. This may be due to the fact the APN in the UK emerged at a later stage than in the USA (McGee and Casteldine, 2000; Marsden and Street, 2004). Furthermore APN education in the UK has been in many parts ad hoc and practice oriented (Castledine, 2002; Marsden, 2003). However, in 2010 the DoH indicated that a Master degree level education is required for advanced practice.

To take this argument further, it is agreed that education systems differ from one country to another and the education and health care needs differ from one country to another as well. A Master’s degree in Palestine is different from a Master degree in the UK or USA and therefore standardization of education may prove difficult globally. It could be argued that APN needs a common definition, core skills and scope of practice and that each country can decide with regards to the level of education needed to achieve that advanced level of practice (Kleinpell et al 2014; Chang et al 2011; Walsh and Crumbie, 2003).

It is clear that such discrepancies may continue unless, agreed guidelines and criteria are established for those role at the advanced level regardless of the title used. Hamric (2013) advocates the use of APN as an umbrella term for all the titles that meet specific criteria of education, competencies and practice.

2.7.2 Role purpose and scope of practice:

The term “scope of practice” in this context refers to the authority approved to a professional to provide health care services (Hamric, 2013). Such authority is given to nurses by the code of professional conduct, professional regulations and state laws (Hamric, 2013).
It could be argued that the lack of international consensus regarding definitions of APN roles, and educational preparations, has resulted in a lack of consensus with regard to the scope of practice for APN roles (Hain and Fleck, 2014). Lack of international guidelines and framework for APN may also have added to the constraining factors (Pulicini et al, 2010). For example, there is a lack of international consensus about APN educational level, role responsibility and autonomy. This is evident in a survey carried out by the International Council of Nursing which indicated variability in role autonomy, prescriptive authority, role functions, and educational preparation. (Pulcini et al, 2010). Due to the lack of internationally agreed APN standards, Bryant-Lukosius, (2003) indicated that organizations, managers and nurses created roles that meet their own requirements. Similar views were expressed by Marsden (2003) who argues that NP roles developed in several UK clinical areas in a fairly ad hoc fashion in response to health care needs at a local level. In the UK, Marsden (2003) indicated that NPs may have undertaken anything from a one-week course to a three-year honours degree course. This discrepancy in educational preparation may have affected role credibility and scope of practice (Marsden, 2003). She suggested that a clear educational policy must be developed with the suitable knowledge and skills that enable nurses to carry out roles at this advanced level (Marsden, 2003).

In Palestine this role development moved from ad hoc and unorganised manner to a more carefully planned role that is regulated at the organizational level. The work of ONPs in Palestine is governed and regulated by clinical protocols at the hospital level that outline roles and responsibilities of ONPs in each area of clinical practice. APN roles may have been created at the organizational level in response to specific needs. Such development may lack clear goal and specific guidelines that clearly define the purpose of such roles. In the absence of clearly defined goals and needs, APN roles become shaped by individual managers, or nurses
undertaking such roles leading to a wide understanding of such roles and their scope of practice (Bryant-Lukosius, 2003). In order to clarify the scope of APN roles, there is a need to establish agreed goals and outcomes of such roles prior to their development. It is therefore, argued that the introduction of APN roles in any health setting should be driven by rationale, scope of practice and outcomes (Chang et al, 2011; Gardner et al, 2006). Otherwise, lack of scope and purpose for such roles lead to operational problems such as role struggle (Hamric, 2013; Irvine et al, 2000).

2.7.3 Role conflict

As APN roles do not function in a vacuum, role conflict with other health care professionals may develop when beliefs about the role are contradictory or mutually exclusive (Hamric, 2013). Two types of APN role conflicts can be distinguished as a result of the evolution of APN: conflict amongst nurses and between nurses and medical staff (Bryant-Lukosius et al, 2004; Hamric, 2013).

The development of APN has not been without opposition from nurses themselves (intra-professional conflict) (Hamric, 2013). One criticism of APN from nurses stems from the belief that APN focuses on physician tasks rather than on nursing practice (Bryant-Lukosius, 2003). This indicates that some nurses were/are suspicious about APN roles and their intention which they believe was/is not underpinned by nursing philosophies. Others argue that nurses are not used to consult with other nurses as clinical experts and therefore such resistance to APN roles could be considered as resistance to change in work practices (Hamric, 2005).

On this front, it appears that there are two schools of thought concerning the core of the second school is associated with advancing nursing practice rather than medical practice (Finlay, 2000;
Manley, 1997). It is noted that such discrepancy in interpretation is still being debated (Carryer et al, 2007; Rolfe, 2014). Regardless of which school one believes in, it could be argued that as nursing is advancing, the status of the whole nursing profession will advance. This is described by Lewis (2004) as the push-pull theory. She argues that when nurses support APN roles to move forward then the remaining nurses will also be pulled forward and advance. In the UK there has been a small but significant resentment from nurses (Wilson and Bunnel, 2007).

APN has blurred the boundaries between nursing and medicine which placed a challenge on the nurses to define what is nursing and what is not (Dowling et al, 2013). This extension of APN into the medical domain was faced with dissatisfaction by many nursing scholars (Por, 2008; Cumming, et al 2003; Walsh, 1999). Others presented a counter argument stating that when nurses extend their role and ensure that such an extension adds to the holistic care nurses provide that avoids fragmentation and ensure continuity of care (Lowe et al, 2011). However, nurses who work at the APN level need to ensure that their practice, although expanded and or extended, remains engaged in nursing philosophies where notions of holistic care, health promotion, inclusive care and patient rights are well embodied in their practice (Dowling et al, 2013). This will provide assurance to all that APN remains within the nursing profession rather than moving into the medical profession.

With regards to conflict with the medical staff, Hamric (2013) views this as resistance to change and the challenge APN has brought into health care with regards to the status quo of nursing. Much of this conflict could be attributes to lack of medical staff understanding of the
complementary role of APN, lack of experience of such collaborative work and the historical hierarchy in the health care system (Hamric, 2013). This conflict was characterized in the USA by legal battles that centred on control, and financial rivalry (Stanley, 2005).

In the UK, Wilson et al (2002) in an attempt to explore the perception of the medical staff regarding the role of NPs revealed that GPs were concerned about threats to GP status (including job and financial security), nurses’ capability and standards in addition to organizational barriers. In England, extending nursing prescribing rights was faced by condemnation from the British Medical Council and considered the move to be dangerous (Bunnell, 2007).

Furthermore, in a qualitative study conducted by Gould et al (2007) to examine barriers to role implementation, participating NPs outlined three main barriers to role implementation: acceptance, relationships with other professionals and system issues. Similar results were revealed from a systematic review carried out by Jones (2005) identified that relationship with other health care workers (mainly doctors) was one of the main obstacles that faced the implementation of APN roles.

The survey by Pulcini et al (2010) revealed that most of the support for APN roles came from nursing organisations (92%) and, 83% of the opposition for the role came from medical staff. Lack of doctors’ knowledge with regards to APN scope of practice and the traditional dominance of the medical staff over health care were identified as reasons for such resistance (Hain and Fleck, 2014). However, it is argued by Jones (2003) that failure of APN roles introduction is inevitable if medical staff perceive the role as a threat. Nurses need to assure doctors that APN is about collaborative care rather than role replacement or transfer of role function from one profession to another (Bryant-Lukosius, 2003). Both doctors and nurses need to realize with
changes in the health care system including patients’ awareness and knowledge, power in health care needs to shift to patients (Pearson, 2000).

In order to reduce both inter and intra-professional conflict, better communication amongst all stakeholders is essential. Clear understanding of APN roles, their intention, values and potential impact is paramount. One fundamental aspect of APN roles is achieving collaborative care which requires that nurses and other health care professionals (mainly doctors) collaborate to provide care to patients. However, this collaborative approach to care requires the medical staff to relax their control over the care of patients and accept APN complementary role in such care (Chang et al, 2011; Sangester-Gromley et al, 2010). It is suggested by Hamric (2013) that multidisciplinary education that involves advanced practice nurses and medical students may prove necessary to enhance mutual understanding of both professional roles. Moreover, a survey of doctors, nurses and NPs in one health board in Northern Ireland revealed the need for multidisciplinary approach to the planning of APN services in order to enhance collaboration amongst health care providers (Griffin and Melby, 2006).

2.7.4 Stakeholders’ acceptance of APN roles.

There are a number of stakeholders in any health care setting: the community, patients, administrators, nurses, and other health care professionals. Acceptance in this perspective refers to the acknowledgment and respect for the role and the inclination to work with APN (Sangetser-Gromley et al, 2011). Various features of APN roles acceptance have been identified including
appreciation of the role, its benefits and the impact of APN roles on patients’ care (Chang et al, 2012; Sanagester-Gromley et al, 2011).

Important stakeholders operating within the APN settings need to be involved in the planning and development of APN roles in order to enhance acceptance of the role and reduce obstacles to the development (Sangester-Gromley et al, 2011; Bryant-Lukosius, 2003). However, it needs to be reiterated that APN roles are suitable for certain clinical areas that permit such a role expansion and also where encouraging contextual dynamics exist to allow role advancement and heighten acceptance by stakeholders (Dowling et al, 2013). The literature has identified that APN roles have been successfully implemented and accepted in community and primary care settings in addition to accident and emergency as well as certain inpatient settings. Sangester-Gromley et al (2011) advised that poor implementation of APN roles is attributed to lack of comprehensive assessment of the contextual influences in the practice environment and the lack of adequate planning to overcome such obstacles and enhance acceptance of APN roles by stakeholders.

It needs to be emphasized that medical and nursing roles are complementary to each other and that the essence of APN roles is to advance nursing practice and knowledge in order to complement medical roles rather than substitute for them (Dowling et al, 2013). It is these principles (complementary role, advanced nursing practice and knowledge) that advanced nurses need to communicate to medical staff, other health care professionals and clients. Such an approach is of great value to achieve a multi-professional acceptance of APN roles. It is believed that care is more effective when provided in collaborative manner across disciplines (Sangester- Gromley et al, 2013; Pearson, 2000).
Implementing a new role will by all means change the way care is delivered locally and it is reasonable to assume that the success of APN role will be dependent on the changes in the work structure. Such role development requires collaboration and co-ordination with all health care providers in addition to changes at the organizational structures that foster APN roles (Sangester-Gromley et al, 2011). For this, Offenbeek and Kinp (2004) demonstrated how organizational structure is crucial in the successful implementation of NP roles. They concluded that without a dynamic change in the way health care is delivered such roles will not be sustained and their full potential realised.

In order to enhance APN roles acceptance by patients, nurses need to focus on patients-centred, holistic and health focused approach to their nursing practice (Bryant-Lukosius, 2003). It is clear that for advanced nurses to be able to gain patients’ acceptance they need to have the care of the patients as a core motive and they need to assure other professionals that such roles will be complementary to their roles rather than a substitution. Reveley et al (2002) argue that once the patient’s best interest is at the heart of such development, less resistance to the role may exist. If nurses’ main reason for developing this role is the patients’ best interest and not their professional self-image (Revely et al, 2002) it is reasonable to assume that even with some opposition from the medical staff such a role can be realised and its potential achieved.

2.7.5. Role Value

In this context role value refers to the contribution of APN roles to the care of patients and how such roles impact quality of patient care. In response to the expansion and evolution of the APN roles, an expanding body of literature evaluating the impact of such roles has appeared. As
many as 30 outcome indicators for APN roles have been identified in the literature (Hain and Fleck, 2014).

International literature demonstrates that NPs provide care of great value and quality (Newhouse et al, 2011; Carter and Chochinvo 2007; Horrocks et al, 2002; Lightfoot et al, 2002; Venning et al, 2000). In their meta-analysis, Horrocks et al (2002) demonstrated that primary care NPs provide equivalent care to the physicians. This analysis concluded that in certain aspects of the care, NPs provided better care than doctors (Horrocks, et al 2002). However, in all these evaluations, patients’ satisfaction was the main indicator for quality. This in itself is a problematic indicator for quality as patients’ satisfaction may represent quality from the patient perspective only. It can, however, be argued that APNs spend more time with patients and therefore one expects patients’ satisfaction with APN roles to be higher than that of the medical staff. Another valid argument can also arise from the fact that advanced practice nurses manage certain categories of patients with less serious and complicated medical conditions and therefore it’s likely that the medical outcomes will be better than that of the medical staff.

On the other hand, Dealy (2001) conducted a meta-analysis to evaluate the role of Emergency NPs in which they concluded that there was no evidence to demonstrate that NPs are better or worse than SHOs in seeing, treating and discharging patients with minor injuries. Woods (2006) further demonstrated that neonate nurse practitioners’ care was inferior to that of the medical staff in the majority of cases examined. Such finding indicates the need for training and further skill development. Furthermore, Perry et al (2005) concluded from their research that although NPs can theoretically ease problems of patients’ access to primary care, the role of NPs cannot provide a straightforward answer to poor access.
A study by Seale et al (2006) revealed that NPs working in primary care provided a more holistic care with greater provision of information than GPs. Although this study focuses on holistic care, it also compares NP’s performance with that of the GPs. Not surprisingly, the majority of research that evaluates the work of advanced practice nurses seems to compare their performance with that of other professionals mainly the medical staff. The essence of such comparison may justify the medical profession opposition to such a role. If advanced practice nurses are indicting that they have no interest to substitute for the medical staff, then evaluating their performance against that of the medical staff may not be the best method of justifying APN roles. This emphasis on physician replacement and support rather than the complementary role of APN promoted evaluation studies that focus primarily on comparing nurses with physicians related to patients’ outcomes (Ezra et al, 2005; Harrocks et al, 2002; Lightfoot et al, 2002). Alternatively, evaluation of such roles can focus on issues related directly to the care of patients such as holistic care, compliance with treatment and the professionals own satisfaction with their role (Newhouse et al, 2011). Such evaluation will highlight the unique contribution APN can offer when introduced to the health care environment. Ongoing evaluations of APN roles are essential for continued development of the role and new nursing knowledge and skills (Bryant-Lukosius, 2003).

From this it is fair to conclude that there is evidence to suggest that APN roles provide positive contribution to the care of patients however, issues of cost effectiveness of the role need to be explored to provide added evidence of the value of such development (Gerrish et al, 2013; Kilpatrick et al, 2012).
The Value of Ophthalmic Nurse Practitioners (ONPs) role

The Ophthalmic Nurse Practitioner (ONP) role as an essence of APN was established in Jerusalem in 2000. However, most of the international literature that discusses the NP role in ophthalmology (ONPs) appears to be based in the UK. This can partly be due to the fact that ONPs were amongst the first NP roles to develop in the UK (Marsden et al, 2013). In fact, in house ONP training started in Manchester in 1989 (Marsden et al, 2013). In addition, NP role development in ophthalmology appears to be limited to the UK ophthalmic departments.

Unfortunately, in this field as well, most evaluations of the APN roles have been carried out by comparing such roles to that of the doctors and revealed higher level of patients’ satisfaction with NPs and marked reduction in waiting times (Slight et al, 2009; Lightfoot et al, 2002, Ezra et al, 2005). It could be argued that ONP see fewer patients with relatively minor complaints and hence the higher level of patients’ satisfaction with ONP compared to medical staff.

From their study of the effectiveness of the ONPs, Ezra et al (2005) found that ONPs were more accurate than Senior House Officers (SHOs) in history taking, assessment and making provisional diagnosis. The question to ask here is that is it right to compare ONPs with SHOs? One would expect an ONP with advanced ophthalmic knowledge, experience and training to be more accurate than SHOs who received ophthalmic training as part of their general medical training.

Kirkwood et al (2005) demonstrated safety and effectiveness of an ONP emergency eye clinic when practicing within defined scope of practice. Marsden (2000) reached similar conclusions when she evaluated the safety and effectiveness of a nurse–led telephone triage system as a method of prioritization in an ophthalmic accident and emergency department. Lockey and Ul-
Hassan (2009) pointed out that advanced ophthalmic nurses provide holistic pre-operative ophthalmic care that is critical in improving patients’ surgical outcomes and satisfaction. Similar conclusion was also reached by Dunlop (2010) concluded that advanced ophthalmic nurses provide holistic, safe, and efficient care by reducing patients’ waiting times and for minor surgical procedures.

Further evaluation in the UK revealed that nurse led ophthalmic care departments were both effective and safe (Hartry 2007; Kirkwood et al., 2005; Wadsworth et al., 2002; Marsden, 1999), improved access to health care services (Kirkwood et al., 2006) and that ONPs possess diagnostic skills necessary to prescribe treatment for glaucoma patients (Johnson et al., 2003). In addition, Bhatt and Sandramouli (2007) concluded from their research that the care provided by ONPs in accident and emergency settings was both evidence-based and of high quality. Marsden et al (2013) concluded that advanced ophthalmic nurses respond well to the need of patients and services. However, such promising results remain unclear in a developing country context.

2.7.6 Managing environmental factors:

As noted APN does not exist in isolation but societal, financial, and political factors both internal and external to health care settings influence policies that have a profound effect on the work nurses undertake (Brown, 1998; Bryant-Lukosius and DiCenso, 2004). Thus APN functions in multifaceted system that arises at the organizational level and spread to the larger social and political grounds. (Bryant-Lukosius and DiCenso, 2004). In this context, Hamric (2013) explains that an environment refers to any setting in which APN roles function ranging from a community in a rural health care practice to a complex tertiary health care organization.
In this regard, Styles and Lewis (2005) identified 3 different groups of factors that support the development of APN roles. These were grouped as external environment, factors operating within the environment of APN and factors operating within the environment of the nursing profession. These factors according to Styles form the pillars that support the development of APN, as outlined in Figure 2.1.

Factors that operate within the external environment include society, government, legislations, health care system and regulations (Styles and Lewis). Bryant-Lukosius (2003) further elaborates that APN is influenced by political, economic and societal factors that determine the support for such roles. Regulatory factors include licensing, privileges and authority (prescriptive and referral) given to advanced practice nurses are frequently reported as environmental barriers to the development and proliferation of APN roles (Sheer and Wong, 2008).

Factors that operate within the internal nursing environment include strength of the profession and support within the profession (Styles and Lewis, 2005). The strength of nursing as a profession and its influence within the health policy making area are critical factors that either support or hinder APN role development (Bryant-Lukosius, 2003). Nursing leaders and elite groups were found to be essential to support the development and successful implementation of APN roles in the USA (Hamric, 2013) in Canada (Bryant-Lukosius, 2003) and the UK (Marsden, 2003).
Factors that operate within the APN environment include APN education, scope of practice role definition and role identification (Styles, 1996). Brown (1998) identifies that in order for APN to gain legitimacy within this complex environment, it required graduate education and licencing. These are fundamental elements of APN (INC, 2008) however, issues such as licensing and regulations that control the entire work of APN are still outlined as environmental obstacles to APN work (Bryant-Lukosius et al, 2004; Hain and Fleck, 2014; Sheer and Wong, 2008). Such legitimacy for the role should enable the profession to determine its scope and direction of practice. This in many ways has been the case for APN in the USA which over the past few decades has achieved legitimacy and clear scope of practice (Hamric, 2013).

Figure 2.1: Pillars of APN, Adapted from Styles and Lewis (2005).
Environmental factors operating at the organizational level must also be adequately addressed to facilitate APN role development and implementation. Several studies report that the legitimacy, scope of practice and efficiency of APN role can be reduced by the absence of appropriate organizational preparations (Bryant-Lukosius et al, 2004; Carryer et al 2007; Hain and Fleck, 2014).

Thus, implementation of APN roles needs to be based on a comprehensive assessment of the environmental factors both internal and external to practice settings (De Geest et al, 2008). The system readiness both at the local (organizational) and national levels (legislations, government, regulation and society) for such implementation and potential obstacles need to be identified and addressed early in the implementation process (Plager and Conger, 2007; Sangester-Gromley et al, 2010). Key stakeholders, medical staff in particular, at the APN environment must participate in the planning and implementation of APN roles in order to enhance role development, minimize barriers, and facilitate integration of the role in the system of health care(Hain and Fleck et al, 2014; Sangester-Gromley et al, 2010).

2.8 Models of APN

A conceptual model is a “set of abstract and general concepts that address the phenomena of central interest to describe the propositions that broadly describe these concepts and the propositions that state general relation between two or more of the concepts” (Hamric, 2013, p 49). Such conceptual models have various purposes: models may help APNs highlight professional role identity and establish their principles and knowledge with regards to their role (Brown, 1998; Hamric, 1996) and provide the foundation for evaluating the impact of such roles (Gerrish et al, 2013; MeiLing, 2009; Sidani and Irvine, 1999). In addition, such models help to
identify sub roles, competencies, and implementation methods as well as APN roles evaluation strategies (Bryant-Lukosius, 2003; De Geest et al, 2008). A number of models of APN have been established from diverse clinical, educational, and theoretical positions. Such models have provided the means to identify role philosophies, domains, values, competencies, and educational requirement (Bryant-Lukosius, 2003).

The following section will analyse three models that have been frequently mentioned in the global literature. Other models will be explored in chapter seven of this thesis.

Manley (1997) developed a framework to describe APN and identified three interrelated concepts: the practitioner, the work environment and the impact of APN roles. This framework identifies contextual factors for such development: shared APN principles, conducive management structure, and organizational arrangement favourable for the development of APN. Although all such factors are vital for the development and the implementation of APN roles, they may only be relevant to the context in which the model was developed. This is the case, as the contextual factors presented (conducive organizational and management structure and shared APN values), describe the direct context i.e. APN work environment. It is apparent that other factors should have been considered including nurses’ power, patient/client choices and preference in addition to societal and economic factors.

On the other hand, Hamric’s (1996) APN framework attempts to assist practitioners in managing environmental elements to support effective APN role implementation including organizational structure and culture. This model falls short of addressing the wider societal and contextual factors that can be instrumental in such role development. This could have been
partly attributed to the fact that societal and contextual factors that have already been addressed and therefore support APN in the USA.

Brown’s (1998) framework provides a guide for development of health care policies, education curricula, role description and research programmes relating to APN. The model identifies three inter related concepts including role legality, APN and role consequences which are affected by several contextual factors. According to this model, APN outcomes can be evaluated in relation to the patients, health care, nursing and the individual practitioner. The model, contrary to Manley’s Model, recognizes various environmental elements that influence APN including society, economy, local circumstances, the nursing profession and the advanced practice nursing community.

Critically examining these models of APN reveals that the only area of agreement amongst these models is the direct patients’ care that APN provides. Although, these models have contributed to the development, promotion and evaluation of the APN role, all these models have one common shortcoming which is, that they were constructed based on developed countries health care context (Kilpatrick et al, 2012; Gerrish et al, 2013). It can be argued that such models lack consideration of various contextual factors that may hinder or facilitate APN development in developing countries such as Palestine. As APN does not exist in a vacuum but rather in a relatively complex and continually changing environment, it would be appropriate to argue that for advanced practice nursing to function and thrive in Palestine, a framework for such a role development is needed. The components of such a model need to be internally dependable with one another (Hamric, 2013) and that the framework is consistent with professional and societal values (Brown, 1998). It is this consistency with professional and societal values that
has prompted the researched to develop an APN framework that is applicable to Palestine which takes into account the unique environmental, health care and societal factors into account. It is those wider contextual factors that have been taken for granted by all mentioned models of APN, but still need to be addressed and receive grassroots level of attention in countries where APN roles have not been fully developed.

2.9 APN in developing countries:

From previous discussions of APN role development, it was evident that various environmental factors have been instrumental in APN role development. However, it is appropriate to argue that such inhibiting and facilitating factors are unique to those countries where APN roles have existed and that such roles cannot be blindly transferred to countries such as Palestine with unique contextual factors.

Internationally, economic demand on health care systems, the development of nurse education and changes in health care needs were instrumental in the global development of APN (Hamric, 2013). As a result, APN roles either exist of currently being developed in some 50 countries worldwide (Sheer and Wong, 2008). From their survey the authors further identified two critical factors in the global development of APN roles: availability of nurses (ratio of nurses to the general population) and the improvement of nurse education (Sheer and Wong, 2008).

For nurses to undertake APN roles, they need to demonstrate that they provide adequate generalist care to their patients. This requires that sufficient numbers of nurses are trained to undertake such responsibility. The availability of educational institutions that is capable of
providing advanced practice nurse education and training is also important to support the introduction of APN in developing countries.

The characteristics of health care needs in developing countries may vary considerably from those in developed countries. Therefore, for APN to be successfully implemented in developing countries, it needs to address the various environmental and cultural values of each nation. Crabtree (2005) further argues that discrepancies in causes and treatment of diseases in developing nations necessitate alteration in the groundwork of APN roles in order to meet the unique needs of developing countries. Screening for diseases, provision of immunization, ensuring clean water supply and improving nutrition may be priorities for many developing countries in the world (Crabtree, 2005). Furthermore, Madubuko (2003), coordinator of nursing affairs at West African College of Nursing, recognized the need for APN roles to screen and manage breast and cervical cancer, prevent the spread of HIV/AIDS, reduce maternal/child mortality and morbidity and decrease starvation. Such a difference in the health needs between developed and developing countries, requires modification in education for APN roles in developing countries.

The WHO (2001) advocated that APN deserves important consideration in developing counties where both communicable diseases and chronic conditions are on the increase. In previous discussions, it was evident that functions of APN roles in the developed world included promoting healthy practices and the provision of holistic approach to care. In addition the World Bank (2007) pointed out that Middle Eastern countries face a dual burden of disease because of decreasing rates of communicable diseases and increasing rates on non-communicable diseases. The WHO (2013) further explains that in 2010 in the Middle East chronic diseases accounted for
53% of disease burden. To be effective chronic disease care must be provided from a flexible, individualised approach (Hancharurnkul, 2007) and health management must be tailored to fit illness phases, biological needs and interests as well as the cultural setting in which the care is to be carried out (Cumbie et al, 2004).

APN can be exceptionally qualified to provide the necessary and effective care for chronic illness. This is true because nursing is steered by a humanistic principle wherein persons care is viewed holistically rather than just medically (Cumbie et al, 2004). Furthermore, for health promotion and illness prevention to occur, expert and well-informed professionals are needed to work with societies where many illnesses can be related to cultural practice. APNs can be ideally situated to conduct such primary care activities. It can be further argued that an emphasis on primary care is needed in developing countries and that the role of APN can fulfil this role (Mahmoud, 2013). This is especially valid as many developing countries suffer from shortages in medical staff (WHO, 2013) which may result in neglecting primary and community care for marginalised populations. It could be argued that with such scarcity of medical resources, it would be a waste to post doctors to work in outlying areas. Some APN roles emerged in the USA to care for the underprivileged and marginalised, improve access to care and provide care to specific groups of patients (Sheer and Wong, 2008). This shortage of medical staff in some developing countries, as compared to the health care needs, can be addressed by copying the experience of APN roles in the USA and where such roles originally flourished due to lack of physicians’ interest in rural settings (Stark et al, 1999).
Various obstacles may hinder the introduction and development of APN roles in developing countries, including lack of government regulations, nurse education as well as the status of nursing as a profession (Crabtree, 2005). Many laws regulating the work of health care professionals are outdated and very hindering (WHO, 2010; Stanley, 2005). As a result, many NPs around the world are actually practicing outside the law particularly with regard to prescribing drugs (WHO, 2010). In order to ensure full utilization of APN, such outdated laws and regulations need to be changed to provide APN with the legal coverage for the care they deliver. Updated regulations at the national level can then be reflected at the organizational level where APN role definition and scope of practice can be realised. The WHO (2010) further recommends that the scope of NPs (as an example of APN) should be well-defined and principles of education and autonomy of practice illuminated.

To address this, the International Council of Nursing created the International Nurse Practitioner/Advanced Practitioner Network. This network is actively involved in defining advanced practice roles, identifying role scope and standards of practice at the international level. However, Crabtree (2005) argues that such an initiative of APN role development need to take into consideration cultural, economic and nursing practice around the world. This advocates that such role development needs to be discussed in a setting applicable to such countries. For instance, nurses in many developing countries may be required to practice as advanced practice nurses however, they have not received the required legitimacy by governments or other institutions in those countries (Sheer and Wong, 2008; Stanley, 2004). Such an obstacle in the path of APN role development can be due to the traditional opinions about women in addition to the power and status of physicians in such countries (Jones and Davies, 1999).
Further to that, instability of political systems in some developing countries (such as Palestine) does not permit strategic and long term health service planning which in turn may have adversely affected development of APNs in such countries (Crabtree, 2005).

In their attempt to meet the health care needs of their countries, nurses working in developing countries need to challenge local traditional beliefs and professional margins (WHO, 2010). Nurses’ roles do not exist in isolation but rather in ever changing and sometimes complex health care environments. It is appropriate to suggest that understanding the specific needs and values of health care systems is essential before such roles are implemented in any jurisdiction (Hain and Fleck, 2014). It could therefore, be argued that the preparation of APN for practice in developing countries may be different from that in developed countries. As the role of an APN is client/patients focused, and that the health care needs of people living in developing countries vary from those in developed countries, it is likely that APN role and scope of practice are different as well. In addition, cultural beliefs, values and socio-economic factors are instrumental in shaping each nations customs and needs (Crabtree, 2005).

It has become apparent that APN roles are well established, at least in developed countries, and that they form the forthcoming frontline of nursing practice (Bryant-Lukosius et al, 2003; Gardner et al, 2007). Continued development of APN role appears to correspond with health care progress, societal developments and developments in the nursing profession to meet the ever changing health care needs of the society (Hain and Fleck, 2014; Sangester-Gromley et al, 2010). One strength of APN roles is the extent to which they can be flexible to accommodate the complex and challenging health care systems (Kleinpell et al, 2014). It is this flexibility that permits APN to meet the unique health care needs of the people in developing countries.
Therefore, giving consideration to the nature of the work nurses perform and limited resources available in developing countries, may help to legitimize APN roles in such countries.

2.10 Need for further research

The previous analysis of literature identified various definitions and characteristics of APN. Previous discussions have also identified role pre-requisites, challenges and facilitations factors in addition to role impact. It is clear that all discussed literature have focused on the development and management of APN in developed countries context namely UK and USA. There has been no research that explored the development of advanced practice nursing in Palestine or similar health care context. Such lack of available literature could have contributed to the poor development of such roles within the Middle Eastern health care context at large.

This study provides an in-depth exploration of the creation of an ONP role as an instance of APN in Palestine. Such a study should contribute to the understanding of APN in Palestine as a country in conflict and its unique health care needs and characteristics. Through the in-depth exploration of the development of APN in Palestine, a conceptual framework (that is more applicable to the country context) has been developed.

2.11 Conclusion

This chapter has outlined various definitions of APN from developed countries perspective. It has become evident that such role definition has been greatly influenced by contextual factors operating in developed counties. The evolution of APN started in the USA and was later adopted by other developed counties and some developing countries. There have been many challenges and obstacles in the path of APN
development. Such obstacles need to be critically examined if such roles are to be successfully implemented in different contexts.

Various conceptual APN models have been instrumental in the development, implementation and evaluation of such roles. All these models have been development in a context of developed countries with little attention to societal and professional values in other health care environments. As populations’ health care needs and characteristics, in addition to other environmental factors operating in developing countries, may be unique to such countries, the successful development of APN roles in such countries needs careful planning and grassroots efforts. The question however remains, whether such roles can be successfully transferred from developed countries health care environment to operate in developing countries jurisdiction. The ultimate aim of this thesis is to investigate such a role development in Palestine in the form of ONPs and to develop an appropriate APN framework that addresses role development needs of Palestine. Such a framework should provide a roadmap that helps health care workers, policy makers and concerned professionals transfer APN roles to other health care settings within the Palestinian health care system.
Chapter three: Choosing a Research Paradigm and Strategy

“Objective reality can never be captured. We know a thing only through its representations (Denzin and Lincoln, 2005, p 13).

3.1 Introduction:

The overall aim of this project is to explore the development of the Ophthalmic Nurse Practitioner (ONP) role as a form of Advanced Practice Nursing (APN) in Palestine. It is therefore important to select an appropriate research paradigm that informs methodology and methods. As this area of interest has not been researched previously in Palestine, an explorative and descriptive approach appears appropriate (Holloway and Wheeler, 2002). In addition, critical review of literature on APN in other countries (mainly western counties) has indicated that such role development is both complex and context based. Therefore, exploring such a complex phenomenon requires a holistic, contextual approach rather than a reductionist one to aid in the understanding of such a complex phenomenon (Plack, 2005). The choice of this approach is reflected by the selection of the inquiry paradigm.

Thomas Kuhn’s groundbreaking book, The Structure of Scientific Revolution (1962/1996), is responsible for the popularity of paradigms as a means to describe researchers’ opinions about their efforts to establish knowledge (Polit and Beck, 2007). Creswell (1998) sees paradigms as worldviews including ways of experiencing and thinking about the world. Plack (2005) reiterates that paradigms are collective beliefs within a community of researchers about the nature of reality and how to understand such a reality.
3.2 Choosing an inquiry paradigm

Philosophers and scientists follow a common objective of creating and experiencing knowledge. However, their methodologies in pursuing this goal may be different based on their ‘world view’ (Denzin and Lincoln, 2005). In general there are two broad inquiry paradigms referred to largely as positivism and subjectivism (Denzin and Lincoln, 2005).

When examining paradigms, thought needs to be given to ontology, epistemology, methodology and methods (Denzin and Lincoln, 2005). Table 3.1 provides an explanation of these terms.

Table 3.1: Composition of paradigms as outlined by Denzin and Lincoln (2005).

<table>
<thead>
<tr>
<th>Term</th>
<th>Questions asked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemology</td>
<td>How the investigator comes to know the world/truth/reality?</td>
</tr>
<tr>
<td>Ontology</td>
<td>How the investigator defines truth/reality/world?</td>
</tr>
<tr>
<td>Axiology</td>
<td>How the investigator ensures morality?</td>
</tr>
<tr>
<td>Methodology</td>
<td>What is the best way the investigator needs to use to acquire knowledge about the world?</td>
</tr>
</tbody>
</table>

The positivist paradigm is most closely associated with quantitative research and is the traditional scientific method to undertake research (Polit and Beck, 2007). A central belief of the positivists is that there is an objective reality that can be studied and known. This view accepts that nature is principally orderly and regular (determinism) and that an objective reality exists free from human observation (Polit and Beck, 2007). Positivists also believe in universal laws and uphold the principles of objectivity (objectivism) and impartiality (Holloway and Wheeler, 2002). An added principle is the need for objectivity and distance between researchers and what is being studied, so that biases are avoided (Speziale and Carpenter, 2007). Positivists
seek casual relationships, focus on prediction and control and argue that their findings can be
generalized to all similar situations and settings (Poat et al, 2007). The model of inquiry adopted
is hypothetico-deductive (Poat et al, 2007) as it moves from the broad to the precise and its
central objective is to test theory (Speziale and Carpenter, 2007).

There has been a wide criticism of this approach as it treats perceptions of the social world as
objective and absolute and disregards every day subjective explanations and the context of
research (Holloway and Wheeler, 2002.). Further criticism stems from the fact that human
involvements (such as experiences, pain, anxiety, attitude, perceptions, feelings, behaviors) are
difficult to quantify and control. Furthermore, the concepts of objectivity, reduction and
manipulation which are fundamental to positivists’ beliefs disregard human experiences and their
social interaction (Speziale and Carpenter, 2007). Positivists are improperly hooked on
providing clarification through generalization (Denzin and Lincoln, 2005). By doing so,
positivist pursue to make explanation through formal theoretical patterns and give no explanation
for multiplicity of other forms of understanding and clarifications (Denzin and Lincoln, 2005).

As a result of these limitations that attach to the positivist view of science, philosophers
have offered a different route to discovery. This is a broad group of inquiry paradigms jointly
labeled anti-positivism, subjectivism or interpretivisim (Creswell, 1998). Researchers within
this paradigm/s favor the use of qualitative approaches such as ethnography, case study,
grounded theory and phenomenology. Denzin and Lincoln (2005) described such an approach to
be multi-method in focus, involving an interpretive and naturalistic approach to its subjective
matter. Within this group of paradigms, the researcher’s role is that of an active participant who
is able to learn a story as told by informants based on their view of the world rather than of the
expert who believes to know more about the experience than those who are living it (Speziale
and Carpenter, 2007). All these paradigms share a goal in that they pursue understanding of a specific phenomenon from the standpoint of those living it (Denzin and Lincoln, 2005). For the naturalistic inquirer, reality (ontology) is not a fixed entity, instead it is a construction of the individuals participating in the research; reality exists within a context, and many constructions are possible (Denzin and Lincoln, 2005; Holloway and Wheeler, 2002). Emphasis is placed on the subjective account within context rather than experimental conditions (Plack, 2005). Thus this approach claims to be holistic, flexible and creative way of uncovering truth and reality (Speziale and Carpenter, 2007).

The subjectivist paradigm employs multiple ways to investigate a phenomenon of interest by analyzing the particulars of the data and then moving to more general perspectives, themes and dimensions (Polit and Beck, 2007). The findings from a naturalistic inquiry are the product of interaction between the inquirer and participants (epistemology), (Polit and Beck, 2007). This approach is usually associated with a small size sample of participants and collection and analysis of information (observations, oral and written narratives, text, visuals and sounds) rather than numbers (Hanley-Maxwell, 2007; Plack, 2005).

The subjectivist researcher becomes part of the research process which is viewed by critics as unacceptable subjectivity (Speziale and Carpenter, 2007). Becoming part of the research process provides insight into the phenomenon being studied as it places data within context and provides a valuable source of information gathering (Plack, 2005). In addition, undertaking research underpinned by subjectivists principles tend to be a lengthy process that requires intensive data collection and analysis. Critics of subjectivists’ research question truthfulness of data. However, good subjectivists research employ measures that enhance truthfulness and generalization of study findings (Speziale and Carpenter, 2007).
To summarize perhaps Stake (2005) provides three major differences between subjectivists and positivists paradigms: (1) the distinction between understanding of a phenomenon and explanation of such a phenomenon in the purpose of the study, (2) the distinction between a personal involvement and impersonal role for the researcher and (3) a distinction between knowledge discovered and knowledge constructed.

Reviewing the two main enquiry paradigms (positivist and subjectivist), has revealed that a subjectivist approach is most appropriate to deploy the study. The researcher had no hypothesis to test, but wanted to answer questions of why, how and what. It is evident that an exploratory perspective was most appropriate to answer the research questions. In addition, the researcher is interested in understanding the phenomenon (APN in Palestine), from the perspective of informants without imposing restrictive controlling measures.

The principles of the subjectivism are most appropriate to guide this study to explore and describe a phenomenon (development of APN) that cannot be measured. Using a subjectivist approach is valuable in providing deep exploration and understanding of a phenomenon rather than superficial answers often requested by static response items, like scales, and other forms of quantitative instruments (Speziale and Carpenter, 2007). As a result the findings from such a research approach are grounded in the realities of everyday life and provide the kind of knowledge that has immediate and practical use (Speziale and Carpenter, 2007). Furthermore, a subjectivists approach can explain ‘what is going on’ in complex situations, groups, and systems (Speziale and Carpenter, 2007). This approach has allowed the researcher to capture the differing multiple perspectives of various stakeholders involved in the development of APN roles in Palestine. Furthermore, using a subjectivists approach has enabled the researcher to bring insight into a contextual phenomenon by acknowledging the views of various informants. This
approach has also provided a holistic and informant-centered account that enabled the researcher to have an insight into a complex and unique phenomenon. This strategy has enabled the researcher to understand the phenomenon of APN in Palestine from the participants’ perspectives by allowing them to speak in their own words and express their perceptions without imposing any terms or restrictions (Plack, 2005). Furthermore, as the evolution of the ONP role as unique to the St. John Eye Hospital and Palestine, the researcher decided to use subjectivist paradigm as it allows the investigator to explore the phenomenon that has not been studied before in the context of the Palestine health care system. This Paradigm by employing qualitative methodology is particularly valuable when there is too little previous knowledge to understand the phenomenon of APN in Palestine (Palinkas, 2014). Such an approach has enabled the researcher to explore the phenomenon and develop conceptual frameworks that can be used as the foundation for further research in this area.

Perhaps the most valid argument for the use of a subjectivists research approach to address the aim of this study comes from Creswell (1998) who argues that such an approach is most appropriate when the problem is not well defined or is subject to interpretation, the variables are unknown and the researcher is focusing on the context that influences the phenomenon. Little is known about APN roles in Palestine in particular and the Middle East in general which warrants a need for a subjectivists approach to be used. In addition, the researcher has no variables to test or manipulate but needs to explore a phenomenon in its natural contextual environment.

Having reached a decision to use a subjectivist paradigm, it is important to decide on the most appropriate research approach to guide and underpin the study. However, Lincoln and Guba (2005) argue that almost any qualitative research receives criticism by advocating an alternative research approach.
Within the subjectivist paradigm there are several approaches and perspectives. These are summarized by Denzин and Lincoln (2005) as: positivist, post-positivist, constructivist, and critical theory. Each of the approaches within the subjectivist paradigm represents beliefs about the nature of reality or knowledge and the possibility of finding truth. A review of the characteristics of these various qualitative approaches highlights some areas of overlap between ontology, epistemology and methodological issues (Denzin and Lincoln, 2005). However, some fundamental beliefs, such as view of the nature of truth and reality cannot be easily unified (Plack, 2005). A comparison between the various approaches is summarized in table 3. 2

Positivist and post positivist paradigms are based on the principles that reality is both objective and external (Hanley-Maxell et al, 2007). Positivists use scientific methods while post positivists argue that research methods are “imperfect and thus knowledge is made up of probable facts and must be subject to constant revision” (Hanley-Maxell et al, 2007, P 100). Researchers operating within these paradigms may use experimental, quasi experimental and survey methods that can be replicated (Denzin and Lincoln, 2005).

Constructivists believe that knowledge is how the participant constructs reality from his/her experience (Denzin and Lincoln, 2005). This approach employs multiple methods of data collection such as observing, taking field notes, interviewing and reviewing permanent products (Hanley-Maxell et al, 2007). The researcher employs a participant-researcher cooperation to generate meaning of the participants’ experiences (Denzin and Lincoln, 2005).

Critical theory is associated with the Frankfurt School (Denzin and Lincoln, 2005). It is based on the principle that injustices, power struggle and inequity are the main influences on the experience of people (Denzin and Lincoln, 2005). This approach places emphasis on the
structures of power, race, class, culture and gender that influence people’s experiences (Denzin and Lincoln, 2005). The researcher and the participant collaborate to produce knowledge which is used to enhance change in people’s lives (Hanley-Maxell et al, 2007).

Following a review of the different research perspectives, it has become evident that constructivist principles are most appropriate to guide the study and archive its aim. Principles of constructivism closely relate to the researcher’s beliefs about reality and how it can be known. Ontologically, the constructivists believe that “realities are wholes which cannot be understood in isolation from their contexts (Lincoln and Guba, 1985, P 39). Constructivists advocate constructed relative reality that is socially and contextually based (Plack, 2005). The phenomenon under study (APN roles in Palestine) is both socially and contextually based. Furthermore, epistemologically, knowledge is viewed by the constructivists as the reflection of how the informants construct reality from their experiences and perceptions (Hanley-Maxwell et al, 2007). It is this interaction with the social environment that constructs knowledge and that reality is seen by the constructivists as socially constructed and context based (Plack, 2005).

Central to this perspective is the belief that values, attitudes of informants can be studied and uncovered through interpretation (Plack, 2005). The researcher is intimately involved in the study (Plack, 2005) and the researcher is interested in understanding the meaning of the informants’ experiences (emic perspective) (Speziale and Carpenter, 2007). During the inquiry the researcher becomes more informed and constructs the truth as in-depth learning and understanding takes place (Plack, 2005). Truth is seen by constructivist as “a matter of the best informed and most sophisticated construction on which there is consensus at a given time” (Plack, P 228). Constructivists believe in holism and therefore they see reality as multifaceted which is discovered in its natural setting (Denzin and Lincoln, 2005). It is the researcher who
moves between the various parts of the phenomenon until a more sophisticated understanding is constructed (Plack, 2005). The phenomenon under study is both complex and context based. In addition, the researcher is interested in exploring the factors that influenced the development of the role which involves taking into consideration the experiences and perceptions of multi stakeholders. The study aims to understand and construct the reality of APN roles development in Palestine driven by the individual and collective experiences of the main informants (ONPs).

Having reached this conclusion to use a subjectivist constructivist approach, one needs to choose amongst various qualitative research methodologies, i.e., phenomenology, grounded theory and cases study.
Table 3.2: Basic beliefs of various inquiry paradigms.

<table>
<thead>
<tr>
<th>Item</th>
<th>Positivism</th>
<th>Post positivism</th>
<th>Critical theory</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology</td>
<td>Reality ensured and driven by natural laws</td>
<td>Reality ensured but imperfectly apprehendable.</td>
<td>Historical realism. Virtual reality shaped by social, political, cultural, economic, ethnic, and gender. Values: crystallized over time</td>
<td>Multiple realities exist that are socially and experientially based.</td>
</tr>
<tr>
<td>Epistemology</td>
<td>The investigator and the investigated are independent. No influence of the investigator over the object being studied</td>
<td>Modified objectivism. Emphasizes external control on objectivity.</td>
<td>The investigator and the investigated are liked through dialogue. The investigator inevitably influences the inquiry.</td>
<td>The investigator and the investigated are linked. The truth is constructed as the investigation proceeds.</td>
</tr>
<tr>
<td>Methodology</td>
<td>Experimental manipulation. verification of hypothesis; chiefly quantitative methods</td>
<td>Modified experimental and manipulative techniques.</td>
<td>Dialogic/dialectical. Aims to transform ignorance into more consciousness.</td>
<td>Sophisticated construction is achieved by refining individual construction through interaction.</td>
</tr>
</tbody>
</table>

Source: Denzin and Lincoln (2005).
3.3 Choosing a methodology

The following section will briefly describe three main qualitative strategies and explain the rationale for choosing case study as research methodology/strategy to answer the questions of this research. Strengths and weaknesses of phenomenology, grounded theory and case study will also be discussed in this section.

Phenomenology as a qualitative research methodology is based on philosophy in the 19th and early 20th century in particular the ideas of the mathematician and philosopher Husserl (1859-1938) and Heidegger (1889-1976) who focused on ontological questions of meaning and lived experience (Poat et al, 2007). In psychological phenomenology, Giorgi and Colazzi developed phenomenological research approaches rooted in the ideas of Husserl (Poat et al, 2007). The aim of a phenomenological approach is to describe accurately the lived experiences of people and not to generate theories or models of the phenomenon being studied (Ploeg, 1999). It is a method and a philosophy that assumes people are able to express their experiences and the meaning of these in their lives (Talbot, 1995). As it focuses on accounts of lived experiences of those being studied, in-depth interviews are the most common means of data collection. The role of the researcher is to describe events as perceived and expressed by participants. This is achieved through the bracketing of researcher values and beliefs to prevent them influencing the description of the individuals’ experiences. Four aspects of lived experience are of interest to phenomenologists; lived space, lived body, lived time and lived human relation (Polit and Beck, 2007).

In general, there are two schools of phenomenology: descriptive and interpretive (Nicholls, 2009; Talbot, 1995). Descriptive phenomenology emphasizes the description of the meaning of human
experience. Descriptive phenomenological studies involve four steps: bracketing, intuiting, analyzing and describing (Talbot, 1995). Bracketing involves the researcher identifying any preconceived opinions, beliefs and values about the phenomenon of interest (Spezaile and Carpenter, 2007). Intuiting is realized when the investigator remains open to meanings of the experience as described by the informants (Spezaile and Carpenter, 2007). Following analysis of data the researcher comes to define and understand the phenomenon (Spezaile and Carpenter, 2007). A more recent approach in phenomenology, the hermeneutical interpretive approach, has emerged, which uses the experiences of people as a tool for better understanding the social, cultural and or historical context in which those experiences occur (Polit and Beck, 2007). Hermeneutic inquiry often focuses on how socially and historically conditioned individuals interpret the world within their given context (Ploeg, 1999).

Grounded theory was developed by Glaser and Strauss in 1960 and is founded philosophically on Symbolic Interactionism (Poat et al, 2007). Symbolic interactionism is the theoretical base for grounded theory research which believes that relationship between a person and society is constructed through constant interactive communications (Talbot, 1995). Distinctive principles of grounded theory comprise theoretical sampling and constant comparative methods (Poat et al, 2007).

The purpose of grounded theory is to discover social-psychological processes from the perspective of human interaction (Ploeg, 1999) and the epistemological assumption that people are engaged in social roles and processes of interaction and behaviors (Speziale and Carpenter, 2007). Grounded theory is an approach to studying social processes and social structures (Polit and Beck, 2007) and generating comprehensive explanation of phenomena that are grounded in reality (Talbot, 1995). According to Speziale and Carpenter (2007) grounded theorists assume
that individuals create their reality by assigning meaning to circumstances. Such meanings are communicated through symbols, e.g. words and dress (symbolic interaction theory). Grounded theorist study such symbols and interactions and examine how these may change to develop theory about social processes (Speziale and Carpenter, 2007). Data from a grounded theory study may come from many sources. In-depth interviews are the most common data source, but observational methods and existing documents may also be used. (Polit and Beck, 2007). The ultimate aim of grounded theory research is to develop a new theory or refine an existing theory about a particular phenomenon of interest by conducting a grounded empirical study on that subject (Speziale and Carpenter 2006).

A case study is an intensive, in-depth form of investigation (Hancock and Algozzine, 2006) when the boundaries between the phenomenon and the context are not clearly evident (Yin, 2003). The unit of analysis is a critical factor in the case study; it is typically a system of action rather than an individual or group of individuals (Tellis, 1997).

Case study is based on the use of multiple methods of data collection (Keyzer, 2000). It focuses on giving full description of the selected phenomenon which can involve individuals, groups, institutions and communities (Keyzer, 2000). One purpose of case study is to expand the understanding of phenomena about which little is known (Fitzpatrick and Wallace, 2006).

While Yin (2003) advocates the use of questions such as “how and why”, Stake (1995) favors the use of what he calls “issues” to define data gathering activities. Stake (1995) asserts that issues are problems about which people disagree, complicated problems within situations and contexts. He further adds that issue questions are issue statements that provide a powerful conceptual structure for organizing the study of the case. Stake (1995) differentiates between
issue statements/questions and information questions. The issue questions/statement directs the researcher to choose information questions to describe the case. Issue statements may be stated in any form that is helpful and appropriate to the research. “It is not a research question, it is the research question” (Stake, 1995, p17).

As with other methodologies, case study research is not perfect. Critics question the transferability of case study findings (Yin, 2003). In case study research transferability of findings can be enhanced by paying attention to detail when describing the context and the methodological aspects of the study (Anthony and Jack, 2009). Other shortcomings include the fact that case study is prone to biases as its methodological guidelines remain underdeveloped and therefore, case study research may lack rigour (Anthony and Jack, 2009). To overcome such shortcomings in case study methodology, Yin (2003) advocates the use of clear methods of sampling, data collection, and analysis as well as audit trail.

Table 3.3 provides a summary of the main strengths and weaknesses of phenomenology, grounded theory and case study methodologies. However, choosing between phenomenology, grounded theory and case study was very challenging and therefore the choice of case study as a research methodology was justified as follows:-

Although phenomenology is a well-established research methodology, it was rejected for this study as it would have focused on the experiences of ONPs ignoring the views of other stakeholders who may have been very influential in the development and evolution of the role. In Nursing, research topics appropriate for phenomenology are those related to human’s life experiences including, happiness, bereavement, being a charge nurse, commitment, or meaning of becoming a nurse. In addition, the aim of the study is more concerned with the phenomenon
of ONP role development rather than solely exploring participants’ (ONPs) life experiences. Furthermore, phenomenology as a research methodology does not provide explanation and conceptualization of the phenomenon under study (Speziale and Carpenter, 2007). The main aim of this study was to provide an insight and understanding of APN phenomenon by means of holistic examination. Phenomenology would have fallen short from archiving such aim.

Although case study and grounded theory have their roots in sociology, they have different goals. Initially grounded theory appeared to be the perfect approach to take however, grounded theory is more suitable to describe social processes and develop substantive theories related to the participants’ experiences. Although grounded theory promotes creativity and is a well-established rigorous methodology, its main aim is to develop or test theory. The aim of the research was not to develop or test a specific substantive theory related to the experiences of the ONPs, but to explore, describe and understand the evolution of the phenomenon (evolution of APN in Palestine) holistically and from perspectives of multiple stakeholders. In addition, the research aims to capture the experience of ONPs and other stakeholders in the evolution of APN to be able to explore the phenomenon in a bounded system. On the other hand, case studies are multi-perspective analysis (Tellis, 1997). This means the researcher can consider not just the voice of the ONPs but also the relevant stakeholders and the interaction between them. Furthermore, case study is the method of choice as the data collected about APN roles has come from various sources and is the preferred method when the research is focused on a specific unique bounded system (Yin, 2003). Thus, case study methodology has provided a holistic account of the evolution of ONP roles in Palestine. In this study, case study was undertaken in contemporary real-life context where the phenomenon of interest is interdependent or enmeshed
with context of study (Yin, 2003) and therefore case study is the method of choice when multiple perspectives and a holistic account need to be recognized (Walshe et al, 2004).

Furthermore, health care developments are complex, context dependent and multidimensional (Walshe et al, 2004) and such characteristics mirror the advantages of case study strategy. In addition, case study fits well with the meta-paradigm of nursing (person, environment, health and nursing) (Gangeness and Yurkovicka, 2006) and must be conducted within the context of the individual or group of individuals because beliefs and values are essential elements in defining and influencing the behavior and experience of people (Fitzpatrick and Wallace, 2006). In addition, case study as a research methodology has provided the researcher with an intensive but flexible approach to answer the research questions. The holistic view of the case study method has enabled the researcher to recognize the interdependencies and historical-contextual boundaries of the natural environment providing an advantage over other research methods which dissect the parts of the whole situation (Stake, 2005). All this has favored the use of case study as a research methodology/strategy.
Table: 3.3: Strengths and weaknesses of various qualitative methodologies

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenomenology</td>
<td>- Describes a phenomenon to provide deep understanding of participants.</td>
<td>- Informants have control over data collected.</td>
</tr>
<tr>
<td></td>
<td>- Lived experience is the main focus.</td>
<td>- Can be a long process.</td>
</tr>
<tr>
<td></td>
<td>- Provides thick description of a lived experience.</td>
<td>- Does not provide explanation or conceptualization.</td>
</tr>
<tr>
<td></td>
<td>- Uses bracketing to minimize bias.</td>
<td>- Difficulty in establishing data truthfulness and generalization.</td>
</tr>
<tr>
<td></td>
<td>- Uses rigorous systematic approach.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Well-developed research guidelines.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grounded Theory</td>
<td>- Employs rigorous and systematic procedures.</td>
<td>- Can stop short of providing an actual theory.</td>
</tr>
<tr>
<td></td>
<td>- Uses human interaction to discover psycho-social processes.</td>
<td>- Establishing rigor of study may be difficult.</td>
</tr>
<tr>
<td></td>
<td>- Uses multiple data collection methods.</td>
<td>- Limited generalization of results.</td>
</tr>
<tr>
<td></td>
<td>- Generates and tests theories.</td>
<td>- Has different research approaches.</td>
</tr>
<tr>
<td></td>
<td>- Studies multiple individuals who are involved in a phenomenon.</td>
<td>- Employs complex processes.</td>
</tr>
<tr>
<td></td>
<td>- Adopts creativity and provides rich data.</td>
<td>- Prone to methodological errors.</td>
</tr>
<tr>
<td></td>
<td>- Well established data analysis methods.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Study</td>
<td>- Useful to study a contemporary phenomenon within a context and bounded system.</td>
<td>- Data analysis methods are not well developed.</td>
</tr>
<tr>
<td></td>
<td>- Employs multiple sources of evidence using a flexible approach.</td>
<td>- Prone to biases.</td>
</tr>
<tr>
<td></td>
<td>- Intensive study and useful to describe, explore and understand a phenomenon in a real life setting.</td>
<td>- May lack rigor.</td>
</tr>
<tr>
<td></td>
<td>- Appropriate to answer how, why and what questions.</td>
<td>- Lack of generalization opportunity.</td>
</tr>
<tr>
<td></td>
<td>- Useful to understand a phenomenon from a historical perspective.</td>
<td>- Generates massive data.</td>
</tr>
<tr>
<td></td>
<td>- Used to study phenomenon little is known about.</td>
<td>- Methodological guidelines underdeveloped.</td>
</tr>
<tr>
<td></td>
<td>- Useful to study rare cases.</td>
<td></td>
</tr>
</tbody>
</table>

### 3.4 Case study as a research methodology.

The development of case study research is associated with the Chicago School of Sociology which was particularly influential in 1920s and 1930s (Rosenberg and Yates, 2007). Case study research was also used by disciplines other than sociology, such as anthropology, economics and geography (Tellis, 1997). In Europe Le Play founded case study approach during the 19th century (Rosenberg and Yates, 2007).

A review of the literature demonstrates no consensus with regard to case study research (Rosenberg and Yates, 2007). Yin (1994) and Stake (1995) regard case study as a comprehensive research strategy while Lincoln and Guba (2005) see case study as a method used to report natural inquiry findings. Other researchers described case study as an evaluation tool (Marshall and Rossman, 1995). Case study is a methodology and not a specific method concerned with a particular case focusing on a specific phenomenon in a given context using multiple methods of data collection (Lovell, 2006; Keyzer, 2000). Case study research is the in-depth study of instances of a phenomenon in its natural context and from the perspective of the participant involved in the phenomenon (Salminen et al, 2006; Jones and Lyons, 2000). It is used to explore real life experiences and situations when the researcher is interested in both the phenomenon and the context in which it occurs (Salminen et al, 2006; ). Moreover, it is used to gain knowledge of contextual phenomena about an individual, group, organization, institution, social or political event (Yin, 2003).
Yin (2003) warns against making any attempt to associate case study with particular paradigm, but other authors such as Lincoln and Guba (1995) and Stake (1995) argue that case study can be strongly associated with qualitative research. However, others believe that case study approach provides a bridge between paradigms (Luck et al, 2006). This bridge offers the researcher flexibility with regards to the choice of methods to inform the inquiry. Depending on the research question, design, and purpose, both quantitative and qualitative methods can be used to single or multiple case studies (Luck et al, 2006).

It is apparent that both the Yin (2003) and Stake (1995) approaches emphasize the importance of studying phenomena in their natural and uncontrolled environments where multiple sources of data are often used and where the focus is on in-depth understanding. However, Stake (1995) does emphasize that his approach to case study is qualitative in nature. Some even argue that Yin’s approach appears to have developed from positivist viewpoint (Appleton, 2002). Furthermore, Stakes (1995) argues that the purpose of case study is to maximize understanding of the case. The terminology which Stake (1995) uses is certainly more in agreement with the qualitative paradigm/s than the language used by Yin (2003). In addition Yin (2003) advocates the use of pre-planned protocols to guide the investigation. Such features of the case study appear strange to a qualitative paradigm where it is regarded that detailed design issue cannot be given in advance but must emerge, develop and unfold (Appleton, 2003). From this it is appropriate to suggest that Stake’s (1995) approach is more explicit in its qualitative belonging than that of Yin’s (2003) approach. Stake (2005, P 445) defined case study as “both the process of learning about the case and the product of our learning”.

101
Embarking on a constructivist inquiry into the development of ONP roles in Palestine, the researcher needed to decide on a case study approach that commensurate with the constructivists’ philosophy. From previous discussion, it can be concluded that Yin’s (1994) approach to case study is more in line with positivists’ philosophy. On the other hand, Stake (1995) advocates the use of qualitative approach to case study and is therefore more appropriate for a constructivist’s philosophy. In fact that Stake (2005, P 449) argues that “knowledge is constructed rather than discovered” and that the researcher cannot be value free. Stake (2005, P 443) further argues that “no aspect of knowledge are purely of the external world, devoid of human construction”. Furthermore Appleton (2002) argues that case study approach coincides with the constructivist’s ontology where there is a holistic approach to the study and also the phenomenon is studied in its natural context.

3.4.1 Types of case studies

Yin (2003) has identified 3 types of case studies: exploratory, explanatory and descriptive. Exploratory case studies are sometimes considered as a preface of social research. Explanatory case studies may be used for doing casual investigations and descriptive cases require a descriptive theory to be developed before starting the project. On the other hand, Stake (1995) categorizes the case as intrinsic, instrumental and collective. The first (intrinsic) has the aim of understanding a particular case without looking for or suggesting that other cases may be similar. This type generates theoretical positions from the data. Instrumental cases study seem to overlap with the description of collection case study which has the approach of theory building, that is to say some
attempt to gain deeper understanding of similar cases thereby widening and deepening our understanding of a phenomenon (Tellis, 1997).

Case study can be either single or multiple. As for multiple case studies, they include a case of replication, thus they are a vehicle for generizability (Yin, 2003). Multiple case studies add reliability to the findings and may offer deeper understanding of cases than single case designs can provide (Salminen et al, 2000; Yin, 2003). However, Stake (1995) emphasized that the number and type of case study depend upon the purpose of the inquiry: instrumental case study is used to provide insight into an issue; an intrinsic case study is undertaken to gain a deeper understanding of the case; and the collective case study is the study of a number of cases in order to inquire into a particular phenomenon.

Single case studies may be simple or complex, studying an individual, an event, or a system and are undertaken to allow the researcher to understand the particular case. The case is chosen because of its uniqueness or its ordinariness (Hanley-Maxwell et al, 2007). An embedded case study is a single study design in which subunits within the large case are targeted as part of the study (Yin, 2003).

For the purpose of this study, the researcher is interested in capturing the issue and complexities surrounding the evolution APN in Palestine. The researcher used an instrumental case study approach (as described by Stake, 2005) as the researcher was interested in furthering professional knowledge with regard to the evolution of APN roles so as to understand how such roles can be transferred further within the Palestinian health care system.
From the researcher’s experience and also based on the literature review on APN roles elsewhere, it has become apparent that the development of APN roles and the ONP roles in Palestine, may have been influenced by multiple contextual factors. Such factors may include, role value, training, professional practice, multidisciplinary relations, governance, legal issues, clients’ acceptance and health policies. It is the researcher’s interest to apply the principles of case study research to explore and understand such a unique phenomenon in a complex environment.

3.4.2 Generalizing from case study

Although some have dismissed the idea that case study is a rigorous research method, Yin (2003) insisted that case study has a robust design and offers advantages over other approaches. The issue of generalization from case study research has been debated at length in the literature and has been used to criticize case study research (Appleton, 2007; Luck et al, 2006). However, Yin (2003) refuted that criticism by presenting a well-structured explanation of the difference between analytical and statistical generalization. In analytical generalization previous theory is used as a template against which to compare the empirical results of the case study. With analytical generalization, Yin (2003) argues that theoretical propositions are developed to offer theoretical explanation of the phenomenon under study. However, the purpose of the case study is to gain in-depth understanding whereas the intent of quantitative methods is to generalize the findings justifying large sample size (Luck et al, 2006). Stake (1995, P 8) remarked that case study
is about “particularization not generalization”. Stake (1995) further explains that instrumental case studies are aimed at gaining greater understanding beyond the particular case. Intrinsic case studies, on the other hand, do not focus on generalizing beyond the case, as the interest is learning about a particular case’s idiosyncrasies. Stake (2005) warns against commitment to generalizing that draws the focus away from understanding the case itself. However, case study design that includes triangulation can enhance the generalizability of the findings (Yin, 2003). Denzin and Lincoln (2005) stated “triangulation is not a tool or a strategy of validation, but an alternative to validation”. The combination of multiple methodological practices, empirical materials, perspectives and observers, as a strategy, adds rigor, complexity, richness and depth to any inquiry” (Yin, 2003, p. 5). Triangulation is achieved through the use of multiple sources of evidence. Marshall and Rossman (2003) explain that triangulation can occur with data, investigators, theories or even methodologies. In case study this could be achieved by using multiple sources of data (Yin, 2003) or multiple perceptions to clarify meaning (Stake, 2005).

It is also argued that the need for triangulation arises from the ethical need to confirm the validity of the processes (Tellis, 1997) and reflects an attempt to secure an in-depth understanding of the phenomenon (Denzin and Lincoln, 2005). In this study multiple forms of data will be used. Data will be gathered from a focus group, in-depth interviews and reviewing of archival records/documents. Therefore multiple data sources will be used (Yin 2003) and multiple perceptions will also be acknowledged (Stake, 2005).
3.5 Research design and methods

“Perhaps the simplest rule for method in qualitative caseworks is this: place your best intellect into the thick of what is going on” (Stake, 2005, p 459).

This section will outline aims of the study and the processes that have been employed to answer the research questions. A design is a logical sequence that connects the empirical data to a study’s initial research question and ultimately to its conclusion (Yin, 2003). This qualitative project is driven by a constructivist inquiry paradigm and has been conducted using case study as a research strategy.

Stake (1995) has proposed a series of necessary steps for completing the case method, including posing research questions, gathering data, data analysis and interpretation. When undertaking a case study research Stake (1995) further emphasis naturalistic approach, the importance of the philosophical underpinnings of case methods, and the importance of the description in the context.

This study will use standard techniques for posing research questions and defining the unit of analysis. Because the study design was focused on exploration and description, emphasis will be placed on the purpose and aim of the study and not for formulating propositions (Yin, 2003). Moreover, the rationale for undertaking the study and substantial review and critique of the literature has provided support for understanding this case study phenomenon, the development of ONPs in Palestine.
3.5.1 Study aim:

The aim of this study is to explore the development of (ONPs) as an instance of Advanced Practice Nursing (APN) roles in Palestine with the view of exploring the development of such roles in other specialties within the Palestinian health care context.

3.5.2 Research questions:

Research questions in case study design begin with ‘how and why’ (Yin, 2003) and determine the type of case study. The main function of the questions is to keep the researcher focused and on track (Tellis, 1997). The following questions fit the planned instrumental, and exploratory and descriptive single case study design:

- Why was the role of APN in the form of ONP developed in Palestine?
- How was this role developed? What educational, organizational and clinical input was required?
- In what context was the role developed and particularly what were the main factors that hindered and or facilitated such development, and how were these managed?
- How has the role impacted the care of patients/clients and the organization of care delivered in the setting it was employed?
- What other examples of ad hoc advanced nursing practice exist within the Palestinian heath care setting and why and how such role developed?
- How can formally recognized APN roles be transferred to similar health services environments?
Yin (2003) confirmed that the particular research questions presented in this study are best answered by employing the case study research methodology. First, research questions like the ones posed here are best suited for case study as they ask the questions “how” and “why”. Second, case study is more effective when the research is focused on the context. This study focuses on the development of ONP role in its contextual ramifications in Palestine. Third, the research aims to explore the development of a phenomenon which cannot be captured by a quantitative approach. Fourth the researcher aims to capture an in-depth exploration which is comparable with the qualitative case study approach. Finally, because the boundaries between the context and the ONP phenomenon in Palestine are not clear, it aligned this research with the case study approach.

3.5.3 Defining the Case

Identifying the case in case study research is a fundamental issue. The case is the object of the study rather that the process (Stake, 1995). It is a single specific phenomenon (Creswell, 1998), it is a specific system (Stake, 2005) that is bounded by time and place and the boundaries are explicitly set via the description of the locale, culture, group, process or institution (Yin, 2003). Thus the case was defined as the development of ONP roles in Palestine.
3.5.4 Defining the unit of analysis

According to Patton (2002) the case and the unit of analysis are the same. This view is echoed by Yin (2003) who argues that the case can be identical with the unit of analysis. However, Stake (1995, p3) does not use the term unit of analysis but “study object”. In fact, Stake seems to perceive the case and the study object as indistinguishable.

It is not unusual for the choice of the case to be “no” choice at all. Sometimes we are given the case obliged to take it as the object to study (Stake, 1995, p 3). This applies to this study where the only choice was ONP role development as the case and the object of the study.

The case study researcher views the case as central to the research and collects multiple forms of data to enhance his/her understanding of the phenomenon under study. Since the unit of analysis is central to the case study, the researcher is not the focus (Zucker, 2001) this shift in focus is viewed by Hancock and Algozzine (2006) as empowering to the participants to provide a holistic view of the situation through multiple data. The unit of analysis refers to what is being studied (Hancock and Algozzine, 2006) which should be an individual, family, community, organization or even a nation (Stake, 1995). The case is a noun, a thing, an entity, a system; it is seldom a verb, a participle, a functioning (Stake, 2005). “The case is something to be studied, a student, a program,……….., but not a problem, a relationship or a theme” (Stake, 1995, p 123).
The definition of the unit should be determined early in the planning process (Appleton, 2002) as it will guide the outcomes of the study (Hancock and Algozzine, 2006). This definition should state who is included, context, phenomenon and time period being studies (Appleton, 2002).

The planned study includes ONPs in Palestine namely the St John Eye Hospital, Jerusalem. The case of analysis is the development of ONP roles in the Palestinian health services context. The time period will be bounded by the time this role was created in 2000 until current time. The context for the study however, included persons and sources of information that directly or indirectly have influenced the evolution of APN in Palestine.

3.5.5 Methods:

For the purpose of this investigation in which the researcher in attempting to capture the issues and complexities in “real life” contexts, thus the case study was regarded as instrumental in design (Stake, 1995). To study the case, the researcher gathered data on:

1. The nature of the case, its activity and impact
2. Its historical background.
3. Its developmental logic.
4. Other contexts, such as economic, political, legal, professional and socio-cultural.
5. The experience of those informants through whom the case can be known (Stake, 2005).
Furthermore, the findings from the literature on APN indicate that evolution of APN may be influenced by multiple interacting contextual factors. These factors include social, political, professional, policy issues in addition to acceptance by various stakeholders. It is the phenomenon of interest and the context that constitute the case (Appleton, 2002). Thus the case in this study (the development of ONP roles in Palestine) will need to include all these factors and possible other significant elements which may emerge during the process of data collection and analysis (Appleton, 2002)

3.5.6 Data collection

Stake (1995) and Yin (2003) concur that multiple sources of information within the real life context generates data that is comprehensive and rich. Yin (2003) identifies six sources of evidence: documentation, archival records, interviews, direct observations, participant observation and physical artifacts. This is logical because the weakness in one method can be compensated for by another at least partially.

This study is based on 4 data sets:

1. Interviews and focus group with ONPs and analysis of relevant historical data pertaining to the evolution of the ONP role.

2. Interviews with health policy makers.

3. Interviews with accident and emergency nurses.

4. Situational and policy analysis of the Palestinian health care system.
In addition to policy analysis, this qualitative research employed three data collection methods, a) focus group, b) individual interviews and c) reviewing and analyzing historical and official documents.

The combination of multiple qualitative methods (triangulation) is advocated to provide better exploration and understanding of a particular phenomenon (Lambert and Loiselle, 2008; 2000; Yin, 2003). The rationale for triangulation in this study is to provide comprehensive account and understanding of the development of the role of ONPs. This is termed by Lambert and Loiselle (2007) as an integrated approach that aims to ensure completeness and confirmation of data collected. When the researcher is interested in completeness of data, it is believed that each method of data collection provides a different perspective of the phenomenon and therefore the each method complements the other (Lambert and Loiselle, 2007).

The use of the focus group technique helped to explore the views, opinions and beliefs that informants had about the role (ONP and APN) whereas interviews helped to explore personal experiences of informants (ONPs and accident and emergency nurses) and other key stakeholders with APN role development. Focus group is often criticized as it offers superficial insight into a particular phenomenon (Talbot, 1995). Complementing focus group with in-depth individual interviews helped to provide better understanding of ONP/APN roles as a phenomenon. The use of focus group technique assisted the researcher to decide on pertinent questions that could have been followed up and explored further during individual interviews. In both data collection methods, the researcher used open-ended and semi structured questions which gave informants the opportunity to
express their views and experiences freely (Lawal, 2009). It is believed that people may need to listen to others’ opinions to help them formulate their own and thus the focus group provided a less threatening environment that presented during one to one interviews (Marshall and Rossman, 2006).

To summarize, holding a focus group sessions with ONPs followed by in-depth individual interviews with informants (ONPs, and accident and emergency nurses) provided data to answer research questions related to environmental factors that facilitated or hindered role development. In addition, this allowed the exploration of informants’ views about the impact of the role on the care of patients and the organization.

Interviewing the former Nursing Director aimed to explore rationale for role development in addition to influential environmental factors that may have influenced such a role development. This included exploring rationale for role development, possible role transfer, facilitating and hindering factors and impact of the role.

Interviewing two key policy makers helped to explore their views about ONPs role development and possible transfer of the role to other subspecialties within the Palestinian health care system. This included the exploration of needed resources for such role development in addition to exploring key policy makers’ knowledge of and interest in APN roles.

Reviewing official documents included ONP curriculum, assessment documents, and minutes of meetings and clinical protocols pertinent to the development and regulation
of the ONP roles. This helped to uncover data and knowledge pertinent to the ONP role development and environmental factors that have influenced such role development.

3.5.6.1 Focus group

Focus group is defined as a one-off meeting between participants to discuss a particular subject chosen by the researcher (Hopkins, 2007). Focus groups are used to explore opinions and beliefs of groups of interest (Halcomb et al, 2007). It aims to listen to and learn from stakeholders with regards to a particular phenomenon (Halcomb et al, 2007). This data collection method was also adopted to provide an interactive account of the phenomenon where informants listen to each other’s views and experiences which may help them form their own views and opinions (appendix one provides the focus group protocol). A focus group comprising 6 ONPs was used to explore the collective and interactive views of all informants in the group. The session took place in a classroom in the school of nursing at a time convenient for all participants, and lasted for 54 minutes. This also allowed the exploration of differences and similarities in opinions and how these were reasoned about and worked out. This added depth to the study of a phenomenon and revealed aspects that may otherwise be inaccessible (Lambert and Loiselle, 2008). Generated data revealed similarities and contradictions in opinions and beliefs pertinent to a particular experience and or phenomenon (Hancock and Algozzine, 2006). One of the main critical issues that a researcher needed to manage was power dynamics amongst the group where some participants were less dominant than others (Poat et al, 2007).
As suggested by Vaughn et al (1996) the following elements were included in the focus group session: introduction; warm up; simple questions; more complex questions; wrap up; member check and conclusion. Such a structure assisted in collecting pertinent and relevant data.

Tape recording was used to capture data during the focus group session. Halcomb et al (2007) favor the use of note keeping in addition to tape recording during a focus group session. This strategy helps to capture nonverbal communication during group interaction. In this project, this strategy was difficult to employ as the only researcher was engaged in facilitating the focus group session and ensuring that discussions were pertinent to the research aim. As advised, data generated from focus group sessions was transcribed after completion of the session in order to enhance accuracy of data (Del Rio-Robers, 2011). In focus group, the group of informants as a whole was the unit of analysis (Halcomb et al (2007). In this study, data generated from the focus group was categorized to inform the individual interviews.

3.5.6.2 Individual interviews

Individual interviews are the most widely used method of data collection in qualitative research (Lambert and Loiselle, 2008). This data collection strategy helped to explore detailed personal accounts and experiences of individual informants with regard to a particular phenomenon. It is believed that when informants are asked the correct
questions they are able to express their views that account for their experiences (Lambert and Loiselle, 2008).

The researcher used a broad “grand tour questions” (Polite and Hungler, 2007: p 255) which was followed by a more focused questions based on the responses from the initial questions, please refer to appendices 2 and 3. Semi structured individual interview was used to explore personal experiences of stakeholders (four Ophthalmic Nurse Practitioners, eight accident and emergency nurses, one former Nursing Director who was instrumental in the evolution of the role and two key governmental nursing policy makers). Individual interviews were conducted at times convenient to the informants and lasted between 35-58 minutes. All interviews took place in private venues to ensure confidentiality and promote interaction with informants.

An interview with the former Nursing Director (lasted 51 minutes) helped to explore issues related to the rationale for role development, dynamics of such evolution and role impact. Interviewing key nursing policy makers at the ministry of health was essential to explore their views regarding the professional and legal implication of such a role development. In addition, these interviews help to explore health officials’ views about possible role transfer to other sub specialties within the Palestinian health care system.

3.5.6.3 Reviewing and analyzing historical and official documents

As one of the main objectives of this study is to explore the historical environment in which the role of ONPs developed, reviewing and analyzing historical and official
documents was necessary. Minutes of meetings, educational curricula, policies and procedures, job descriptions, directives and communications pertaining to the role development and management were reviewed and analyzed. These documents are held in the Nursing Directors’ office, human resources office and the school of nursing as well as certain clinical settings. The researcher was granted a written permission from the Hospital Ethics Committee to access such documents. Pertinent historical documents were retrieved from the year 2000 (when the role was first introduced) until end of 2014. Documents were reviewed with regard to the main research questions to ensure that only meaningful data was collected.

One of the strengths of analyzing the content of such documents was that it was unobtrusive (Marshall and Rossman, 2006) as it was employed without disrupting the environment in which it was conducted. However, such review and analysis of such documents may be subjected to interpretation of the researcher (Poat, et al, 2007). This method was particularly useful for triangulation and supplementing other data collection methods as it provided another perspective on the phenomenon.

3.5.7 Reflection on data collection methods

1. Focus group with Ophthalmic Nurse Practitioners:

The focus group session with the nurse practitioners was interesting and provoked discussions and arguments. The focus group session with ONPs was held in a form of a guided discussion, sharing views and contrasting perspectives on the role development.
This interactive method allowed capturing collective and interactive views that helped to shape opinions and uncover interesting accounts of the phenomenon. Issues that surfaced during the focus group helped to provide direction to the personal interviews with ONPs in order to add depth and meaning to experiences. Some informants appeared more dominant that others which necessitated that the researcher acted as an active facilitator of the discussion and provoked the thoughts of the less dominant informants to ensure that active participation.

Members of the group appeared relaxed and confident to express their views. This could have been due to the peer comfort the group may have felt and also the members of the group are colleagues who on occasions work in the same clinical areas. However, most of the data that was generated from the focus group was in many ways confirmed during personal interviews but there was more emphasis in the focus group on obstacles and challenges that faced the ONP role.

Towards the end of the focus group session the recording device malfunctioned and therefore, the researcher continued the session but took notes of discussions.

2. **Personal interviews with Ophthalmic Nurse Practitioners**

Although some good valuable data was obtained from the interviews with four Nurse Practitioners, the researcher felt that some of the informants were not very willing to share their experiences freely with the researcher. Despite assurances about the role of the researcher and also the fact that the researcher is not the direct manager of the informants,
the perceived relationship and the role of the researcher as Director at the Hospital could have inhibited the flow of more in-depth data from the ONPs. Although, all participating ONPs were informed that the interview is scheduled to last for approximately one hour, some of the ONPs appeared uncomfortable during the interviews and even in a hurry to finish the discussion. This may have inhibited the researcher to pursue matters further and therefore obtain more rich valuable data. However, I feel this was compensated for during the focus group session as NPs appeared more relaxed and comfortable.

3. Interview with the policy makers:

Prior to deciding on interviewing these two policy makers, the researcher contacted the ministry of health explaining the purpose of the interviews. The researcher was informed that these two officials would be most useful with regard to discussing APN roles. Both officials agreed to meet with the researcher and to participate in the study. Both interviews took place at the ministry of health in Ramallah at the offices of both policy makers.

This experience was interesting as at least in one of the interviews that lasted 35 minutes, I felt that the Ministry of health official (policy maker) had very little knowledge about the role and therefore, he was trying to take the discussion to a different direction. The second official was more interested in the discussion (that lasted 43 minutes), and the subject being explored but I felt that he was more interested in placing obstacles in the possible path of role transfer than being genuine in suggesting ways to overcome such obstacles. Therefore, the data obtained was not sufficient to answer one of the research
questions about possible transfer of the role to similar health care environment etc. As a result, it was decided to extend data collection to other Palestinian health care setting where unregulated and ad hoc APN roles may exist.

4. **Interview with the former Nursing Director:**

This in many ways was generated and valuable data from which the rationale for role development was explored in depth. Interviewing the former Nursing Director achieved its aims as this allowed for the exploration of the official rationale for role development in addition to influential environmental factors that facilitated or hindered the role development.

3.5.8 **Expanding data collection**

Following the planned data collection, it became apparent that the data collected was insufficient in depth and breadth to answer one of the main research questions that deals with possible transfer of Advanced Practice Nursing roles to other specialities within the Palestinian health care context. This was mainly due to poor information obtained from interviewing the two policy makers.

Following discussion with the researcher’s supervisors, it was pointed out that some de facto APN roles, which are not regulated, may already be present in some accident and emergency departments in Palestine. Therefore, the researcher extended data collection to include
nursing and nursing management staff working at another hospital in Jerusalem. Individual one to one interviews with staff nurses and a nurse manager working at a general accident and emergency department were conducted to explore informants’ views about advanced nursing roles in their practice environment. The 10 practicing nurses in the department were invited to participate, but only 7 agreed to participate in the interviews. In addition, the Nursing Director of the Hospital was interviewed to explore her views about potential advanced roles at the accident and emergency department. Nurses, at the department, worked a three shift pattern, morning, evening and night. Nurses who were interviewed provided a good representation of nurses undertaking their duties across the three shifts. This was important to ensure that the experiences of nurses from all spans were taken into consideration.

The interview protocol (presented in appendix 4) covered areas related to nurses’ knowledge about APN roles, nature of advanced roles (if they exist), teaching and training, regulation and governance of such role. Data generated from those interviews enabled the researcher to explore contextual factors surrounding the creation of such roles. This also provided an insight into how such unregulated roles may have influenced the care of patients. Exploring the views and experiences of nurses and managers undertaking such unplanned roles has enhanced understanding of the factors that may have facilitated or hindered such role development. This also provided an excellent opportunity to enrich discussions and comparisons between planned advanced nurses’ roles (ONPs) with those that have developed ad hoc. By exploring educational and training needs in addition to nurses’ perception of role impact and rationale has enriched understanding of such ad hoc
nursing roles. When comparing such roles with the planned ONP role, it clearly demonstrates how various contextual factors are critical for the successful introduction of APN roles into the Palestinian health care settings. Therefore, exploring the views of concerned nursing staff has provided in-depth knowledge with regards to the possibility of APN role transfer to other areas of health care.

3.5.9 Sampling:

As a qualitative paradigm was guiding this study, a non-probabilistic sampling technique was used. Qualitative research is concerned with providing rich, in-depth understanding of a phenomenon which stems from personal accounts of participants (Poat et al, 2007). This study therefore, employed a purposive sampling method where participants of theoretical relevance were selected (Poat et al, 2007). In qualitative research, it is normal practice that data is collected until no new information is forthcoming. It is therefore inappropriate to decide on the number of participants prior to data collection (Talbot, 1995). However, when planning a research a framework for data collection is needed. Stake (2005) advocates that the researcher selects cases relevant to the phenomenon of interest. He further asserts that the researcher selects cases that “seem to offer opportunity to learn” Stake (2005, P 465). This approach advocates a purposive sampling method for the study that intends to construct knowledge from collected data. As the number of potential informants was not clear, for both the focus group and the personal interviews involving ONPs, all of the 10 practicing Ophthalmic Nurse
Practitioners in St. John Eye Hospital, were approached to participate in the study. For the focus group 6 ONPs agreed and consented to participate in the study. Following this, individualized personal interviews were held with 4 of whom 2 participated in the focus group as well. It was felt that this number of informants will provide rich data that will help the researcher to construct the development ONP roles.

One former Nursing Director was interviewed to explore reasons and circumstances that lead to the development of the role of ONPs. In addition two key nursing policy makers were interviewed to explore their views and opinions about the role development and the possible transfer of this role to other subspecialties within the Palestinian Health care system. Although such officials were not involved in the role development but exploring their views about such role development proved critical in supporting and licensing APN roles especially if the role is to be transferred to other subspecialties within the Palestinian health care system.

As for the 10 nurses practicing ad hoc APN roles at a general Hospital, seven agreed to participate in addition to the Nursing Director. Extending data collection to include informants undertaking ad hoc APN roles was essential to explore the rational for such development and also the processes used in developing such roles. In addition, this has provided an insight as how such roles can be successfully planned and introduced in other health care settings.

With regards to official and archival documents, samples from ONPs’ job descriptions, clinical protocols were reviewed as well as documents related to ONP course
curriculum and assessment. Minutes of meetings pertinent to the role development and management were also retrieved and reviewed. Where appropriate, hospital reports including general and human resources statistics, and patient satisfaction reports were also reviewed.

3.5.10 the research environment

This research project was conducted at two Hospitals in East Jerusalem. The first was the Eye Hospital where the ONP role has developed for more than 14 years. The Hospital is the main provider of eye care for the population of the West Bank, Gaza and East Jerusalem. ONP roles are implemented in various hospital settings including primary care, outreach clinics, a minor surgical unit and accident and the emergency department. Data was also collected at a second East Jerusalem general Hospital and specifically in its accident and emergency department.

Both environments provided the perfect opportunity for the researcher to explore the development of the ONP role and other de facto APN roles from the perspective of those who have been directly involved in the creation of the roles. The researcher also conducted interviews with other key informants namely a former nursing director and nursing policy makers working at the Palestinian Ministry of Health.

In order to gain access to the research environments, ethical approvals were sought from both Hospitals’ Ethics Committees as well as the De Montfort University Post Graduate Research Ethics Department, (appendix 4&5). Once these were granted,
informants were approached to participate in the study and were given an introductory letter explaining the nature and purpose of the study, (appendix 6&7). Those who agreed to participate were asked to sign a consent form, (appendix 8).

3.5.11 Data analysis

Data analysis in quantitative studies is dictated by strict protocols based on statistical methods, but data analysis for case studies is not as well defined (Stake, 2005; Yin, 2003). Qualitative research in an inductive process by which the researcher allow data interpretation to evolve and reveal patterns before, during and after the data collection process (Poat et al, 2007). According to Yin (2003) using a case study design allows the researcher to conduct the study (method) and analysis simultaneously. That is data collection and analysis occurs as an interactive process in which the researcher reviews the literature and then the field data and then revisits the literature once again to determine recurrent themes and patterns (Yin, 2003).

As an ongoing process, case study data analysis involves noting themes, clustering ideas and comparing and contrasting different responses during the course of the study (Stake, 1995; Yin, 2003). It is evident that the primary challenge for any qualitative researcher is the appropriate handling of large volume of data. This was echoed by Stake (1995) who asserted that the purpose of the case study is to eliminate data from consideration. This meant that the researcher kept a constant focus on the research questions and put aside data that is not meaningful to the study. However, as Hancock and Algozzine (2006) warn, the
researcher needs to be aware of any premature elimination of data that may prove essential to provide explanation for issues in the study.

Poet, et al (2007) reported two schools of thought with regards to conducting literature analysis prior to data analysis. The first advocates that literature review should not be carried out before data analysis as it may constrict the horizon of the data analysis (Poet et al, 2007). The second school argues for literature review prior to data analysis as this provides means of broadening analysis and enhancing the opportunity to have a better insight into the data (Poet et al, 2007). The researcher opted for the second argument as the evolution of ONP role is a unique phenomenon in Palestine and therefore, analysis of the literature did not shape the research methodology, methods or interviews and focus group schedules. However, during analysis, the researcher took a particular care to ensure that emerging codes, categories and themes were data driven. In addition, using memos provided an excellent mechanism to enhance the researcher’s awareness of particular biases and preconceived thoughts and ideas he had about the development of the ONP role (Spezaile and Carpenter 2007).

3.5.11.1 Using thematic analysis

Thematic analysis is an appropriate approach to qualitative data analysis that fits the constructivist paradigm (Braun and Clarke, 2006). This approach to analysis aims to organize data and search for patterns of meanings from qualitative data. It is also a flexible method that offers insight to study a complex phenomenon (Smith and Firth 2011). In
addition it is an analysis method that can be used across different research epistemologies or questions (Daya, 2011).

Thematic analysis has been criticized for being subjective (Daya, 2011). In order to avoid such shortcomings, I will explain all stages of the analysis process. Table 3.4 outlines stages for thematic data analysis as adapted from Ely et al (1997).

<table>
<thead>
<tr>
<th>Table 3.4: Six phases for thematic analysis. Based on Ely et al (1997).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarization with data.</td>
</tr>
<tr>
<td>2. In vivo coding.</td>
</tr>
<tr>
<td>3. Thematic categories.</td>
</tr>
<tr>
<td>4. Discovering themes.</td>
</tr>
<tr>
<td>5. Reviewing themes.</td>
</tr>
<tr>
<td>6. Finalizing and naming themes.</td>
</tr>
</tbody>
</table>

I started by transcribing the interviews and focus group recordings to familiarize myself with the data. This was time consuming but a very valuable exercise and provided me with the opportunity to immerse myself with the data collected. This also helped in the data analysis which was done within 1-2 days following each interview. During transcribing I was aware of the emergence of various codes from the data. Transcribing data formed the first stage of analysis as the researcher started to formulate meanings and make sense of the available data (Braun and Clarke, 2006). For each interview transcribed, pages were numbered with a front sheet containing information about time and place of the interview and a number was given to each interviewee. For each interview, three hard copies were made: one clean copy free from comments was locked safely. The other copies were used by the researcher for analysis but also kept safe at all times.
Data from the focus groups was captured on tape except for the final 10 minutes during which the researcher was able to take adequate notes. As the researcher was not able to write down all the words stated by the participants, following the focus group session data from the final 10 minutes was reviewed and additional clarifying comments were added to ensure the words captured the intention/words of the informants.

The second phase started as I began to look for relevant and interesting patterns of meaning to create an initial list of codes from the data. Moving forward and backward between data was essential to ensure that all relevant meanings and patterns are accounted for. Immersion of the researcher in qualitative data is achieved by active constant reading of the data in searching for meanings and patterns (Braun and Clarke, 2006).

Within thematic analysis, I used the theoretical approach. (Braun and Clarke, 2006). Analysis in the theoretical thematic approach enabled the researcher to direct the analysis to the theoretical interests in the area of research. This approach starts analysis from the specific research question (Braun and Clarke, 2006). This ensured that coding was carried out around each domain of the enquiry (Guest and Mclellan, 2003). Domains were derived from the inquiry objectives and composed of a number of research questions which were used during interviews, focus group and when analyzing historical data.

However, in looking for meanings and patterns in the data, I used an interpretive level of analysis which fits in well with the constructivist paradigm that underpins this study (Braun and Clarke, 2006). This interpretive approach in the analysis enables the researcher
to look beyond what informants have said and try to identify significant meanings in the various sections of the data. (Braun and Clarke, 2006).

Each transcript was read line by line and codes (using the participants’ words) were assigned to lines, sections and paragraphs. Interviews were read in-depth again and again to ensure no important data was overlooked. Codes then were grouped together to form thematic categories. Colours were used to highlight similar categories/concepts and identify those close links. For each interview categories were listed under each main research question. For each research question a flip chart was used to group all categories emerging from all interviews, focus group and historical data. Categories with similar meanings were then grouped into constructs or themes which are linked to the same phenomenon/research question. Those that did not fit any construct or theme were put aside and returned to later to see if they fitted with other emerging themes. Appendix 9 provides detailed explanation of the strategies used to deal with such challenging items.

Analyzing historical qualitative data followed the same principles of coding, categorizing and then comparing and contrasting with the whole data ensuring conceptual links. This involved a critical analysis of data pertinent to the role development. Documents, including ONP course curriculum, assessment and supervision were analyzed. In addition, management meeting minutes, clinical protocols and statistics related to work of ONPs were also analyzed. Phrases, comments and concepts pertinent to the role development were transcribed under the different domains of the research. Where appropriate quantitative data that was also examined in order to provide a better insight to the role development and also enrich the discussion.
Formulation of themes required considering all codes and categories and assigning them into logical groups to formulate potential themes. In doing this, similar codes and categories were grouped under one heading using visual representation and tables. Codes, categories and themes were examined for relationships and therefore, codes were moved between themes and others were discarded. When themes were formulated, it was ensured that each of them captured an integral aspect that is pertinent to the research aim (Braun and Clarke 2006). Appendices 10(a &b) provide an example of how themes were generated showing progression from transcript to conceptual framework.

Refining themes was also carried out to ensure that data within each theme is both coherent and meaningful. Once this stage of refinement was completed, the data was examined again for possible codes to ensure that themes are true representations of the original data. (Braun and Clarke, 2006) and elements of each theme are true components of a central coherent concept. At this stage the entire data was re-examined to ensure that the refined themes are a true representation of the data and to ensure that no other codes within a theme have been missed or overlooked in the data.

Defining and naming each theme required the researcher to write detailed analysis of each theme and identifying the story of each theme as well. At this stage it was also important to identify subthemes within themes in order to provide structure to the story of each theme.

Figures 3.1 and 3.2 demonstrate how the 4 data sets were used to construct the two conceptual frameworks.
In addition, throughout the research process, memos were written outlining thoughts, interpretations about emerging codes, categories, and themes (Hanley-Maxwell et al, 2007). Memo writing helped the researcher to become more connected to the data and opened the possibilities of seeing the data from different angles, leading to refinement of the emerging codes, categories and themes (Charmaz, 2000).
Figure 3.1: Data Analysis

Data Sources

ONPs
- Focus group
- Interviews
- Historical data

Policy makers
- Interviews

Data transcribed

Relevant and interesting patterns of meaning – initial codes

14 Thematic categories identified

Discovering themes and reviewing 7 themes

Finalizing 4 themes and naming them

Conceptualizing and contextualizing of themes

Construct the conceptual framework

ONP role evolution in Palestine (Figure 5.8)
Figure 3.2: Data Analysis

Data Sources

<table>
<thead>
<tr>
<th>ONPs</th>
<th>A&amp;E nurses</th>
<th>Policy makers</th>
<th>Situational and policy analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus group</td>
<td>Interviews</td>
<td>Interviews</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;E nurses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy makers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Situational and policy analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data transcribed

Relevant and interesting patterns of meaning – initial codes

Critical analysis of documents

20 Thematic categories identified

Discovering themes and reviewing themes

Finalizing 7 themes and naming them

7 themes pertinent to the aims of the study were identified

Conceptualizing and contextualizing of themes

4 elements and 12 concepts were identified to construct the conceptual framework (Introducing APN Roles in Palestine - Figure 7.1).
3.5.12 Situational and policy analysis of the Palestinian health care system

In this context, policy analysis is the process of building a better understanding of the Palestinian health care system by analyzing available information and triangulating various data sources (Lippman, et al, 2014). The ultimate aim of this analysis was to provide an overview of the health care system, its structure, provisions, work force and challenges as well as the extent to which such a system meets the health care needs of the Palestinians. In addition, this analysis aimed to identify gaps in the system that APN roles may be able to fill.

In order to achieve these aims the following strategy was used:

1. Based on the study questions, the researcher decided which information was needed to conduct an analysis of the health policy in Palestine in order to provide an outline assessment of the Palestinian health care context. This included data related to demographic, historical, political, social and economic factors as well as population health status, health care system, and health care provisions.

2. Information was gathered from local government publications, health reports produced by international and domestic agencies and international literature pertinent to the Palestinian health care context.

3. All information gathered was critically analyzed and triangulated from the various sources.

4. Data are reported in chapter four of this thesis which present a critical analysis of the historical and political perspectives. In addition, the economic situation, social
and demographic characteristics are discussed. This analysis also examined the health status of the population, disease patterns, health care provisions, health care financing, and health care challenges facing the Palestinian population.

This situational analysis of the contextual factors affecting the Palestinian health care system and policy has provided a better understanding of the health care system and its challenges. This analysis has provided the foundation to identify gaps, major shortcomings, and unmet health care needs of the population. This can be employed by concerned stakeholders to plan, implement and evaluate health care interventions to meet the pressing health care needs of the Palestinians.

5. By analyzing and triangulating data gained from various sources (governmental, NGOs and international agencies), 7 themes emerged that clearly highlight challenges facing health care planners and policy makers. As demonstrated in figure 3.2, findings from this analysis along with other sources of data were used to construct a framework (introducing APN roles in Palestine, Figure 7.1).

The following provides an example how evidence emerging from health policy analysis was triangulated with evidence emerging from the other data sources (table 3.5) to inform the construction of the conceptual framework.

Shortage of medical staff is an example of one of the themes that emerged from this policy analysis. Shortages of medical staff emerged as one of the main challenges facing the health care system and resulted in depriving Palestinians from a very much needed primary health care particularly for those with chronic diseases.
This theme was further conceptualized and triangulated with themes from other data sources (table 3.5) to construct aspects of the conceptual framework. Appendix 11 presents extracts from the various data sources that reflect shortages of the medical workforce. Evidence from the literature also confirms that shortage of medical staff was one of the main factors that triggered the evolution of APN roles in countries such as the USA and the UK.

These themes (table 3.5) that pointed to the need for the development of APN roles in order to meet the health care needs of the Palestinian people were further refined and developed to inform the conceptual framework. These themes were translated to a concept “APN role rationale” in the conceptual framework. APN role rationale constituted one of the concepts of a main element of the conceptual framework “assessing the need for APN role” which forms the first step that needs to be undertaken when introducing APN roles in Palestine.

Table 3.5: data sources and examples of emerging themes.

<table>
<thead>
<tr>
<th>Data source</th>
<th>Emerging theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview and focus group with ONPs</td>
<td>Role rationale (increased workload).</td>
</tr>
<tr>
<td>Interview with A&amp;E nurses</td>
<td>Ad hoc substitution of doctors.</td>
</tr>
<tr>
<td>Policy analysis</td>
<td>Shortage of medical staff.</td>
</tr>
</tbody>
</table>
3.5.13 Maintaining rigor

Qualitative research rigor is enhanced by emphasizing concepts of credibility, dependability, transferability, and conformability (Speziale and Carpenter, 2007; Denzin and Lincoln, 2005). In 1994 Guba and Lincoln added authenticity as a fifth criterion for evaluating the quality of qualitative report (Polit and Beck, 2014).

Credibility addresses the issue of fitting between the informants’ views and the researcher’s representation of such views (Speziale and Carpenter, 2007). Dependability on the other hand refers to the degree to which the research process is logical, traceable and clearly documented (Speziale and Carpenter, 2007). Credibility and dependability refer to ensuring that the interpretations of the research are “real” to the participants or that they reflect the perspectives of participants and not those of the researcher (Holloway and Wheeler, 2006; Denzin and Lincoln, 2005). In order to achieve confidence in data interpretation, prolonged field engagements as well as member checks were carried out where specific generated themes were taken back to informants to ensure those represented their views and experiences and were therefore, an accurate interpretations of data. Each interview that was transcribed and then analyzed was taken back to the informants to confirm the analysis was a true representation of their experiences. This was carried out with the four ONPs and three of the accident and emergency nurses. Dependability was also enhanced by ensuring that multiple data collection methods and multiple informants contributed to the generated data (triangulation) (Polit and Beck, 2014; Spezaile and Carpenter, 2007).
Transferability (fittingness) is the probability that research findings are applicable to others in similar situations (Polit and Beck, 2012; Poet et al, 2007). The searcher has provided a thick description of the phenomenon under study in order to assist readers in understanding the people and the context from which the results have emerged. Through thick description, readers can identify similarities or differences that may make the results more or less applicable to their or other situations (Denzin and Lincoln, 2005; Cope, 2014).

Conformability is the ability of the researcher to assure that the interpretation has emerged from the data and not been imposed on the data (Denzin and Lincoln, 2005; Cope, 2014). The researcher enhanced conformability by using an audit trail to review interpretation and provide justification for such interpretations. Diaries and analysis memos in addition to personal notes added to the conformability (Denzin and Lincoln, 2005). Furthermore, as Stake (2005) advised, the researcher as a qualitative researcher sought alternative explanations to challenge those that appeared to be emerging from the data.

Authenticity refers to the extent in which the researcher has been able to represent the emotions and feelings of informants (Polit and Beck, 2014). This was enhanced by providing a thick description of the research environments and informants and by using direct quotes from informants that represent their feelings and experiences with regards to ONP/APN roles.
3.5.14 Researcher’s role

In qualitative research, the researcher is the primary instrument of data collection and analysis. Although this has many advantages but also possible disadvantages. The researcher’s previous knowledge, familiarities, assumptions and expectations can influence what they see and hear (Hanley-Maxwell et al, 2007). Therefore, qualitative researchers must continually reflect on their involvement in the research process and how this involvement affects the outcomes and products (Denzin and Lincoln, 2005). This reflection is called reflexivity and encompasses according to Hanely-Maxwell et al (2007), two aspects (a) being aware of and reflecting on how the researcher’s beliefs, values and experiences affect the research process and (b) reflecting on how the research process affects the outcomes.

Although these aspects were continuously reflected and reported, the researcher has had an interest in the phenomenon of ONP role development in Palestine. First, being a lecturer and an advanced practitioner, the researcher contributed indirectly to the development of the ONP educational curriculum. Currently, the researcher’s role is managerial and has a responsibility for training, regulation, and governance of the work carried out by ONPs at the hospital where this research was conducted.

3.5.15 Ethical considerations

Negotiating access to both research environments (St. John Eye Hospital and the Accident and Emergency department) commenced by seeking an ethical approval from the
De Montfort University Post Graduate Research Office. The ethical approval was applied for after securing local ethical approvals from both Hospitals where this study was undertaken. The ethical approval requests included conducting interviews, focus group with informants as well as reviewing historical data pertaining to the ONP role development at the eye hospital. The second De Montfort University ethical approval request included conducting personal interviews with nurses working at a general accident and emergency department, (appendix, 12).

A letter was hand given to each potential participant outlining the aim of the study and nature of involvement needed explaining the voluntariness of the participants’ contribution. A consent form was also attached to the letter so that participants could sign if they agreed to participate. Each participant was assured about his/her autonomy, confidentiality and anonymity. Participants were informed that they can withdraw from the study at any stage without penalty. This was also explained in a consent form that each participant will sign prior to data collection.

Participants had the opportunity to discuss their concerns and questions with the researcher when letters were delivered and also at any time after that if they wished to do so. This gave participants the power to choose whether to participate in the study based on truthful and understandable information about risks and benefits involved in their participation (Del Rio-Robers, 2011).

This study utilized a focus group, one to one interviews and reviewing historical data as the principal data collection methods. This presented the researcher with unique
ethical concerns as the researcher is the line manager of the ONPs. This imbalance in power presented added ethical dilemmas (Swauger, 2011). This required the researcher to be very explicit about his intentions and expectation from informants. Although physical harm to participants was highly unlikely, psychological harm is an area that needed careful consideration. However, due to the nature of the relationship between the researcher and some informants namely ONPs, the researcher was conscious that participants could be embarrassed, humiliated or could lose their self-esteem as they were requested to share their experiences both positive and negative about a role that they were undertaking. Throughout this study the participants’ right of self-determination was assured and that participants will be free from coercion through the assurance of the voluntary nature of their participation. This was also assured by implementing the principle of informed consent. Being open about the nature and aim of the study, this should have encouraged voluntary participation of informants. The research did not exert any pressure on the nurses to participate in the study. Furthermore, they were provided with the necessary information about the study and encouraged to voice their concerns so that these could be discussed and addressed early in the study.

The issue of power dynamics was also addressed when approaching ONPs to participate and only those who felt comfortable participating were involved in the study. The researcher commenced this project being aware of his biases and continued to reflect on new emerging biases throughout the project (Swauger, 2011). Despite all of these measures that were taken by the researcher, only 4 ONPs agreed to participate in the personal interviews.
In compliance with the De Montfort Policy, the researcher has been responsible for data storage and when appropriate he will dispose of the data in a safe manner. Data was transcribed by the researcher and only the supervisors, Dr. S Ruane and Dr. A Moriarty have had access to the data other than the researcher.

Safe storage of data was assured. The researcher (and supervisors) had sole access to date and he has been responsible for data storage and when appropriate disposes of data in a safe manner. Research data was indexed and stored in a hard copy format and stored in a locked cabinet. Electronic data was also stored and secured with a password. Raw and analysed data will be kept for 5 years following the completion of the study and safely disposed of to ensure both confidentiality and anonymity of informants.

3.5.16 Reporting the results

Results from data analysis have been reported in three chapters of this thesis. Chapter four presents results from Palestinian health care policy analysis. From this analysis, seven themes emerged that describe challenges facing the Palestinian health care system.

Chapter five presents evidence generated from the focus group, and interviews with ONPs and interviews with other stakeholders as well as analysis of pertinent official and historical documents. Four major themes emerged and captured the experience and opinions of the informants with regards to ONP role development.
Chapter six presents evidence generated from conducting interviews with nurses undertaking ad hoc APN roles at the accident and emergency department. Three major themes emerged from analysis of this data that represent the experience of ad hoc APN role development.

Chapter seven of this thesis presents a further conceptualization of evidence from both chapters and presents a conceptual framework that guide the introduction of APN in other health care settings within the Palestinian health care system.

### 3.6 Summary

This chapter outlines the journey the researcher took in searching for an appropriate paradigm to inform both the methodology and methods employed in this study. Reviewing the two main paradigms (Positivists and subjectivists) revealed that a qualitative methodology underpinned by a constructivist’s paradigm is most appropriate to achieve the aim of this study.

Following a brief review of three qualitative methodologies (phenomenology, case study and grounded theory), it was decided that case study as a research methodology/strategy will be most appropriate to explore a phenomenon. Case study method is a comprehensive research strategy that allows for the interpretation of events through a multiple data collection process and the analysis of patterns occurring in the environmental context (Stake, 1995; Yin, 2003).
An exploration of case study as research strategy/methodology has revealed two dominant approaches: Stake (1995) and Yin (2003). The two approaches are somehow different in their orientation to the qualitative paradigms, it was decided that Stake’s (1995) approach will be used to guide the design and the methods of this study.

The development of APN in Palestine was chosen as the central phenomenon of interest and therefore, a single, instrumental and explorative case study design was chosen as described by Stake (1995).
Chapter Four: The Palestinian Health Care System

4.1 Introduction:

Previous work in this thesis has highlighted Advanced Practice Nursing (APN) development in the USA, where the role was first established and in the UK which is believed to have influenced the development of the ONP role in Palestine. Rationales for such role development and contextual factors that have both facilitated and or hindered role development were explored in both countries. In addition, APN roles in developing countries were explored with particular emphasis on how such roles can provide a means to meet the health care needs of populations.

This chapter provides an analysis of the Palestinian health care system and the socioeconomic determinates of the population’s health. Results from this analysis will form an integral component of the study findings and will be used to construct a conceptual framework for the introduction of APN in Palestine. This analysis will be achieved by exploring major contextual factors that may influence the health of the Palestinian population and health care in the Occupied Palestinian Territories (OPT). A brief historical perspective will set the scene to highlight the effect of the on-going conflict and unstable political climate on health of the Palestinians. This will be followed by analysis of socioeconomic factors and their determinants on health. The health status of the Palestinian people will be discussed by highlighting major health indicators. Where appropriate, a comparison of major health indicators will be made between Palestine and neighbouring countries.

The structure of the Palestinian health care system will also be discussed highlighting its
challenges and shortcomings. Palestine human health care resources operating within the health care system will be discussed and compared to neighbouring countries with a particular focus on nursing staff. In this respect, the Ophthalmic Nurse Practitioner (ONP) role development at St. John Eye Hospital will be explored outlining possible role development rationale. Throughout the discussion, the potential role of APN in meeting the health care needs of the Palestinian population will also be discussed.

4.2 Contextual and policy analysis

4.2.1 Values of policy analysis

Prior to commencing this study, I had been working in Palestine as a registered nurse for more than 15 years. I then thought I had a good understanding of the Palestinian Health care system and policy. When analysing the Palestinian health care policy, I used various sources including governmental, NGO, national and international literature related to the health care policy in Palestine.

The various sources pertaining to health care policy in Palestine point to one main underpinning value implicit in the domestic policy documents which is respecting human rights and social justice (MoH, 2013). The Palestinian Law and the Public Health Law both ensure the right to health protection for every Palestinian (MoH, 2013). The Public Health Law also highlights the right of access to health care for all Palestinians (MoH, 2013). The Palestinian Authority is also committed in its Charter to the protection of
individuals with special needs and the elimination of all types of discrimination against women (MoH, 2014).

Although this value is evident in the various health care policies, there was a clear indication that the political instability of the country did not promote and safeguard such an important value.

Violation of human rights and the overwhelming injustice across the Palestinian territories are manifested by the constraints of the separation wall, military barriers and the occupation which undermine all attempts to build a modern health care system in Palestine. This injustice is also acerbated by insecurity and economic blockade that influence four main values (partnership, effectiveness, efficiency and equity) that underpin health care policy in Palestine.

Partnership is an integral value that is reflected in the Palestinian health policy (MoH, 2013; UNRWA, 2015). Partnership between public, NGO, UNRWA and private health care providers is a common theme that may reflect the current level of fragmentation of health care provisions. Due to the large number of health care providers, such a partnership appears central to promote collaboration, coordination and liaison amongst all stakeholders. Health care policies value the contribution of all health care providers and advocate for effective partnerships amongst all stakeholders. This is directed at achieving better use of scarce resources to avoid duplication of services, competition and moreover enhance affordability and services accessibility especially to those who are disadvantaged, poor and unemployed. However, and despite this prevailing value, it is still
argued that one of the main challenges facing the Palestinian health care system is the lack of coordination amongst all partners and stakeholders (Gordon, 2012).

Another form of partnership which is reflected in the health policies relates to the collaboration between various governmental sectors and ministries. Such collaboration is directed mainly at areas related to creating an emergency national plan. As a result, a national emergency and disaster plan has been formulated to respond to conflicts and other major emergencies ensuring preparedness amongst all partners.

Effectiveness is another value that underpins health care policy in Palestine. Effectiveness focuses on the outcomes of health care services and the level of health improvement achieved (Seavey et al, 2014). Health policy in Palestine emphasizes the importance of better management of care facilities to promote quality of the care provided (MoH, 2013, UNRWA 2014). Under this value, policy analysis examined health outcomes (physical, psychological and emotional), mortality rates, life expectancy, prevalence and incidence of diseases (Walt, et al, 2008). Two dimensions of effectiveness were identified: medical and population (Seavey et al, 2014). Medical effectiveness deals with medical treatment of individual patients whereas population effectiveness focuses on interventions to prevent diseases at the public level.

Under this value, the researcher critically analysed issues related to health care provisions, health care providers, types of services provided at each level (primary, secondary and tertiary), regulation, licensure of health care professionals and public health practices. Health outcomes such as causes of death, infant mortality rates, life expectancy, disability rates, and the burden of both communicable and chronic diseases were critically appraised
and compared to neighbouring countries.

Efficiency as a third value underpinning health policy in Palestine, refers to a comparison between the inputs (resources allocated to health care such as the percentage of GNP spent on health care) and the outputs (the volume of the health services provided at the lowest cost) (Seavey et al, 2014). Under this value, health care policies advocate the efficient use of financial resources (MoH, 2013). Although, it does not provide a clear mechanism for governance, health care policies advocate transparency with regards to allocation of funds that are based on the provision of cost effective health care services (MoH, 2013). In this regard, this policy analysis examined issues related to health care expenditure comparing Palestine and neighbouring countries. Given the fact that Palestine has limited resources, the researcher examined health care expenditure per providers and the level and volume of services provided by the main health care providers. Issues related to numbers and distribution of health care workers, their education and regulation were also critically appraised. Areas of disease prevention, health promotion and vaccinations coverage were also examined. Walt et al (2008) argue that disease prevention and health promotion to reduce disabilities in the first place, are key aspects of health care efficiency. Therefore, public health provisions in the area of health promotion and disease prevention particularly chronic diseases were critically analysed.
Equity as the fourth value underpinning health policy in Palestine refers to the examination of fairness within the Palestinian health care system. Equity is concerned with the distribution of services and the status of health for all population subgroups (Walt et al, 2008). It was evident from this policy analysis that equitable geographical distribution of health care facilities and provisions is compromised by the security and political situation of the country (MoH, 2013; UNRWA, 2014; WHO, 2015). Analysis of the Palestinian health policy related to equity included studying certain aspects such as access to health care (including eye care services) by all and particularly comparing rural and urban populations. In addition, types and levels of health insurance coverage for all the Palestinian population were also critically appraised. This analysis examined the impact of poor health insurance coverage on the health of the marginalized and the health status of all the population.

The researcher explored types of health care service and provisions by the multiple providers. Given the fact that refugees are marginalized with poor living conditions and that chronic diseases are particularly prevalent amongst the refugee population, there was a particular emphasis on health care provisions for the refugees as compared to that provided to the non-refugees. It was evident that various health policies advocated for a more comprehensive national health insurance scheme to promote access to health care by all including the marginalised, poor and unemployed sectors of the Palestinian society.

On the personal level, undertaking this policy analysis was enlightening as my prior belief that the Palestinian health care system is primitive was changed at an early stage of
this analysis. Although the health care system was only established in 1993, I was surprised to learn that critical health care indicators such as infant mortality rate in Palestine, was comparable if not better than many neighbouring Arab countries.

From experience, I believed that access to health care facilities was complicated by the political instability of the country which prevented many from receiving basic primary and community care. I however, lacked adequate appreciation for the complexity of the health care system operating in Palestine. This triggered the researcher to study and analyse the structure, financing and provisions of the health care system. Analysis of these complexities revealed a number of challenges facing the Palestinian health care system.

This analysis was also underpinned by objectivity and reliability principles to minimize preconceptions. In order to achieve this, the researcher endeavoured to analyse pertinent data and literature from various sources. In addition to the local government official publications, information was also obtained from reliable and credible international non-governmental agencies such as the World Health Organization and the United Nations. Triangulating these various sources of information enabled the researcher to present a more reliable and objective analysis of the Palestinian health care system and policy.

4.2.2 Contextual background

A health care system cannot be studied without understanding the context in which it functions, especially as any health care system does not operate in a vacuum. Any health care system is influenced by its political, demographic, socio-economic, and cultural
environment within which it functions (Hamdan & Defever, 2003; World Bank, 2007). In addition, health can be influenced by the wider contextual factors including poverty, education, infrastructure, laws policies and politics (World Bank, 2007).

Palestinians took over the responsibility for health care in 1994 (Pourgourides, 1999). Prior to this, the Israeli authority was responsible for health care in the OPT (Pourgourides, 1999). Since 1994, modernization and change in various aspects of life including health care have been taking place (World Bank, 2007). However, since then, the country has been facing various challenges in meeting the health care needs and responding to those needs as a result of the ongoing conflict (Shawahim and Ciftci, 2012). To date, the Palestinians are still facing many challenges imposed by the unstable political situation which as a result affects all parts of life including the health care system (WHO, East Mediterranean Regional Office (EMRO), 2014; MoH, 2012). The following presents an analysis of the main contextual factors that influence health care in the OPT including historical, political, social and economic factors.

4.2.3 Historical and political perspective

In the past 100 years, Palestine has witnessed discontinuous governance and major political rivalry. Palestine was incorporated into the Ottoman Empire between 1514 and 1918 (Katvan and Bartal, 2012). It is believed by many that the source of the Arab-Israeli conflict goes back to the end of this era which witnessed immigration of Jews to Palestine (Imam, 2005). The British Mandate in Palestine started after the First World War and continued until 1948. In 1947 the United Nations approved the ‘Partition Resolution’
(Resolution number 181), splitting Palestine into an Arab and a Jewish state (Giacaman, et al, 2009). In 1948, following the end of the British Mandate the State of Israel was established over 75% of the Palestinian land. The remaining 25% of the Palestinian land that incorporated the West Bank including East Jerusalem and Gaza Strip were administered by Jordan and Egypt respectively, until these were also occupied by Israel in 1967 (Imam, 2005).

The Arab-Israeli wars (the 1948 and 1967) that Israel and Arabs fought over the remaining Palestinian territories resulted in the occupation of the whole of Palestine and the displacement of many Palestinians inside and outside the country (Imam, 2005). It is estimated that the number of registered Palestinian refugees is 5 million; about 1.6 million of them live in the West Bank and Gaza Strip (WBGS), and the rest live in other neighbouring countries (United Nations Relief and Works Agency (UNRWA), 2015). Palestine refugees are defined as “persons whose normal place of residence was Palestine during the period 1 June 1946 to May 1948 and who lost both home and means of livelihood as a result of the 1948 conflict” (UNRWA, 2015, P 1).

As a result, health care was administered by the occupying authority (Israel) until 1994. Health care services were neglected by the occupying authorities and spending on Palestinian health care by Israel was almost negligible (Gordon, 2012). The prevailing struggle and ongoing political uncertainty have resulted in poor health care services where Israel provided very limited health care coverage to the Palestinian population (MoH, 2012). This lack of adequate health care services for the Palestinians prompted various non-governmental organizations (NGOs) to focus their efforts on the provision of health
care services (MoH, 2012).

The peace process started in 1992 and resulted in an Agreement on Interim Self-Government Arrangements, and was signed by Israel and the Palestinian Liberation Organisation (PLO) in 1993 (World Bank, 2007). As an outcome the Palestinian National Authority (PNA) was established (Giacaman, et al, 2009). It was agreed by both parties at this ‘interim’ period that the final status negotiations would commence to solve problems over boarders, water, refugees, Jewish settlements and Palestinian refugees (Imam, 2005). These issues have since been the main hurdles in reaching a comprehensive peace agreement between Israelis’ and Palestinians. Moreover, UNRWA (2015) argues that the continued construction of illegal Israeli settlements in the OPT jeopardises the pursuit for a peaceful settlement to the conflict and the realisation of a two-state-solution.

Lack of political progress led to the eruption of the second Palestinian Intifada (uprising against the Israeli occupation) in 2000 and as a result Israel reoccupied parts of the Palestinian autonomous territories in the West Bank and Gaza which had a dramatic effect on the ground (MoH, 2008). The Israeli punitive strategy against the Palestinians has resulted in weakening the PNA and resulted in destruction of the public infrastructure (Gordon, 2012; MoH, 2008). The effect on the organizations, performance and funding of the health care system were profound and devastating (World Bank, 2007). Instability in the political climate and uncertainty about the future are clearly witnessed in the OPT (Mahmoud, 2013). Efforts to achieve peace are still ongoing. However the results of the process, including the future status of the OPT remain vague until current times.
4.2.4 The economic situation

Data from the World Bank (2014) indicated that the Gross Domestic Product (GDP) of Palestine was estimated at US$ 4,627.3 million or about US$ 1,337 per capita. Table 4.1 provides a comparison between Palestinian, Israeli and Jordanian GDP. The Palestinian economy is relatively small compared to neighbouring countries.


<table>
<thead>
<tr>
<th>Country</th>
<th>GDP (US$ Million)</th>
<th>GDP per capita (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palestine</td>
<td>4,627.3</td>
<td>1,337</td>
</tr>
<tr>
<td>Israel</td>
<td>290,550.9</td>
<td>20,780</td>
</tr>
<tr>
<td>Jordan</td>
<td>33,593.8</td>
<td>1,897</td>
</tr>
</tbody>
</table>

The economic situation has an intense effect on health care of the Palestinians where continued conflict and instability has resulted in shifting focus to the provision of the most crucial health care services (Gordon, 2012; Hamdan and Defever, 2003). The Palestinian economy has severely continued to deteriorate over the past years despite the peace agreement. This deterioration in the economy is as a consequence of political instability, curfews, closures, check points and the separation wall (Gordon, 2012). In addition, poverty and unemployment are very serious problems that present challenges and demands on the health care providers.

Prior to the 1994 Oslo Peace Agreement, the Palestinian economy was reliant on the State of Israel (the occupying power) for goods, trade and employment. However, it is evident that, even after the agreement, the PNA still lacks control over its borders (unmarked) and its natural resources (Gordon, 2012). Movement restrictions of people and
goods within the PNA controlled areas and also between PNA and other countries have resulted in the deterioration of the Palestinian economy (Palestinian Bureau of Central Statistics (PBCS), 2013; Roy, 1999). As a result of these restraints forced by the Israelis on movements of Palestinians and goods, the economic situation exacerbated further after the rise of the Palestinian Intifada in 2000 that resulted in punitive Israeli strategy (PCBS, 2013). According to a report by the PCBS (2014) the unemployment rate amongst Palestinians in the first quarter of 2014 was 17.0% in the West Bank and 43.5% in Gaza. The main reason for this form of economic crisis has been ‘closure,’ a system that enforces limitations on the movement of people and supplies. Such a closure system is claimed by Israel as necessary for security purposes (WHO EMRO, 2015). Closures, including the Separation Barrier, prevent the free movement of Palestinian economic relations and disrupt economic life (PCBS, 2013; World Bank, 2007). In the absence of any change in the current political and security situations, the likelihood of any economic progression that draws in investment is very difficult. (UNRWA, 2015).

Palestinian living standards have also been severely compromised. Despite some economic stabilization in 2010, 25 percent of Palestinians live in poverty (around 1.7 million people still live below the official poverty line of US$ 2.1 daily per person down from 51 percent in 2002) (PCBS, 2013). More than 600,000 people (16 percent of the population) were not able to afford basic necessities for survival (PCBS, 2013). It is pointed out by UNRWA (2015) that food security remains a major concern as many as 894,000 refugees (living in Gaza and the West Bank) required assistance by UNRWA to
meet their basic food needs.

High unemployment rates particularly in Gaza (43.5%), high poverty levels and also food insecurities have direct effect on levels of anaemias, poor dietary habits that result in obesity, diabetes, risk of ischemic diseases and hypertension (UNRWA, 2015). This presents a challenge to health care providers working at the primary care level in conducting awareness campaigns to combat such risk factors and carry out screening to prevent severe complications. It is these challenging circumstances that provide an opportunity and open doors for advanced practice nurses to play a role at the primary care level to address health care needs of the Palestinian population. Advanced practice nurses working in primary care in many countries have been able to provide quality, cost effective and preventive care (Jokiniemi et al, 2012; Twinn et al, 2004; Wilson et al, 2002).

### 4.2.5 Social and demographic characteristics

In 2014, the population of Palestine was estimated to be 4.4 million, out of which 2.7 live in the West Bank and 1.7 in Gaza Strip (PBCS, 2015). In 2013, 42% of the population in Palestine were refugees (they have lost their homes and their livelihoods); 28% of the total population in the West Bank and 72% of the population of the Gaza Strip (UNRWA, 2015). Such a high percentage of refugees has placed more demand on the Palestinian economy and health care (MoH, 2012). Many refugees live in very crowded camps and depend on food hand-outs provided by UNRWA. Such hard living conditions predispose refugees to nutritional problems, cardiovascular risk factors and chronic diseases such as diabetes (UNRWA, 2015). This requires strengthening primary care
provisions and enhancing access to services that has been severely compromised by the ongoing conflict (UNRWA, 2015).

The median age in Palestine is 16.7 years and only 2% are over the age of 65 years (PCBS, 2014). This means that many people will be entering their reproductive years and the population will continue to grow. Such high growth rates will lead to ever more rapid expanding of the youth population and smaller rate in the aging population. This trend in the Palestinian population dictates that more resources need to be diverted to child care and more emphasis is placed on the health of young people.

4.3 The health status of the population

As a result of external assistance from organisations such as the United Nations, World Bank and WHO, the overall health status of the population in the OPT compares well with countries of the same level of socio-economic development (Table 4.2). Well established successful immunisation programmes with high coverage have significantly contributed to the improvements in the mortality rates and the life expectancy of the population (MoH, 2014). The immunizations coverage rate exceeded 98% of the target population (MoH, 2014; UNRWA, 2015).
The fertility rate is high compared to neighbouring countries, which may be due to early marriage especially among females (PBCS, 2013). According to PBCS the total fertility rate in Palestine in 2012 was 4.6 (4.1 in West Bank and 5.8 in Gaza Strip) (PBCS, 2013).

In 2012, the life expectancy was 72.1 (71.1 years for males and 73.1 years for females) (World Bank, 2013). There are regional discrepancies: life expectancy in West Bank is slightly higher than that in the Gaza Strip (PCBS, 2013). Prolonged blockade and poor access to health care resources that have been imposed on Gaza since 2007, have impacted life expectancy (MoH, 2012). However, the improved health situation (as compared to the era before the PNA took control over health in 1994) and the gradual decline in the infant and child mortality rates have contributed to longer life expectancy. Table 4.3 provides some comparable health indicators with neighbouring countries.

<table>
<thead>
<tr>
<th></th>
<th>Life expectancy at birth</th>
<th>Infant (&lt; 1 year) mortality rate</th>
<th>Child(1-5 yrs.) mortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income countries</td>
<td>58</td>
<td>80</td>
<td>123</td>
</tr>
<tr>
<td>Middle income countries</td>
<td>70</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>69</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>Palestine</td>
<td>72.1</td>
<td>24</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4.3: Comparable health indicators with neighbouring countries.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>OPT</th>
<th>Jordan</th>
<th>Egypt</th>
<th>Lebanon</th>
<th>Israel</th>
</tr>
</thead>
<tbody>
<tr>
<td>% population growth rate</td>
<td>3.5*</td>
<td>2.8</td>
<td>2</td>
<td>1.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Total fertility rate per 1000</td>
<td>4.6*</td>
<td>3.7</td>
<td>3.2</td>
<td>3.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Health spending as % of GNP</td>
<td>9.3**</td>
<td>9.6</td>
<td>4.8</td>
<td>12.3</td>
<td>8.5</td>
</tr>
<tr>
<td>Per capita health spending US$</td>
<td>138**</td>
<td>74</td>
<td>66</td>
<td>476</td>
<td>1953</td>
</tr>
<tr>
<td>Hospital bed per 10,000</td>
<td>13.3**</td>
<td>17</td>
<td>21.5</td>
<td>30</td>
<td>62</td>
</tr>
<tr>
<td>Infant mortality rate per 1000</td>
<td>24.2*</td>
<td>22.1</td>
<td>27</td>
<td>27</td>
<td>6.1</td>
</tr>
<tr>
<td>Maternal mortality rate per 10,000</td>
<td>10**</td>
<td>4.1</td>
<td>10.4</td>
<td>10.4</td>
<td>5</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>72.1*</td>
<td>72.9</td>
<td>72.3</td>
<td>72.3</td>
<td>82.1</td>
</tr>
</tbody>
</table>

Sources: *PCBS, 20013 & **MoH, 2012 and World Bank, 2014 for other countries.

From this table it clear that fertility rate and crude birth rate in Palestine are still high compared to other neighbouring countries. However, crude death rate is the same as for Jordan but it is less than other neighbouring countries.

Life expectancy compares favourably with other neighbouring countries except for Israel. Although, both nations live in the same country, the average Israeli lives 10 years more than the Palestinian. In addition infant mortality rate is only 6.1 in Israeli and 24.2 in Palestine and the number of available beds in Palestine compares negatively with neighbouring countries especially Israel.

4.3.1 Disease patterns

The disease patterns of the Palestinians resemble a mixture of developing and developed countries characteristics (MoH, 2012). The main causes of adult mortality are
accidents (violence, trauma, and war), cardiovascular diseases and cancer (MoH, 2012). Although it is not a huge problem, there is a number of infectious diseases such as Meningitis, Viral Hepatitis A and B, Brucellosis, Measles, Leishmaniosis, and AIDS/HIV. Infectious diseases related death was 10.14% of the total deaths, with a rate of 27.9 per 100,000 populations (MoH, 2012). Mortality rate due to pneumonia and other respiratory infections are still the highest incidence rate (17.8) of infectious disease, per 100,000 populations (MoH, 2012). The high prevalence of smoking amongst the males could have been a contributing factor that increased the risk of pneumonia and respiratory infections. As a result of external assistance to the MoH from UNRWA and the WHO, there is a very successful immunization programme in Palestine. Thus many communicable diseases have been eradicated (MoH, 2012; UNRWA, 2015). However, some communicable diseases such Tuberculosis still persist especially in poor and overcrowded refugee camps in the GS (UNRWA, 2015).

4.3.2 Non communicable diseases (NCDs)

There are no routine morbidity data available from hospitals and Primary Health Care (PHC) centres (MoH, 2012). This problem results from the fact that clinics are overcrowded allowing doctors limited opportunity to keep adequate records (Imam, 2005). In addition, computerized information systems, in both hospitals and PHC centres, are not well developed except in 4 clinics in the WBGS and in the European Gaza Hospital. (MoH, 2012).

Non-communicable, chronic diseases present a major challenge for the Palestinian
health care system and therefore addressing chronic diseases was outlined as a strategic objective by the MoH strategic plan 2014-2016. Major chronic diseases in Palestine are cardiovascular diseases (CVD), Diabetes Mellitus (DM), and cancers (MoH, 2012). This coincides with the WHO EMRO (2015) report that Middle Eastern countries face a double problem of disease because of decreasing rates of communicable diseases and increasing rates of non-communicable diseases. The WHO EMRO (2015) estimated that in 2010, communicable diseases accounted for 29% of the disease burden (down from 40%) and non-communicable diseases accounted for 53% (up from 45%). By 2020 the respective figures are estimated to be 20% and 60%. This epidemiological transition is the effect of urbanization, changes in tobacco smoking and diet (WHO EMRO, 2015). In 2020, it is estimated that 9.5% of deaths in Middle Eastern countries will be related to tobacco use (WHO EMRO, 2015). A report by UNRWA (2015) further indicates that in Palestine food security is compromised as 50% of household income is spent on food which may affect the quality of food affordable to families. This in itself may lead to poor nutrition that causes a high prevalence of stunting along with Iron deficiency anaemia and newer problems such as obesity.

All of this presents a challenge for the health care system in Palestine. Several factors including poverty, unemployment, urbanization, stress of military occupation and changes in food consumption habits all present risk factors that increase the incidence of NCDs (EMRO WHO, 2015; MoH, 2012). As a result, one in ten people living in Palestine have at least one chronic disease (MoH, 2012). Such striking figures clearly highlight the need for advanced interventions at the primary and public health levels to combat NCDs.
UNRWA (2014) called for strengthening primary care that focuses on screening programmes and primary prevention through health education that impacts life style. In response to such need, the St. John Eye Hospital conducted retinal screening for 40,000 diabetic patients including 5000 refugees in 2014-15. This was undertaken by a group of ONPs who carried out primary prevention activities including screening and health education for diabetics living in refugee camps and isolated areas (St. John Eye Hospital, 2015). Early detection of diabetic eye diseases is essential to combat blindness which in turn protects patients and their families from poverty (UNRWA, 2014).

It has been reported that the prevalence of diabetes in Palestine is 12%, most of whom are poorly controlled (Husseini, 2000). However, recent estimations by UNRWA indicates that as many as 18% of the population may suffer from diabetes (UNRWA, 2013). One of the principle causes of blindness in Palestine is diabetic related eye diseases (Ma'ali, 2004). Poverty, low level of literacy amongst elderly patients in addition to eye trauma as a result of civilian unrests and warfare all added factors that exacerbate such high incidence of eye diseases (St. John Eye Hospital, 2013).

This role of the ONP in dealing with such a high prevalence of chronic diseases (diabetes) can be used as a model in other health care settings where chronic diseases present a significant burden on the Palestinian Health care system.

### 4.4.1 Structure of the Palestinian health care system

According to the WHO (2005) health care systems comprise the various establishments, institutions and resources that function collectively to meet the health care
needs of a population. At the heart of any health care system are the notions of access to health care services and equity amongst all beneficiaries (MoH, 2012). The World Bank (2007) identifies three components of any health care system: governance (policy and regulation), provision of services (clinical care and health promotion activities) and financing (resources).

The Palestinian health care system was described by Giacaman, et al (2009) as a mixture of disjointed services that were developed in different years and under different governing administrations. Thus, there are four main providers of health care in Palestine: Palestinian Ministry of Health (PMH), UNRWA, non-governmental organizations (NGOs) and private for profit providers (MoH, 2010). Although, the Ministry of health is responsible for health care provisions in all of the Palestinian territories, the current political conditions have resulted in the production of two health care systems one in GS and the other in the WB. The WB and GS are geographically separated by 80 miles, (see figure 4.1) and their boarders are controlled by the Israeli authorities. Patients from Gaza who require tertiary care in the WB and Jerusalem must receive approval to cross the boarders from the Israeli authorities. According to WHO (2014) report, as many as 20% of those seeking health care in the WB and Jerusalem were refused access by the Israeli authorities.
The Palestinian health care system as outlined in figure 4.2 is characterised by multiple providers and high fragmentation of structures with complex public and private provision and funding arrangements (Giacaman, et al, 2009; Hamdan and Defever, 2003). The following sections will highlight health care provisions, health care financing, health care insurance, human resources for health and the challenges facing the Palestinian health care system.
**4.4.1 Health care provision and governance**

Health care services are provided to the Palestinians through health care institutions that are managed by different agencies namely governmental (MoH), UNRWA, Non-Governmental voluntary organisations (NGOs), and the private for-profit organizations. This in many ways has led to fragmentation and duplication of services due to the presence of many health care providers and lack of coordination amongst the various providers.
PHC services are an important element of the Palestinian health care system that aims to enhance health care accessibility for all Palestinians (MoH, 2012). PHC in Palestine has been influenced by the complex political environment in the country where access to services is often compromised due to movement restriction and blockades. (Abu-Zaineh et al, 2008).

Primary preventive and curative health services are delivered by the MoH, UNRWA and other NGOs. These services that include, immunisation, mother and childcare, and health education, are mainly provided by the governmental sector and UNRWA free of charge (MoH, 2012).

The MoH provides free primary, secondary and tertiary services (please refer to table 4.4 for definition of services) to those who are enrolled on the national health insurance. Enrolment on the national health insurance is compulsory for all civil servants (police, military, teachers, and other public sector employees) but optional for the rest of the population. UNRWA on the other hand, provides free services (primary and limited secondary) to all those who have refugee status. NGOs provide subsidised services (primary, secondary and tertiary) to all those who seek care at the various centres, clinics and hospitals. However, those seeking care at private clinics, centres and hospitals must pay out of pocket or be enrolled in a private health care insurance.

The MoH owns and manages 22 Hospitals and 551 health centres all over the West Bank and Gaza. (MoH, 2014). In addition, there are 28 PHC clinics managed by the
security forces medical services serving for policemen, general security forces personnel and their families (MoH, 2014). All health services at both the MoH and security medical services are funded by the PNA. The MoH subcontracts specific tertiary health care and advanced diagnostic services that are not available at the ministry, with local private and overseas providers (mainly Egypt and Jordan) (MoH, 2012). In principle, governmental sector services are provided free of charge for those covered by the Government Health Insurance (GHI) (MoH, 2012).

Table 4.4: Types of health care services. Adapted from WHO, 2015.

| Primary care: health care that is provided by health care professionals who have first contact with patients who may be referred to more specialised care. |
| Secondary care: specialised care that is provided to patients who are normally referred from primary care physicians. Secondary care requires more specialised expertise and equipment than primary care. |
| Tertiary care: a highly specialised care provided over an extended period of time by high specialised health care professionals and usually involves performing complex procedures. |

UNRWA primarily focuses on basic health services including immunizations, managing chronic diseases, and screening. It has 61 PHC centres in the West Bank and Gaza and basically situated inside the refugee camps (UNRWA, 2014). PHC services are provided by UNRWA free of charge for registered refugees. At the same time, on a limited scale it has contractual agreements for hospital care with NGO providers, besides providing care through its only hospital which has 63 beds in the West Bank (UNRW, 2014).

NGOs had a central role in the provision of care before 1994 (MoH, 2010). It is believed that there are more than 50 NGOs providing health care to Palestinians (MoH, 2010).
According to MoH (2012) NGOs own some 205 PHC centres and 31 hospitals. The financial resources of the NGOs are from both local and international donors (European Commission, USAID, and other Gulf Countries) and agencies. NGOs provide subsidised services to those seeking care at the NGO’s clinics, centres and hospitals.

The private for profit services include private for profit clinics, centres and Hospitals that provide a wide range of services to those who have no medical insurance, non-refugees, those with private health insurance and middle and high income citizens. It has been noted that there has been an increase in such services due to the shortages of services provided by the government and the lack of certain sub-specialities within the Palestinian health care system in addition, to poor regulation of such services by the MoH (Giacaman, et al, 2009).

Individuals seeking care at the MoH or UNRWA must be referred by their primary care doctors (equivalent to family doctors) before they can seek secondary or tertiary care. However, patients can self-refer to both NGOs and private providers as patients will be required to pay out-of-pocket for health care services.

**4.4.2 Financing and expenditure of the health system**

In general, the health care systems in Middle Eastern countries are a complex mixture of three major providers: public, private and NGOs (WHO, 2005). Government spending is the main source of health care financing in Middle Eastern countries (WHO EMRO, 2105). However, funding for health tends largely to be directed at providing curative medical services intended to imitate Western health systems (Makhoul, 2006). On
average, the countries in the region are spending around 5% of their GDP on health care but some countries such as Lebanon and Jordan are spending 11.5% and 9.3% respectively (WHO EMRO, 2015). It is anticipated that governments in the Middle East will be under more pressure to increase spending due to population growth and increase in non-communicable diseases (WHO EMRO, 2015; World Bank, 2007).

Funding of health care in Palestine has a fragmented structure due to the multiple providers of health care (WHO EMRO, 2015; World Bank, 2007). The average health care expenditure in Palestine between 2000 and 2009 was estimated to be around 11% of the GDP which is higher than most developing countries (MoH, 2010). However, most of this funding comes from foreign donors. Due to the current political unrest and also reduction in forging aid, PBCS (2014) estimated health care expenditure in Palestine to be around 9% of the GDP.

External contribution to the health care financing is still substantial as different Palestinian health organizations are beneficiaries of foreign financial aid (MoH, 2012). Nonetheless, UNRWA is totally dependent on external funds which affect the range of services available for refugees depending on the level of funding available each year (UNRWA, 2014). The total expenditure of UNRWA on health in the year 2013 in the OPT was 119,454,000 USD (UNRWA, 2014)

### 4.4.3 Health insurance

The Government Health Insurance (GHI) covers about 60.4% of the Palestinian families (PBCS, 2012). It was indicated that 32% of the enrolments in the GHI are
compulsory for civil servants and also workers in Israel (PBCS, 2012). Voluntary enrolment in the GHI forms only 6.3% of those enrolled on the scheme (PBCS, 2012). Another category are those vulnerable and poor families who are registered as such by the Ministry of Social Affairs and make 14.8% of those enrolled on the GHI. The remaining are those who receive insurance coverage with subsidised fee under the Intifada Insurance (PBCS, 2012).

In Palestine, private health insurance schemes are so far limited and not adequately developed (MoH, 2012). They cover a small proportion of the population (7.8%) mainly in the West Bank (PCBS, 2012). Members of the private insurance schemes are those who are either upper or middle class as well as those working at private organisations such as universities, private companies and banks. People over the age of 65 and those with pre-existing medical conditions are strangely barred from enrolment in such private medical insurances (MoH, 2012).

4.4.4 Healthcare workforce

An exact number of health professionals and health care workforce in Palestine is lacking, since a nationwide database does not exist (MoH, 2012). Moreover, many health care providers work in both governmental and private for profit sectors which make a precise assessment of the number of health care workers very difficult. (MoH, 2012). As the main provider for health care in Palestine, the MoH employed 40,000 persons in 2011 (MoH, 2012). As many as 27% of the total employees in the health sector are employed in the PHC services and 59% are working in the hospitals, while 14% work in other health
departments within the ministry of health (MoH, 2012). The percentage of the workers in PHC appears high, however, there are no available statistics that outline the distribution and types of health care professionals undertaking work in the PHC settings.

Although the ratio of health professional to population has increased significantly after the establishment of many health training programmes at the Palestinian universities after 1994, however, these ratios are still less than most of the neighbouring countries in the region (Table 4.5).

Palestine has fewer doctors and nurses per head as compared to neighbouring countries such as Egypt and Jordan (MoH, 2012).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Palestine</th>
<th>Jordan</th>
<th>Egypt</th>
<th>Lebanon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician/1000 pop.</td>
<td>0.96</td>
<td>22.6</td>
<td>22.2</td>
<td>28.1</td>
</tr>
<tr>
<td>Dentist/1000 pop.</td>
<td>0.9</td>
<td>6.3</td>
<td>3</td>
<td>10.5</td>
</tr>
<tr>
<td>Pharmacist/1000 pop.</td>
<td>1.43</td>
<td>11.6</td>
<td>9.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Nurse and midwife/1000</td>
<td>18.3</td>
<td>29.5</td>
<td>26.5</td>
<td>11.6</td>
</tr>
</tbody>
</table>

Table (4.5) Comparable human resources indicators with countries in the region. Source: (WHO EMRO, 2011; MoH, 2012).

It is clear that there are fewer doctors per head in Palestine as compared to neighbouring couturiers such as Jordan and Egypt (MoH, 2013). Such shortage may be attributed to the poor economy and also shortages of medical schools (three in total with limited number of enrolled students). An added reason for this shortage of medical staff may be also due to migration of the few qualified doctors to other countries due to the political instability. On the other hand, there are eleven universities that undertake nurse training (both graduate
and post graduate). All university education is self-funded by the enrolled students and the cost of nurse education is far less than medical education. It is not uncommon to have unemployed nursing staff as the number of graduates may exceed the market needs. This shortage of medical staff and over supply of nurses could be used as a platform for introducing APN roles to meet the health care needs of the Palestinian population. One principle factor for developing APN roles globally has been driven by shortages of doctors willing to work in primary care as well as changes in junior doctors working hours in high income countries (Barton, 2014a; Hamric, 2013). With such poor economy and poor access to health care due to barriers and blockades, the development of APN roles, at least at the primary care level, appears attractive. With the available educational institutions and resources, the education and training of advanced practice nurses should become feasible. Graduates of such APN programmes can undertake roles in various settings within the community and even hospital settings. As chronic diseases are prevalent and present an increasing challenge for the health care system, advanced practice nurses working in isolated and remote communities can form the backbone for primary care in Palestine.

4.4.5 Challenges for the Palestinian health care system

The MoH has identified five main strategic objectives as outlined in Table 4.6, in its strategic plan 2011-2013. These objectives address some of the challenges facing the Palestinian health care system. The main challenge that faces the Palestinian health care system is its dependence on external aids (MoH, 2012). Palestinians depend heavily on external assistance without which it is debatable whether the PNA can sustain its existence.
The three top donors are the USAID, European Commission and the Arab League (MoH, 2012). In 2008, the PNA received $891 million in the form of emergency aid, budget support and development aid (World Bank, 2009). In 2014, the WHO Regional Office for the East Mediterranean Region appealed for urgent funds to enable the Palestinian MoH meeting health care needs of the Palestinians (WHO, 2014). Such external aids are not always regular which may result in poor funding and reduction of services depending on available resources. This shortage of funding for the ministry of health presents major challenges for forward planning (Hamdan and Imam, 2014).

An added challenge is the lack of effective coordination and communication amongst health care providers (public, private sector, NGOs and UNRWA). Such lack of coordination and regulation by the MoH has resulted in subsequent fragmentation in the provision of care that is driven by competition amongst recipients of foreign aids. It is possible that international donors often have their political agenda which results in poor liaison amongst providers of health care and duplication of services (Hamdan and Imam, 2014).

<table>
<thead>
<tr>
<th>Table 4.6: MoH strategic objectives as outlined in its strategic plan 2011-2013. Source MoH (2013).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensure comprehensive and integrated health care system for all citizens.</td>
</tr>
<tr>
<td>2. Promote preventative health care and management of non-communicable diseases.</td>
</tr>
<tr>
<td>3. Ensure the availability of qualified health workforce for all health care services.</td>
</tr>
<tr>
<td>4. Ensure effective, comprehensive and sustainable health care system.</td>
</tr>
<tr>
<td>5. Ensure institutional development and governance of the health sector.</td>
</tr>
</tbody>
</table>

An added challenge is the lack of effective coordination and communication amongst health care providers (public, private sector, NGOs and UNRWA). Such lack of coordination and regulation by the MoH has resulted in subsequent fragmentation in the provision of care that is driven by competition amongst recipients of foreign aids. It is possible that international donors often have their political agenda which results in poor liaison amongst providers of health care and duplication of services (Hamdan and Imam, 2014).
As a result, the MoH has a significant challenge in coordinating the provision of services amongst the various health service providers to ensure efficient use of scarce resources. Although the MoH has an overall responsibility for the regulation and governance of all health care activities, such a role remains very limited and underdeveloped.

Dominance of the medical leading group in major health policy-making is also evident in Palestine (World Bank, 2009). The majority of the key policy makers and senior civil servants are medical professionals (Imam, 2005) which makes health policy more medically oriented (Gordan, 2012). In addition, most health services in the region including Palestine are based on a curative model (World Bank, 2007). Such a model is both expensive and inappropriate to address health challenges particularly in Palestine as the rise in the non-communicable diseases namely diabetes, obesity and cardiovascular diseases form a major challenge to the health of the nation. Therefore, health care delivery will need to reconfigure to integrate the provision of preventive and promotive health care services (WHO EMRO, 2015). Such emphasis on prevention of disease and promotion of healthy practices is an essential component of both public and primary health care services. With the rise of chronic diseases and scarcity of medical resources, attention needs to be given to alternative models of primary health care delivery. As previously discussed, advanced practice nurses have demonstrated efficiency and effectiveness in the provision of primary health care in many parts of the world.
Another challenge that faces the health care system with regards to the workforce is related to the shortage of medical staff as compared to neighbouring countries. With this shortage and increased demand on the system especially with the increase in the number of casualties and accidents related to the conflict, the health care system will continue to deprive Palestinians from very much needed primary health care particularly those with chronic diseases.

There is a lack of comprehensive health insurance coverage for Palestinians that has led to inequalities in accessing health care services for the different socio-economic groups (World Bank, 2009). In addition, the Palestinian territories are fragmented characterized by a Gaza strip that is physically secluded and a West Bank that is separated by barriers (World Bank, 2014). In addition the separation wall that was erected by Israel in 2002 has impacted the life of the Palestinians in many ways particularly access to health care in East Jerusalem. Patients who require speciality care at the East Jerusalem Hospitals have to negotiate barriers and apply for permits. In 2014, 20% of patients applying for permits to access hospitals in East Jerusalem were either denied or unnecessarily delayed (WHO, 2015). Such a complex environment requires the establishment of health care services that are accessible. The provision of primary care services in isolated and remote areas was the main driver for the establishment of APN roles in the USA as early as the 1960s (Hamric, 2013).
4.4.6 Nursing in Palestine

Since the establishment of the PNA in 1995 the MoH has taken several steps toward achieving a quality move in nurse education and the provision of nursing services (MoH, 2012). Despite the great difficulties, the MoH has made substantial progress, some of its achievements include the development of regulating policies for training and recruitment of nurses. Before the establishment of the PNA in 1994, many unqualified nurses worked in governmental health centres and hospitals. Today there are eleven universities that undertake nurse training in Palestine (Hamdan and Imam, 2015) and therefore, only qualified nursing staff are recruited to work at the MoH and existing unqualified nurses have been given aid nurse duties (MoH, 2012).

The regulating and licensure of nursing colleges and nurse education have been the focus of the MoH (Palestinian Nursing Council, 2013). This has been carried out with the help of international leaders and experts in the field of nurse education. Castldine (2003) evaluated Palestinian nursing courses and outlined that there were two types of courses for nurses at the preregistration level. The first is a 2-year diploma programme for practical nurses (equivalent to enrolled nurses in the UK). The second is a 4-year degree programme that is run by various universities in the West Bank and Gaza.

The Palestinian higher academic system is composed of 11 universities granting degrees from baccalaureate to Master’s level, as well as 15 colleges offering the 2-year diploma (Hamdan and Imam, 2014). Post graduate Master’s degree in public health, community health, epidemiology and paediatric nursing are offered at a number of the Palestinian universities. The availability of such post graduate educational resources
may prove essential for any future development of APN programmes at a post graduate level. The Ministry of Higher Education is responsible for accrediting health related educational programmes. In addition to the academic institutions, training and education of health professionals is also offered in the health care system in the form of in service training programmes especially for nurses (MoH, 2010). This is the case with regard to the development of the Ophthalmic Nurse Practitioner (ONP) programme which is the focus of this thesis. However, it is apparent that most of these programmes remain unregulated and un-standardised by the Ministry of Health or Higher Education. What adds to this confusion is that some nursing programmes still seek accreditation from international institutions such as Augusta Victoria Hospital and the St. John Eye Hospital (Hamdan and Deffver, 2003). This may be due to the perception that local accreditation still lacks international recognition.

Although, the ministry of higher education is responsible for accreditation of all degree or post graduate programmes, regulating practice of nurses is a shared responsibility between the Palestinian Nursing Council and the Palestinian Ministry of Health. Nurses, as many other health professionals, are enrolled in associations or unions responsible for granting practice licences for nurses. These unions and professional associations have developed after 1994 as establishing unions was previously prohibited by the Israeli Authorities. The Palestinian Nursing Council was established in 1954 and it has its headquarters in Ramallah city.
In 2003, Hamadan and Defever reported that in Palestine, there were a round 6,500 nurses employed by various health service providers. However, according to the Palestinian Nursing Council (2013) there are about 9,500 nurses practising in Palestine. Of the total number of nurses 73% work in hospitals in secondary and tertiary care. This sharp increase in the number of nurses since 2003 is mainly attributed to the establishment of nursing schools/colleges at all 11 universities in Palestine, while previously such schools/colleges only existed in three universities. As a result and because of low funding levels, it is now common for newly graduated nurses to be without jobs and therefore, they try to seek job opportunities in Gulf Countries.

The gender ratio in the nursing workforce was reported at 49:51 male to female ratio. The male-female ratio of practicing nurses has increased rapidly in some Arab countries (Shuriquie et al, 2006). This percentage has reached 40/60 in Jordan and 49/51 in Palestine (Kronfol, 2012). In Middle Eastern countries with low economic developments the percentage of female nurses appears higher than well off countries. This development can also be partly due to the improvement in the image of the profession. However, Al Wan (2015) disagrees that nursing as a profession in the Arab World still lacks appeal and prestige despite a major improvement in the last 10 years. In Palestine, as the cost of living has increased sharply and people strived for better lives, female nurses in comparison to male nurses started to look for working opportunities. Nursing has become one of the occupations that secured a stable source of income for those who sought a decent life. This view is echoed by Hamadan and Imam (2014) that economic reasons
seem to drive females to practice nursing in Palestine.

4.4.6.1 The development of Ophthalmic Nurse Practitioner role

The St John Eye Hospital in East Jerusalem is a charitable organization which was established in 1882 aiming to target blinding eye diseases in the Holy Land. It is administered by the St John Organization with its headquarters in London. The Hospital in the main provider of eye care for the inhabitants of the West Bank, Gaza and the East Jerusalem. According to the St John Eye Hospital (2014) statistics, 120 thousand patients’ were registered at the Hospital’s various clinics of whom 16,000 thousand patients were managed by Ophthalmic Nurse Practitioners (ONPs). This highlights the contribution of ONPs to the delivery of patients’ care.

The ONP role was established at the Eye Hospital in the year 2000. To date, no such role has been established in other specialities within the Palestinian health care system. It is documented that nurses in developing countries have always assumed an extended role due to scarce resources particularly medical staff (WHO 2002; Stark et al, 1999). This also applies to Palestine where nurses in various settings, both community and hospital, have been taking on responsibilities and carrying out tasks traditionally performed by medical staff. This may be partly due to a high ratio of patients to medical staff and increase in the work load. In addition, lack of governmental nursing regulations could have contributed to this form of unregulated and unaccredited advanced nursing practices. It is evident that such nurses working in unregulated and unaccredited
advanced levels, either substitute for the medical staff in their absence or assist doctors to perform certain medical procedures to aid in the delivery of care to a large number of patients. In the Middle East, the lack of regulation of nursing practice by the profession has led to each establishment setting its own policies regarding the role of the nurse and the practice of nursing. (Shuriquie et al, 2007).

At the Eye Hospital, many experienced (sometimes unregistered) nurses were engaged in various extended activities involving treatment of patients suffering from eye problems. In order to protect the public and ensure that quality eye care is provided by nurses, a group of visionary nurses (Nursing Director, Lecturer Practitioner and a Nurse Manager) proposed to regulate such roles by introducing the role of ONP. In order to support nursing staff, it was necessary to ensure that those who practice at the advanced level are deemed competent (Stark et al, 1999). They further added that it is not safe to designate a nurse to practice at an advanced level purely on the basis of former practice and experience.

The Hospital's close relations with various eye hospitals in the UK could also have enabled this ambitious project (ONPs) to be implemented. This role development may also have been influenced by the organizational culture where many of the senior nurses and managers in addition to medical staff working at the hospital at the time of ONP role development, were either British citizens or British trained. Based on the UK experience, the ONP course commenced in 2000 at the St John Eye Hospital where it originally
involved training one nurse at a time as part of an in house training programme.

ONPs function mainly in the hospital’s Primary Care Clinic and two Mobile Outreach Clinics that provides eye care to isolated communities, in addition to a Nurse Led Minor Operations Clinic and the Retinal Unit. In these settings, ONPs assess, treat and discharge patients under agreed protocols, but have no authority to prescribe. ONPs have the authority to order certain diagnostic tests and refer patients to other health care professionals within the organization.

The lack of ophthalmic human resources was highlighted in the Ministry of Health Strategic Health Plan (2011-2013) which indicated that there were 77 ophthalmologists practicing in the West Bank, East Jerusalem and Gaza Strip. This made the Ophthalmologists -population ratio 1:88,441. In its national health plan, the ministry of health aims to train 10 ophthalmologists every year to achieve the ratio of 1:50,000 by the year 2016. It is clear that this target may not be achieved. This may be due partly to the political unrest over the past two and a half years which allowed little or no leeway for development or meaningful planning. However, training more ophthalmologists may not be the only course of action to be taken by the MoH. It is clear that ONP role developed at St. John Eye Hospital has been effective in meeting some of the ophthalmic needs of the Hospital patients who have more than doubled in the past 15 years (St. John Eye Hospital, 2014).
4.5 Conclusion

This chapter has clearly demonstrated that the Palestinian Health Care system is rather complex and challenging. The status of health of any nation is mostly determined outside hospitals as the health of people is influenced by social, economic, cultural and political context in which people live (Shabita, 2006).

Since the creation of the PNA, major efforts have been devoted to improve the health of the Palestinians. Major health indicators favourably compare with neighbouring counties reflecting the improvement in the provision of health care. The current political instability and future uncertainty negatively affect the standards of living amongst Palestinians and add to the burden on the provision of health services.

Furthermore, the PNA’s reliance on external donations makes strategic health planning far from attainable. It can be concluded that high level of donor assistance to the PNA cannot be sustained especially that the political future of the Palestinian territories remains unclear.

The evident lack of human resources mainly doctors and the oversupply of nurses presents a very attractive solution by training advanced practice nurses to undertake health care roles that are traditionally performed by the medical staff. Advanced practice nurses working at the community and primary care levels may offer a solution to some of the health challenges the Palestinian people face particularly the high prevalence of chronic diseases such as diabetes.
Chapter Five: Development of the Ophthalmic Nurse Practitioner Role

5.1 Introduction

This chapter presents the evidence about the evolution of the ONP role in Palestine. Evidence has been predominantly drawn from interviews with ONPs and other stakeholders (former senior nurse and two policy makers), and a focus group with ONPs, along with data generated from reviewing pertinent historical documents. Evidence will be presented in four themes that have explored the contextual factors of the ONP role development. These are: Role Rationale, Challenges, Driving Forces and Role Impact.

The development of the ONP role has been critically analyzed based on evidence gathered from participants and pertinent historical data. Discussion of experiences and views of participants are supported by quotations from interviews and the focus group in addition to relevant literature. Integration of evidence from historical data has also supported discussions.

In order to ensure anonymity of participants, quotations were referenced using a number given to each interview and line numbers as appeared in each transcript. Quotations from the focus group session are referred to as FG with the appropriate line numbers as appeared in the focus group transcript. Example interview, 1:2-3, refers to interview one and lines 2-3 in the transcript, and FG: 10-12 refers to a quotation from the focus group and lines 10-12 as appeared in the focus group transcript.
The chapter begins by providing description of the ONPs and their working environment. This is followed by principles used for thematic analysis and the integration of multiple sources of data. Each of the four themes is discussed in details and evidence from data supports the presentation. The chapter concludes by presenting a conceptual framework that explains the development of the ONP role in Palestine which was constructed as a result of data analysis.

5.2 Participants and their practice environment

The study took place at an Eye Hospital in Jerusalem. The Hospital is a charitable non-governmental organization that provides eye care to Palestinians living in the West Bank, Gaza and East Jerusalem. In 2014, there were more than 120,000 patients’ visits to the Hospital and more than 5,000 patients underwent sight saving eye operations (St. John Eye Hospital, 2014). The Hospital caters mainly for those who are unable to pay for private eye care.

The Hospital provides inpatients (surgical and medical eye care) and outpatient care in addition to community mobile services. The Hospital has three Satellite Clinics in the north and south of the West Bank and the Gaza Strip. In addition, to its community outreach services, the Hospital also provides eye screening services for diabetic patients in the West Bank.
Since the year 2000, twelve nurse practitioners have undergone and successfully completed the ONP course at the Hospital and eleven of them remain practicing at the Hospital Group. All were invited to participate in the research and in total the experiences of eight practicing ONPs were explored. Four ONPs participated in the personal interviews and six participated in the focus group session with two participating in both. All participants are Palestinians who trained as nurses at local universities, expect one participant who trained in Jordan but undertook the eye course before he worked at the hospital and then trained as an ONP. All participants were practicing at the Hospital in the various clinical setting: two had management responsibilities in addition to their clinical practice commitments.

ONPs practice in the primary care clinic, retinal clinic, minor procedures room and the mobile outreach services. At the primary care clinic, ONPs examine patients who self-refer and conduct comprehensive assessment and make diagnosis. Treatment is prescribed by the medical staff due to restrictions imposed by law on nurse prescribing. Patients who attend the primary care clinic are triaged and those who meet the inclusion criteria for management by ONPs are referred to be managed by ONPs and the remaining patients are directed to ophthalmologists working in the department. In the retinal unit, all patients who attend the clinic have prior appointments. When patients call at the clinic, ONPs workup patients and carry out primary examinations and procedures before patients are briefly seen by ophthalmologists who make final decisions and plans of care. No treatment or prescribing takes place in the retinal unit by the ONPs. On the mobile outreach services, patients self-refer and ONPs who work alongside ophthalmologists provide
comprehensive assessment, diagnosis and plan of treatment for patients. Prescriptions for patients are the responsibility of the ophthalmologists. In the minor procedure room, patients are referred to the ONP by ophthalmologists. Patients who need to undergo minor surgery are invited by the medical staff to give consent and are operated on by ONPs. The ONPs undertake procedures such as minor lid surgeries, removal of corneal foreign bodies and removal of corneal sutures. No prescribing is carried out by the ONPs in this department either. Figure 5.1 summarizes the roles of ONPs in the various departments.

Figure 5.1: roles of the ONPs in the various setting of their practice.

- **Primary care clinic**
  - Patients’ assessment, ordering of diagnostic tests, patient management and or referral to ophthalmologists and health education/promotion.
  - No prescribing or discharging patients.

- **Outreach services**
  - Patients’ assessments, ordering of diagnostic tests, patient management, referral to ophthalmologists, health education/promotion.

- **Minor procedures room**
  - Lid surgery, removal of foreign bodies, removal of sutures, minor ophthalmic procedures
  - No prescribing or discharging patients.

- **Retinal unit**
  - Patients’ assessment, ordering of diagnostic tests, referral to ophthalmologists and health education/promotion.
  - No prescribing or discharging patients.

All ONPs underwent the ophthalmic nursing course to become specialist ophthalmic staff nurses at the hospital. Senior ophthalmic staff nurses are then eligible to
undertake the ONP course. Figure 5.2 explains the various ophthalmic training conducted at the Hospital.

**Figure 5.2: training nurses undergo prior to becoming Ophthalmic Nurse Practitioners.**

All the practitioners are registered nurses, some with post graduate degrees. Most of the ONPs worked at the Hospital for more than 15 years prior to their enrolment on the
ONP course. Only one ONP worked at the hospital for 8 years prior to his training as an ONP. Table 5.1 provides a summary of profiles for participants’ experience.

Table 5.1: Summary of profiles for practicing ONPs

<table>
<thead>
<tr>
<th>Participant</th>
<th>Qualifications</th>
<th>Years of nursing experience</th>
<th>Area of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BSN, MA</td>
<td>18</td>
<td>Primary care clinic</td>
</tr>
<tr>
<td>2</td>
<td>BSN</td>
<td>20</td>
<td>Retinal unit</td>
</tr>
<tr>
<td>3</td>
<td>BSN</td>
<td>27</td>
<td>Outreach</td>
</tr>
<tr>
<td>4</td>
<td>BSN</td>
<td>13</td>
<td>Outreach</td>
</tr>
<tr>
<td>5</td>
<td>BSN</td>
<td>16</td>
<td>Primary Care and management</td>
</tr>
<tr>
<td>6</td>
<td>BSN</td>
<td>19</td>
<td>Retinal unit and management</td>
</tr>
<tr>
<td>7</td>
<td>BSN, MA</td>
<td>8</td>
<td>Minor Surgical Room</td>
</tr>
<tr>
<td>8</td>
<td>BSN</td>
<td>14</td>
<td>Primary care</td>
</tr>
</tbody>
</table>

The variation in the participants experience and profile provides an opportunity to explore the various views and experiences with regards to the evolution ONPs role in Palestine. In addition, participants work in the four areas of practice for ONPs at the Hospital which provides a wide range of experiences and views with regard to the role development and management. The remaining three ONPs who did not participate in this study fall into similar profile description especially with regards to qualifications and also their experience.
5.3 Interviewing other key informants

One former Senior Nurse (a former Nursing Director), who was instrumental in the development and management of the ONP role at the Hospital, was also interviewed. The reiterated senior nurse worked at the hospital for 30 years, 13 of which as a Director of Nursing. The interview took place at the Hospital.

Two Palestinian Ministry of Health officials working at the nursing policy office were also interviewed in their offices in Ramallah. One of the officials has been working at the Palestinian Ministry of Health for 3 years and the other official has been working as the Director of Nursing Services for 9 years.

5.4 Analysis of evidence

Evidence generated from the focus group held with six ONPs, personal interviews with four ONPs, former Director of Nursing and two government officials as well as reviewing pertinent historical data, was analyzed using the thematic analysis approach. Evidence consisted of data that aimed to explore four domains of inquiry namely:

1. Why was the role of APN in the form of ONP developed in Palestine?
2. How was the role developed? What educational and organizational input were needed?
3. What were the main factors that hindered and or facilitated such development? And how were these managed?
4. How has the role impacted the care of patients/clients and the organization of care delivery in the settings it was employed?

Evidence from each interview and from the focus group was transcribed on the same day to ensure that transcription of interviews was a true representation of the participants’ experiences. Table 5.2 outlines the first themes that emerged from primary analysis of data. These themes related to 7 areas that were highlighted to be important for the development of ONPs roles in Palestine. However, refinement of those themes resulted in the emergence of four main themes as depicted in figure 5.3.

Table 5.2. Research questions/objectives and emerging primary themes.

<table>
<thead>
<tr>
<th>Research questions/objectives</th>
<th>Themes and Subthemes emerged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale for role development</td>
<td>Increased workload, shortages of ophthalmologists, regulation of existing extended roles, UK influence.</td>
</tr>
<tr>
<td>Facilitating factors for role development</td>
<td>UK influence, adequate training and supervision, participants’ motivation and knowledge, management and doctors’ support, patients’ acceptance of the role.</td>
</tr>
<tr>
<td>Challenges for role development</td>
<td>Law restrictions on role, lack of prescribing privileges, role confusion, lack of resources, medical and nursing resistance.</td>
</tr>
<tr>
<td>Managing role development</td>
<td>Clinical and theoretical components, assessment of competencies, varied clinical experience.</td>
</tr>
<tr>
<td>Role impact on care of patients</td>
<td>Holistic care, patients’ satisfaction, quality care.</td>
</tr>
<tr>
<td>Role impact on care delivery</td>
<td>Collaborative care, ONPs led clinics.</td>
</tr>
<tr>
<td>Role impact on the profession</td>
<td>Advancement in status, medical staff respect, patients’ respect</td>
</tr>
</tbody>
</table>
Figure 5.3: Refined themes and subthemes

2. Driving factors
- Motivation
- Acceptance of the role

3. Challenges
- Law restrictions
- Resistance
- Role confusion

4. Role impact
- Collaborative Care
- Advancing status
- Holistic Care
- Nurse led Services
- Quality care
In the following section the four emerged themes and their subthemes will be presented and discussed.

5.5 Rationale for role development

The first appointment of a qualified ONP role took place in 2000. Prior to this role development, some experienced nurses were engaged in various extended nursing activities involving diagnosis and treatment of eye patients.

Based on the data collected three sub-themes emerged from role development rationale as outlined in Figure 5.4.

Figure 5.4: Rationale for role development and associated subthemes.

5.5.1 Perceived increase in eye care demand

Participants claimed that the perceived increased workload by Hospital management was identified as one of the main reasons for the development of the ONP’s role in Palestine. At the time of role development in 2000, most of the ophthalmologists were expatriate staff (mainly British and American based) who mainly volunteered for
specific periods of time at the Hospital. In that year, more than 70,000 patients’ visits were recorded at the hospital. Only eleven qualified ophthalmologist (all expatriates except 2) were working at the Hospital and were responsible for both medical and surgical care delivery. The hospital was then the only not-for profit ophthalmic care provider in the country. However, statistical evidence does not support this perception of increased work load as in previous years to the role development, the numbers of patients who sought care at the Hospital were very similar to that in 2000. However, it was evident that less number of ophthalmologists worked at the Hospital in 2000 compared to previous years. This could have been influenced by the political and civil unrest in Jerusalem between the years 2000 and 2003.

The perceived increase in the work load coupled with shortages of ophthalmologist working at the Hospital, at the time, was perceived to be the main driving forces behind the development of the ONP role.

“*We had many outpatients and very few ophthalmologists; we had good nurses who could be trained to undertake a more advanced role.*” Interview 5: 35-36.

“The role developed in order to help the medical staff who had high workload and to reduce patients’ waiting times.”  FG: 127-128.

One former senior nurse at the Hospital, who was instrumental in developing the role, identified that the increased incidence of diabetic eye diseases in the population, coupled with shortages of ophthalmologist both at the Hospital and the community at the time, were instrumental reasons behind developing the role.
“At the time there were very few ophthalmologists in the West Bank so using nurse practitioners in the community to fill the gap was ideal and also deal with the increasing problem of diabetes.” Interview 5: 52-54.

Although there are currently more ophthalmologists working at the Hospital (27 compared to 11 in the year 2000) it is clear that ONPs’ contribution to the care of patients remains noticeable. According to the outreach statistical data, as many as 6,000 out of 13,700 patients are treated by ONPs annually at the Hospital (St. John Eye Hospital, 2014).

The construction of the separation wall between the West Bank and Jerusalem has also prevented many patients from reaching the Hospital which has been the main provider of affordable eye care since 1882. This has resulted in increased need for eye care at the community level due to poor access of patients to health eye care services in Jerusalem. Community eye care services were limited and unable to meet the increasing demand of eye care. At the time of role development, only private for-profit eye care providers existed at the community level. Such services were and are still outside the reach of many poor and economically disadvantaged patients.

As a result, the Palestinian Ministry of Health established limited eye care services in the north of the West Bank that catered for more than 1.8 million Palestinians. This lack of community ophthalmic care and the shortages of ophthalmologists working in the community prompted the Hospital to create community services mainly mobile outreach clinics and to establish two Satellite Clinics in the south and north of the West Bank. However, due to the shortage of ophthalmologists working at the Hospital, the
management turned to nurses and specifically ONP to fill the gap and meet the needs of patients.

“The role needed to fit with our needs, we mainly needed it [ONP role] particularly in the community and outreach services and the fact that there was very little ophthalmic nursing in the community at that time”. Interview 5: 16-18.

In 2014, the Hospital statistics revealed that almost 40% of the patients who received eye care at the outreach unit were managed by the ONPs (St. John Eye Hospital, 2014). This trend of care has been sustained since 2002 when the first ONP commenced work at the outreach mobile clinic. This demonstrates that the role development was influenced by the need of community care and that such rationale remains valid until present times.

5.5.2 Advancing nursing roles

Another rationale for role evolution was the need for advancing nursing roles and regulating existing ad hoc developed advanced roles. This rationale was identified by ONPs who pointed out that nurses working at the Hospital have always undertaken extended roles that were traditionally performed by doctors. Extended nursing roles are defined as roles that nurses undertake outside the scope of their practice and perform procedures that are traditionally medical. It was also evident that such development of the role was both formal and desirable in order to regulate what nurses do and enhance both quality and safety of patient care.
“Because for many years, we trained nurses to an extended role whereby they assisted doctors in procedures which normally were not the nurse’s role, as the role of nurse practitioner developed specifically in England, it seemed sensible to follow that particular route [extending the role of the nurse to a formally recognized role]”. Interview 5: 4-7.

It is evident that due to these perceived shortages in medical staff working at the Hospital and the increase in the demand of patients’ care, nurses have always undertaken some extended roles in order to meet care demands. This was emphasized by participants and supported by evidence from historical data. Nurses, even those who were not registered nurses but with considerable experience, were allowed to perform certain procedures that are traditionally performed by the medical staff. Such procedures were learned on the job and by experience which included even performing some minor eye surgeries.

“In fact our nurses always had an extended role and they did more than what nurses did in the UK”. Interview 5: 45-46.

The ONP role was in many ways, created in order to regulate and make consistent those extended roles and ensure that only those who have had the appropriate training and were deemed demonstrably competent in performing extended roles were allowed to practice at this advanced role.

“The role has become more legitimized, it was just an extended role for a particular nurse and now is more regulated and nurses who have had the
training are the ones who undertake the extended role rather than everybody”.

Interview 5: 122-123.

Such regulation of advanced roles was essential in order to create a safe clinical environment and enhance care quality. Clinical protocols for ONPs’ work were implemented to govern the quality of their work. In addition, following this role development, only ONPs are certified to undertake advanced role at the Hospital.

“Safety [of patients] is very important, as extended role is a big responsibility but [practicing such roles] must be safe for the patient”. Interview 2: 4-5.

Prior to role evolution, at the Eye Hospital, many experienced (sometimes unregistered) nurses were engaged in various extended activities that involved treatment of patients suffering from eye problems. This however, was in many was unregulated and those who were deemed experienced were asked to undertake procedures outside their scope of practice. In order to protect the public and ensure that quality eye care is provided by nurses, a group of visionary nurses (Nursing Director, Lecturer Practitioner and a Nurse Manager) proposed to regulate such roles by introducing the role of ONP.

5.5.3 Learning from experiences elsewhere (role transfer).

St John Eye Hospital is a British institution which at the time of role development employed mainly senior British nurses. Like expatriate doctors, the Hospital also relied heavily on mainly expatriate senior nurses until 2002. All junior, some unqualified, nurses
were Palestinians. However, since 2000 there was an investment in building the capacity of local Palestinian doctors and nurses which resulted in almost all nursing and medical staff being local Palestinian in 2014. Due to the close link the hospital has had with some UK hospitals, the role development has been influenced by, the experience of British Hospitals. However, ONP role was adapted locally to meet the needs of the Hospital at the time.

Transfer of the role was carried out voluntarily as policy makers at the Hospital learned about the role/experience from England and adapted that to the Hospital setting.

“This role was not imposed on us but I discussed it with the Head of the Nursing School and agreed to adapt it locally”. Interview 5: 10-11.

At the time, the role of ONP was developing in the UK, the Hospital had some form of extended roles that were not regulated. The opportunity arose then to learn from leading eye hospitals in England and regulate what was already an extended role carried out by many nurses working at the Hospital. It is clear that the transfer ensured adaption of the role in order to take into account differences in contextual factors in the working environments.

“We learned from what was taking place elsewhere and we adapted this to meet our needs”. Interview 5: 20-21.

At the time of the role transfer, it was perceived by hospital mangers that APN roles developed in the UK to deal with patients’ waiting times. So the hospital policy makers were searching for a solution to address the increasing number of eye patients at the hospital with limited available resources. The Hospital nursing management identified
long patients’ waiting times, as a common concern for both UK hospitals and the Eye Hospital in Jerusalem. It appears that similar problems were experienced both in the UK and Palestine. It was particularly reported that UK hospitals developed the role of NPs in order to address the problem of waiting times and therefore, the potential of ONP role in Jerusalem looked attractive.

“At the time [ONP role development] things like waiting times were very relevant in the UK and at our hospital as well”. Interview 5: 49-50.

The perceived large number of patients seen at the hospital compared to the limited number of ophthalmologist lead to increased patients’ waiting times. The ONP role developed to meet the needs of patients by providing care and also substitute for the medical staff who would then be able to undertake other complex surgical procedures.

Although the role of the ONP at the hospital was influenced by the experience in the UK where ONP roles started to appear in the late eighties (Marsden, 1999), the transfer was partial to ensure fitness for the hospital working environment.

“This by no means was a blind copy of what was there in England”. Interview 5: 21-2.

The Hospital management relied heavily on one particular nurse practitioner from Manchester who was also instrumental in developing the role in the north of England. This form of transfer required the constant contact and even visits to England by senior nursing staff. Contextual factors including infrastructure, education and training facilities, human resources, and need for the role in the Jerusalem hospital were studied prior to the transfer.
The shortages of medical staff, the availability of pre-existing nursing upskilling and the practice of certain advanced procedures all favored the introduction of the ONP role. The health care system, to which the role was transferred, needed to be ready for the planned change. This is essential to ensure that role transfer is both appropriate and smooth. Working with experts (from the UK) in the field of advanced nursing practice provided such assurance that the hospital environment was suitable and that contextual factors were appropriate to support such role transfer.

“I went to England specifically to work with …………… [Senior Nurse Practitioner] who instigated the role of the ONP in England”. Interview 5: 10-11.

“In addition to my visits, we had experts to see us in our setting and advised us and they wanted to see how things are different from the UK”. Interview 5: 28-29.

Learning from the UK experience was not without innovation and adaptation to meet contextual factors and unique demands as presented in Jerusalem. Adapting the role to the hospital needs was identified by one of the informants who reiterated that only aspects of the role that were relevant to the Hospital setting were learned and implemented.

“Cataract and glaucoma nurse practitioner roles developed in England but we did not feel such roles were appropriate for us due to our system of work”. Interview 5: 58-59.
ONPs work in different sub-specialties in the UK (Marsden, 2003). In addition to general ONPs accident and emergency ONP, glaucoma NP, Retinal NP and corneal NP roles have developed in the UK in various ophthalmic settings. Such roles were perceived not to fit within the Hospital working environment and therefore, it was decided to train only general ONPs. In the UK, ONPs work as glaucoma and cataract nurse practitioners as they enjoy more autonomous status that enables them to prescribe medications for patients. ONPs in Palestine lack this prescribing privilege and therefore, training other sub-specialty ONP, such as glaucoma NPs, was perceived to be unnecessary and unsuitable for the Hospital as nurses will not be able to function without being privileged to prescribe medications.

5.6 Facilitating factors

Three forces were identified as to have facilitated the evolution of the ONPs at the Hospital as depicted in figure 5.5

Figure 5.5 Facilitating factors for role development.
5.6.1 Support during role transfer

It was clear from participants that learning from the UK experience was very beneficial in the evolution of the ONP role in Palestine. It is evident that learning about the role and the transfer was very much from English institutions. One former senior hospital director was very clear in explaining how the initiative and the idea had a British influence. This form of role transfer was driven by consultations, professional visits and conferences that senior nurses from the hospital attended in the UK.

“We learned from what was taking place in the UK, such as Moorfields Eye Hospital”. Interview 5: 21-22.

Evidence from historical documents related to the development of the ONP role, illustrates that at least two visits by UK leading nurses took place between the years 2000-2009. In addition, UK senior lecturers attend the first ophthalmic nursing symposium which was held at the Hospital in 2007 during which the issue of ONP role was heavily debated.

This UK influence on the role development and management was also identified as a driving factor by ONPs during the focus group session. At the time of role development, some nurses were either undertaking general nurse training in the UK or had just completed their higher degrees in nursing which again contributed to the transfer of the role. In fact one of the senior tutors who completed his training in England was responsible for the teaching and management of the theoretical component of ONPs course.
“Our colleagues who trained in the UK were influential in developing the role”.

*FG: 101-102.*

In addition, it was viewed by ONPs that the multiple visits to the UK by senior Hospital nurses as a facilitating factor that helped Hospital management to learn about similar roles created in the UK. At the time of role development, eleven senior nurses attended the Royal College of Nursing Forum conference in England. Two of those nurses went on to undertake the ONP training course, the main theme for the conference was advanced nursing practice in ophthalmic settings.

“*Many of our nurse travelled to England and came back which I think must have helped in developing the role in Palestine*. *FG: 107:108.*

5.6.2. **Support during training**

Throughout the six-month ONP course, training and supervision were identified by the ONPs as factors that facilitated the development of the role. The small number of ONPs who trained at one time (one nurse trained every six months) made their supervision and support adequate. This small number of trainees also allowed nurse practitioners to be exposed to diverse clinical settings. Training for the role was conducted in 4 ophthalmic departments which provided ONP trainees with adequate general and advanced experiences.
“The training was adequate, we had training in all the departments and sections required to become ONPs”. 3: 3-4.

Lecturer Practitioners (one British and one Palestinian) were responsible for delivering the theoretical components of the course. They also ensured close supervision and monitoring of progress to ensure that trainee ONPs were able to meet their specified learning needs in each area.

“Supervision from the nursing school, the programme you know provided us with a step by step supervision from Lecturer Practitioners in the nursing school”. Interview 4: 21-22.

Reviewing tutorial and assessment documents related to the role development and training highlight that trainees received ongoing feedback and personal tutorials from their clinical mentors and lecturer practitioners. When objectives were not met due to logistical reasons, trainees were reallocated to other areas within the hospital until such clinical training needs were fully realized.

“We were given great flexibility during the training to enable us meet our learning objectives in each department”. Interview 3: 32-33.

The ONP course is based on a curriculum that identifies theoretical and clinical components of the course which runs for one year. The course has two main components: six months of theoretical and practical training and six months of consolidation which is clinically based. Trainee ophthalmic nurse practitioners undertook clinical placement in the primary care clinic, outreach mobile clinic, retinal unit and minor procedures room.
ONPs expressed satisfaction with the clinical component of the course more than the theoretical aspects. The main criticism was to the level of theoretical input received during training of ONPs.

“We had more clinical practice and training than theoretical input, the clinical side of things was okay but the theory was not sufficient”. Interview 4: 3-4.

“The training was okay but would have liked more theoretical input in addition to the clinical training”. Interview 1: 3-4.

The ONP training curriculum supports this argument as it reveals limited theoretical input especially when training was first launched. The emphasis seemed to focus mainly on achieving clinical competencies and underpinning theories related to those competencies. As the ONP’s curriculum outlines that theoretical input is clinically based where ONPs are required to demonstrate knowledge and competencies in 4 broad areas of clinical practice. Assessment, although it was clinically based, it required students to demonstrate competencies in performing a number of pre identified advanced ophthalmic skills. Each of the clinical competencies has a theoretical component and therefore ONP were required to demonstrate advanced knowledge related to each of the clinical skills.

As the ONP’s course was clinically based, each ONP was assigned a clinical mentor (medical/nursing) in the four different areas of training/practice. This clinical mentoring/supervision were very much valued by ONPs.

“Supervision was from the nursing school, ......, in the department it was mixed doctors and nurses”. Interview 3: 21-23.
When the ONP role was first created, clinical supervision and mentoring was mainly carried out by the medical staff as there were no senior nurses who had advanced clinical expertise and knowledge. In addition, lecturers were unable to provide clinical supervision as they had other teaching responsibilities.

“The same it [supervision] was mainly done by the doctors and the training mainly focused on the retinal services”. Interview 4: 25-26.

However, this has changed as more ONPs underwent training and were able to share the responsibility for mentoring of trainee ONPs with the medical staff.

5.6. 3 Environmental support

The environment in which the course developed was conducive in many ways. Nursing management support was evident and highly rated by informants. This form of support included the availability of teaching and training opportunities and regular meetings between managers and ONPs to discuss obstacles and also provide ongoing mentoring of the role by senior nurses. In addition, the hospital is a teaching institution for both nursing and medical staff which created a teaching-learning environment that provided further support to nurses undertaking the ONP course.

“I think that our nurses are also keen to develop because we have a teaching hospital which creates this environment of development and training” FG: 123-124.
“Also the supportive environment helps you to develop and learn and keep up to date and the atmosphere in general was supportive”. Interview 4:34-36.

Another ONP identified management support as a necessary factor for the successful implementation for the role.

“The support from the management was a main factor in facilitating my training”. Interview 3:31.

The ONP role developed in the outpatients department that includes outreach services. It is clear that the manager of the department, who was a deputy Director of Nursing, was fully supportive for the role.

5.6.4 Personal Characteristics of ONPs

ONPs’ motivation for development and their previous knowledge and experience were identified by participants as driving forces that facilitated the development of their role. The role of the ONP was seen by many nurses as the perfect opportunity to develop and advance their careers.

“Being ambitious about getting professional development and gaining more knowledge were essential driving forces in achieving role development”. Interview 4: 34-35.

The selection for the ONP course was done by means of both experience and also examination. Due to the fierce competition (as many as 10-15 nurses competed for one
training post), only the most talented and those with vast prior knowledge and experience were chosen for this role. Clinical experience of ONPs prior to their enrolment of the course ranged from 8-23 years. Five out of the eight participants had more than 16 years of nursing experience prior to commencement of their training. Prior experience and knowledge were instrumental in the selection for the training as candidates needed to undergo clinical and theoretical ophthalmic examinations.

“Previous knowledge and experience were very important; I could rely on my experience to take the right decision and plan for the care of patients”. Interview 1:41-42.

Another ONP who has had 18 years of clinical nursing experience, explained that his self-confidence was instrumental in the new role development. Such professional confidence is usually gained through clinical experience and further professional development.

“Self-confidence was important for me – that I know myself and I know I was able to do the course and I was confident in what I was doing” interview 1:36-37.

Only nurses who are capable of developing this role (as judged by examination results and experience) were selected which again was seen as a strength and a factor that facilitated the development. Twelve nurses underwent training over the past 14 years with 100% success rate. All ONPs were able to pass their theoretical and clinical assessment at their first attempts.
“I was an excellent nurse, I always thought I need to develop myself and I thought the role is a chance to have an excellent opportunity for me to develop myself and capabilities”. Interview 2:65-67.

5.6.5 Role acceptance by stakeholders

More than one ONP pointed out that doctors’ acceptance of the role was instrumental for ONPs in acquiring the skills needed to develop the role. This acceptance was essential especially at the start of the role development as medical staff were heavily involving in clinical coaching and training of ONPs. According to the informants, doctors had low confidence in what nurses can do but this attitude changed once doctors felt confident that the ONPs role were not there to substitute for doctors. Acceptance for the role was evident in the way doctors trusted the decision made by ONPs.

“One of the most important things [is] that we have respect from the doctors and they trust what we do”. FG: 61-62.

“When I worked on outreach, the doctors always respected my decision and always supported what I do”. FG: 239-240.

This support included both clinical teaching and assessment of competencies in the various clinical settings. Most of the support seemed to centre on teaching both theoretical and clinical components of the course which was mainly carried out by the medical staff especially at the start of the role.
“The doctors were very supportive and helped me to gain more skills especially with regards to assessment of patients”. Interview 3:32-33.

Although doctors were not fully informed about the role development and its rationale and intentions, involving the medical staff at a later stage in the training, teaching and assessment of ONPs was a positive strategy to encourage doctors to get involved and also for the doctors to feel some responsibility and ownership of the role development. Key stakeholders within the advanced practice nursing environment must participate in developing and planning the implementation of such roles in order to minimize barrier, facilitate system entry and prompt integration of role (Bryant-Lukosius and DiCenso, 2004).

Patients’ attitude and acceptance of the role were also important factors identified by respondents as facilitators of the role development. However, patients were reluctant to accept treatment by ONPs at the beginning of the role development. Reviewing relevant historical data revealed that patients did not receive any official information about the role and its development and scope. It was only after patients experienced the work and the expertise provided by ONPs they were ready to accept such change in the care delivery system.

“At the beginning patients refused that we examine them and provide care to them. Patients are now aware of what we can do and happy to accept the role”. Interview 1: 53-54.
This change in patients attitude (according to ONPs) was influenced by the fact that ONPs manage fewer patients when compared to doctors and also they tend to manage relatively simple medical complaints and therefore, they are more likely to give information and advice to patients.

“In my experience patients do not ask if we are nurses or doctors. I feel that patients do ask us for advice more than they ask the doctors”. FG: 61-62.

“From my experience patients appreciate the care they receive from NPs”. FG.70-71.

Workload carried out by ONPs at the Hospital is significant as more than 6000 patients received treatment by ONPs at the Hospital in 2014. Satisfaction surveys carried out routinely at the Hospital indicated that the overall satisfaction with work provided by ONPs exceeded 90% which is slightly higher than that of the medical staff (St. John Eye Hospital, 2014).

5.7 Challenges for role development

The development of the ONP role was established as part of an in-service nurse training programme at the Hospital. Individual nurses were selected to undertake the ONP course by both examinations and interviews. As this role was part of in-service training rather than a university programme, it did not require approval either from the Ministry of Health or Education.
Advanced nursing roles such as the ONP have not been introduced into other health care settings within the Palestinian health care system and such roles are not recognized by the Ministry of Health. This evolution has been unique to the Eye Hospital and it is still true until today that those roles of advanced nursing practices remain limited to the Eye Hospital. One possible explanation for this lack of role proliferation could have been a result of medical dominance that is evident in the Palestinian health care system.

This complex environment in which the role evolved must have presented various challenges to both practitioners and managers of the role. In the next section evidence of challenges that have faced the evolution of the role will be presented and discussed.

Various factors were identified by the various stakeholders as challenges to the role development as depicted in Figure 5.6.

**Figure 5.6: Challenges for role evolution.**
5.7.1 Role Regulation

Nursing roles in Palestine are regulated by the Ministry of Health (MoH) in addition to the Palestinian Nurses Association. Such regulatory bodies identify registration and licensure requirements for nurses. Regulation of nursing roles is still primitive and is limited to first level nurses (registered) without any reference to advanced nursing roles such as that of the ONPs.

Lack of role regulation was identified by ONPs as an obstacle that prohibited them from fulfilling their roles. As mentioned earlier, the role of the ONP has not been acknowledged as a professional role by the Palestinian MoH and therefore, there are no regulations that support the function of the role.

In Palestine, there has been no mention of the role at the governmental (MoH) or professional (Nursing) levels since the evolution of the ONP role at the Eye Hospital. No definition of advanced nursing roles exists in Palestine and therefore, the role remains confined to the Eye Hospital. At the Hospital, ONPs are senior clinical nurses who have a similar status to charge nurses with regards to both seniority and pay scale.

Successful implementation of advanced nursing roles such as the ONP requires policy, educational and regulatory standards (Pearson, 2011; Furlong and Smith, 2005; Castledine, 2002). Instability of the Palestinian political system may have prevented policy makers from strategically planning to introduce advanced nursing roles within the Palestinian health care system. Political unrest in Palestine as a result of the Israeli occupation has been one of the main obstacles for health and health services (MoH, 2013).
Any attempt to separate health and health services from the political and overall conditions in Palestine is impossible. Therefore, this lack of stability could have forced health care policy makers to focus their efforts on more pressing health needs such as immunizations.

In addition, the traditional beliefs held by society about women and the dominance of the medical staff within such health care environment could also further obstruct any advancement in nursing roles. This coupled with lack of nursing political power, could have further hindered the advancement of nurses role.

As a result of this lack of regulation and subsequent lack of recognition for ONPs as professionals practicing at an advanced level, there have been no rules and regulations at the Ministry level to govern this advanced role. This in itself is seen by practitioners as an obstacle that restricts the scope of their practice. Scope of practice refers to the activities a health care professional is permitted to undertake within their privileges, licensure and certification. Although, the role is regulated at the Hospital by clinical protocols, it is not recognized or regulated as a professional role by the concerned ministries of health.

“You cannot work as an ONP outside the Hospital, recognition of our training is a problem. [At our hospital] You still need to work under the supervision of the medical staff. In Palestine there is no university training for NPs”. Interview 2: 84-85.

Dissatisfaction was expressed by all ONPs as this lack of recognition is also seen as an obstacle in the path of any professional development for the ONPs. Training for advanced nursing roles remains to be based at the Hospital and out of the 7 Universities providing
post graduate nursing education in Palestine, none has developed any form of advanced nurse education.

“Being a nurse practitioner in Palestine is not yet recognized and I am not sure there is an opportunity for us to develop if we want. If you have to undertake further training you may need to do this abroad”. Interview 4: 62-63.

In the Middle East, the lack of regulation of nursing practice by the profession until now, has led to each establishment deciding its own regulations for nursing roles. (Shuriquie et al, 2008). This applies to the development of the ONP roles in Palestine where the Hospital has developed the role to meet specific hospital needs and demands for eye care with little or no input from the regulatory bodies. Although, since 1996 the PA has started to regulate nurses roles but such regulations lack both clarity and authority to be implemented. This lack of recognition and regulation for the ONP roles is not unique to Palestine as it is common for nurses in developing countries to be expected to practice at advanced level yet not be recognised by the political or the medical systems (Stanley, 2004).

Many of the NPs voiced their concerns about the legal aspects of their work as they lack recognition of their role by either the Israeli or the Palestinian Ministries of Health which restricts their scope of clinical practice.

“Sometimes when you come across a case that is difficult you hesitate to even treat the patients or write anything in the file because you would expect
sometimes you will be asked about this in a court of law as why we treated and discharged the patient”. FG: 14-17.

The work of all health care professionals at the Hospital is covered by a private malpractice insurance firm which provides legal coverage for any litigation against the hospital from clients. Since the development of the ONP role at the hospital, there have been no litigations against the work of nurses. This is further complicated by the fact that ONP roles are not recognized as a form of APN roles by the Israeli ministry of health.

As the mother Hospital is situated in East Jerusalem (occupied) its function is under the Israeli jurisdiction which requires that all health professionals need to comply with rules and regulations of the Israeli Ministry of Health. The remaining three Satellite Clinics and the outreach mobile services function in the Palestinian Authority controlled areas and therefore, these centres must comply with regulation of the Palestinian Ministry of Health. This in its self presents a complex environment where Palestinian nurses who may work in Jerusalem (Israeli controlled areas) have to comply with rules which may be different to their colleagues working in the Palestinian Authority controlled areas.

Furthermore, ONP roles are unique to the Hospital and have not yet emerged in either Palestine or Israel. This lack of formal recognition of the role and its scope of practice remain to be an obstacle that restricts the practice of ONPs. APN roles are only recently being debated in Israel (Brodsky and Dijk, 2008) and there are no signs that even such a debate exists amongst the Palestinian policy makers. This lack of recognition is also evident in the Palestinian Nurses Association Charter (equivalent to the Nursing Midwifery
Council in the UK), where there has been no mention of advanced nursing roles or a registration pathway that regulates their clinical work.

“We are ONPs, but according to the law, they [regulatory bodies] do not acknowledge our certificates as NPs and this restricts our development [practice]”. FG: 12-13.

“The Israeli MoH, I do not think they [Israeli regulatory bodies] accept or recognize this course (ONP role) and they [Israeli nurses] do not even have eye nurses. There are many restrictions on what nurses can do, so I am not sure how they will accept such a role”. Interview 1: 87-89.

As a result of this lack of recognition that regulates scope of practice, ONPs identified lack of autonomy in their practice as a challenge. This (lack of autonomy) was explained as the inability of ONPs to prescribe medications for patients. Such practice presents obstacles and prevents ONPs from providing complete care as they have to consult with the medical staff prior to discharging patients. Such practice however, can be advocated as a protective measure to ensure that there are no legal liabilities on the practicing ONPs. In addition, this can also be seen as a mechanism to ensure that the care delivered by ONPs is both safe and appropriate as it is approved by ophthalmologists through consultations. However, the reason this system of practice is followed, is to overcome restrictions that are imposed by the lack of recognition and subsequent autonomy of the ONPs.
“If you prescribe antibiotics or lubricants, I need to wait for the doctor to approve my decision, such cases [patients’ eye complaint] are not a big deal and we can manage them if given the autonomy”. FG: 38-39.

This in many ways was seen by ONPs as a frustrating system which prohibited professionals from fulfilling their scope of practice. Prescribing treatment and medications to patients is governed by Ministry of Health regulations that identify doctors as sole prescribers. This applies to both the Palestinian and the Israeli Ministries of Health. As the role of the ONPs has not been formally recognized, prescribing is not permitted which again presents a challenge and a restriction on the role. In the primary eye care clinic and the outreach mobile clinics, ONPs undertake assessment and diagnosis of eye patients. However, all prescriptions must be signed by ophthalmologists before patients are discharged.

“This is a problem [lack of prescribing privilege] and it ties you up. It restricts you from doing things as you cannot (prescribe medications for patients).

Sometimes it is frustrating; it is not accepted to prescribe”. Interview 4:68.

Such lack of prescribing privileges was also seen as an added obstacle facing ONPs as they were unable to discharge patients independently.

“As you know we are not allowed to prescribe and this has affected the role,................., you cannot discharge patients before the doctor approves your prescription”. Interview 4: 69-70.
5.7.2 Role confusion

Role confusion refers to the lack of clarity with regards to role intentions, competencies, and scope of practice, role boundaries and integration within the health care delivery system.

Various terms were used by ONPs to describe confusion that surrounded their role particularly at the start of development. Those included lack of medical staff understanding of the ONPs role, vague responsibilities and scope of practice, and lack of patients’ and other nurses’ understanding of ONPs role.

“....... there was a lack of understanding amongst nursing staff with regards to our role”. Interview 2:1

Scope of practice refers to the authority ONPs have to undertake their professional role which includes a clear description of what is expected from them in the clinical settings. Evidence revealed that job descriptions for ONPs were only developed in 2009 which contributed to this confusion for nurses, ONPs and health care providers working at the Hospital. A job descriptions for all grade of nurses, is a basic management tool to ensure that the employee and his /her manager/supervisor are aware of their contractual responsibilities. In the nursing profession, such description includes, but not limited to, clinical roles, responsibilities and competencies. For 9 years ONPs functioned in a vague scope of practice as they were not clear with regards to their job responsibilities. This also added to the confusion amongst other nursing staff and resulted in resistance to the introduction of the ONP role.
“Many nurses were not happy that I was doing the ONP training...., but they have accepted the role”. Interview 4: 38-39.

This lack of acceptance and maybe resistance to the role by the nursing staff was explained as a result of lack of understanding of the ONP role. Nurses working at the Hospital at the time of role development were not informed about the role, its scope and responsibility and therefore, it was expected that they would resist change to the status quo.

“They [medical staff] did not understand what the role was all about, it [ONP role] was not very obvious and some resistance (to the role) came also from the nurses”. Interview 4: 43-45.

Prior to its evolution, the role was alien to the Hospital health care environment and therefore, introducing such a change without appropriate preparation is expected to face resistance.

“This [resistance to the role] mainly came from junior nursing staff. Usually there is a resistance for every change”. Interview 4: 47.

In order to ensure that such a change in the work of the nursing department is implemented effectively, change mechanisms would apply in this scenario to ensure that all of the staff were made aware of such change. This lack of clarity for the new role added to the confusion with regards to role rationale, role scope and how the role fits within the Hospital’s care delivery system.
Confusion amongst practicing ONPs was also evident and expressed as inability to fulfill the role they have been trained to undertake. This confusion stems out from the fact that ONPs are placed in a difficult position where their extended role has not been fully realized. On one hand they have acquired advanced knowledge and clinical skills but on the other, their scope remains to be vague and unregulated. ONPs lack of understanding with regards to their scope of practice and lack of clarity that has surrounded their role have resulted in a sense of frustration amongst ONPs.

“Yes we [ONPs] need to understand where we are standing, we are in the middle of the road, and we do not know whether we are going left or right [inability to realize our job potential and fulfil role]”. FG: 2: 48-50.

5.7.3 Resistance

Resistance in this context is defined as actions taken by others (doctors and other stakeholders) to slow down or prevent the change (development of the ONP role). Lack of understanding of the role was linked to the medical and nursing resistance for the role which declined over time. The participants identified medical resistance as a main challenge that faced their role development. Lack of role understanding appears to have been the main reason for this resistance. Particularly, when the role was first established, Doctors were not informed about the nature or the intention of the role or the training which could have resulted in a feeling of competition from the nurses for the doctors’
work. This conclusion was reached by a former senior nurse who was very instrumental in the role development.

“We should have involved the doctors more from the beginning. I think we just assumed that doctors will think it is a good idea without really asking about their opinion”. Interview 5: 147-149.

“Lack of understanding amongst the nursing staff with regard to my role and also the doctors at the beginning were not very keen on the role”. Interview 2: 90-92.

One nurse practitioner identified lack of doctors' confidence in nurses’ ability to undertake the APN role competently and also the willingness of medical staff to control what the nurses are able or not able to do, as challenges and forms of resistance for the role of ONPs.

“Doctors are not always happy with our decision; you know they want us to know that we [ONPs] cannot function without them being present”. FG: 48-49.

Again this lack of understanding of the role by the medical staff could have resulted in this form of resistance and lack of cooperation. A study carried out by Sangster-Gormly et al (2013) revealed that health care teams’ prior knowledge and understanding of the NP role were instrumental in the acceptance of the role.

“Doctors hesitated very much at the beginning of our training to work with ONPs”. Interview 1: 53-54.
“This role was new and many doctors did not understand where we were going with the role and they did not have faith that we can do some of their jobs”.

Interview 1: 56-57.

However, such forms of resistance appeared to have been temporary and there was a shift in doctors’ attitude and even acceptance of the ONP role.

It was claimed by ONPs that, when doctors realized the value of the ONP role and that the role was beneficial to them, this resistance declined and doctors even became in favor of the role. This is not unique to Palestine, as one main factor that facilitated the development of advanced nursing roles in the USA was the perception that the role was of value to both the patients’ and the care delivery system. Studies that examined role value in the USA revealed advanced nursing roles were beneficial and therefore such studies were instrumental in the development and advocacy of advanced nursing roles. (Bryant-Lukosius, 2003; Hamric, 2013).

At the Hospital, once doctors realized that ONPs are there to give them support rather than substitute for them, they started to accept the role. In addition, doctors also advocated for the role when it became clear that the role is also beneficial to them. Nurses working alongside doctors are able to carry out comprehensive assessment of patients and therefore, they were able to reduce the workload doctors need to undertake.

“The Doctors soon realized that the role was beneficial to them as well so they started to accept and advocate the role. It was actually of benefit to them”.

Interview 5: 88-89.
“I think they were shocked to know how much we know and how much we could do. They started to accept us and trust our assessment and management of patients”. Interview 1: 62-63.

It was perceived by the only female nurse practitioner that she faced more resistance in her role development that her colleagues.

“I had more resistance than other colleagues who were doing the same course” interview. 4:51-53.

Professional jealousy from other nurses and the perceived lack of experience of the only female ONP by other nursing staff were identified as reasons behind this resistance. However, such lack of acceptance at the start of role development can be explained as Hamric (2013) outlines this as conflict within the context of change and that such an innovation changed the status quo of the nursing establishment which resulted in resentment for the ONP role. It is also evident that as many as 15 nurses competed for one ONP training position at a given time. This in itself could have added to professional jealousy and subsequent resistance to the role by other nurses.

Lack of understanding amongst patients of the role presented challenges for ONPs at least at the start of their role development. This form of resistance was demonstrated by the refusal of some patients to be treated by ONPs.

“In the past patients argued that they must be seen by doctors. Now they have more confidence and have accepted the role of ONPs”. Interview 4: 100-101.
However, it is the patients’ basic right to be aware of who delivers his/her care and therefore be able to make an informed decision about such care. In addition to the lack of understanding amongst patients with regard to the role of the ONPs, cultural factors could have also be influential where patients may not accept that their care is managed by nurses. This is a challenge for patients’ cultural beliefs that nurses are there to provide basic nursing care and support the medical staff. Nursing like any other profession, is greatly influenced and directed by a mixture of cultural, socio-economic and political factors within which it functions. Shuriquie et al (2007) suggested that many Arabs perceive nursing to be too close to domestic services to be a ‘respectable’ occupation. To challenge such beliefs ONPs needed to prove to patients that they were capable to undertake the role assign to them. However, it must be emphasised that introducing such a change in the health care delivery system required more careful planning to ensure that all stakeholders are fully informed about the rationale, value and scope of ONP practice.

Lack of adequate resources for APN role development was identified by both governmental officials as obstacles facing development and transfer of such advanced nursing roles to governmental health care settings.

“There are many reasons [why the role has not been transferred], you need the right qualifications for the staff, you need special courses to be given at the universities which we do not have”. Interview 6: 12-14.
Unavailability of human resources to undertake training in addition to shortages of nursing staff were identified as specific reasons why such roles are not developed in other health care environments within the Palestinian Ministry of Health.

“Resources are always a problem,..........., with shortages of nurses in the ministry because we have limited nursing budgets for nurses we cannot supply more nurses”.  Interview 7:49-50.

Chapter four in this thesis presented challenges facing the Palestinian MoH, which included lack of adequate resources. However, there is no shortage of nursing graduates in the country, on the contrary many newly graduated nurses are unemployed. It is evident that with lack of resources, the Ministry is unable to employee more nurses if other nurses were assigned to undertake APN roles. .

The Palestinian Ministry of Health is dependent on monthly donations and handouts to pay for its employees. Donations and funds are transferred mainly form the European Union and Gulf Countries. It is not uncommon for nurses and doctors not to be paid for months due to this lack of funding. This instability in the political situation have forced policy makers at the ministry to focus on more pressing needs such as paying their health care workers and paying for services purchased from other health care providers outside the Ministry of Health (Hamdan and Imam, 2014).

An added obstacle that emerged from interviewing the policy makers at the ministry of health was related to poor understanding of the nature of APN roles. In fact, at least during
one of the interviews it was evident that the concerned policy maker had very little if any understanding of such roles.

5.8 ONPs’ Role Impact

Implementation of the ONPs role has impacted the care that is delivered to patients receiving care at the Hospital. Analyzing relevant data revealed a major theme (role impact) and five sub themes that identify how the role has impacted the way the care has been delivered as a result of the role implementation, see figure 5.7.

**Figure 5.7. ONPs role impact**

![Diagram showing role impact with sub themes: Holistic care, Nurse led services, Collaborative care, Quality care, Advancing status]
5.8.1 Holistic care

Holistic care, in this context, refers to the provision of care that addresses all aspects of patients’ eye health (physical, psychological, educational, emotional and spiritual).

Holistic care was frequently identified by ONPs as a consequence and an impact of the role development. Some referred to meeting the educational and physical needs of the patients as a form of holistic care.

“*We as NPs have more time to explain to the patients so I think we provide a more holistic care than the medical staff wo are very busy doing other things*”

*Interview 1: 99-100.*

Others used the term complete care that involved physical assessment, management and information giving to patients, to describe the holistic components of the care delivered by ONPs.

“I think patients received good care from the ONPs who provide complete care”.

*Interview 3: 75-76.*

Other ONPs used the term comprehensive care when describing the care they provide to patients as compared to medical staff. ONPs perception of good care centred on describing care delivered to meet the patients’ physical and educational needs but also ensuring that patients waiting times are kept to the minimum.
“I think in all cases patients happy to accept our care because we take our time in the assessment and also provide the information to patients that medical staff do not” Interview 1: 114-116.

“We as nurses always give more information to patients and therefore, I feel I can provide more [better] care and information to patients. We provide complete physical and educational care to patients” Interview 2: 97-99

However, one ONP identified lack of prescribing authority as a factor that prevented this form of comprehensive care.

“You can carry out the assessment and treatment in a comprehensive manner apart from prescribing”. Interview 4: 89-90.

A study by Seale et al (2006) revealed that NPs working in primary care in the UK provided a more holistic care with greater provision of information than GPs. Although this study focused on holistic care, it also compares NP’s performance with that of the GPs. Not surprisingly, the majority of research that evaluates the work of NPs seems to compare their performance with that of other professionals mainly the medical staff (Ezra et al, 2005).

5.8.2 Quality Care

Quality care in this context refers to the degree to which care meets the desired outcomes, expectations and satisfaction of clients/patients seeking eye care at the Hospital. Informants described the quality of the care they provide to patients in various ways.
ONPs seem to value the quality time they spend with patients. This was explained by one nurse practitioner as he has more time to spend with patients as compared to the medical staff which has positively influenced the care delivered to patients. As ONPs have less workload as compared to the medical staff, it was seen as a positive contribution to the care which has resulted in the provision of high care quality.

“We have more time to explain to patients so I think we provide a more complete care than the medical staff that who busy doing other things”. Interview 1: 99-101.

This is supported by data collected in 2013 (table 5.3) which shows that ONPs have a lighter workload than the medical staff in all areas of ONPs’ clinical practice. This could offer an explanation why ONPs have more time to spend with the patients as compared to medical staff.

Table 5.3 Average number of patients seen in various departments by medical staff and ONPs.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Average number of patients seen by Doctors</th>
<th>Average number of patients seen by ONPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>52</td>
<td>18</td>
</tr>
<tr>
<td>Emergency room</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>Retinal unit</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td>Primary care</td>
<td>46</td>
<td>11</td>
</tr>
</tbody>
</table>
ONPs believed that the outcome of their care was patient’s satisfaction which was evident as patients requested to be treated by ONPs. This acceptance for the role by patients could have been also influenced by prior knowledge and experience with the ONPs’ care.

“Many people who are initially seen and treated by ONPs, when they come back for follow up, they usually insist to be seen and treated by the ONP”. FG: 78-79.

However, it is possible that patients who have minor eye complaints are keen to be seen by ONPs as their waiting times was less and therefore, patients requested the care of ONPs.

This acceptance of patients for the ONP role/work was viewed by participants as an indication of quality care that has led to patients satisfaction for the care delivered.

Reducing waiting time for patients was also identified as an integral component of the role impact which has resulted in quality care and more patients’ satisfaction.

“I think patients are more satisfied as they receive better care. Waiting times for patients has reduced dramatically. I think the care of patients has improved a lot since the creation of the role”. 3:82-83.

Patients with ophthalmic emergencies are fast tracked to the emergency room where they are managed by ONPs. Such a change in the care delivery system has ensured that all patients who are presented with emergency conditions are managed promptly by ONPs.

“But it does make the patients more satisfied as we give them more information that the doctors”. FG: 133-134.
“Yes we can confidently say that the quality of care has improved, patients do not have to wait as long as they did, and there is a fast track where certain categories of patients can be seen quickly”. FG: 207-210.

Another aspect of quality care was described by participants as they provide standardized assessment and management to all patients and that their assessment of patients’ needs were comprehensive. ONPs argued that the care they deliver to patients is of high quality as they adhere to clinical protocols that enable them to provide both evidence-based and equal care to all patients.

“We carry out our examinations according to protocols so that every single part of the eye is examined. Doctors do not do that especially senior doctors as they sometimes do not take the pressure” FG: 181-183.

5.8.3 Collaborative care

Collaborative care is defined in this context as the teamwork between ONPs, Ophthalmologist and other health care providers. This involves communications, planning, decision making and coordination to meet the needs of the ophthalmic patient.

ONPs work in collaboration with doctors especially in the primary care clinic and outreach settings. This role has certainly influenced the care delivery system in the two setting. Patients, who have certain eye complaints, as identified by clinical protocols, are directed
to be managed by the ONPs. Which in turn gives the medical staff the opportunity to manage more complex patients’ complaints.

“There is a fast track where certain categories of patients can be seen quickly. Doctors as a result are more free to undertake more demanding roles”. Interview 2: 101-103.

Furthermore, ONPs working in the retinal unit and primary care clinic provide comprehensive assessments to patients, order diagnostic tests and plan the care for patients. This allows doctors to manage more patients as most of the assessment work has been carried out by ONPs.

Another aspect of collaborative care was explained as teamwork between doctors and ONPs. Doctors have realized the value of the work carried by ONPs who are not competing but rather complementing the care delivered by doctors. Such complementary and collaborative care is evident in the work carried out by in primary care/emergency, outreach, and retinal and minor surgery settings. In these areas of practice, patients care is shared between the ONPs and ophthalmologist. Such collaboration has ensured better cooperation and team work where each professional is dependent on the work of the other. An added advantage for this system of collaboration is the continuous professional development and knowledge update of practicing ONPs. This was made possible as ONPs are in constant contact with the medical staff that have superior ophthalmic knowledge and skills and therefore transfer of such knowledge and expertise is an ongoing process.
Additional aspect of collaborative care is demonstrated in joint research and clinical audits projects that are being undertaken by ONPs and ophthalmologists. Such development in this approach of collaboration clearly signifies that there is both appreciation and respect for ONP roles by the medical staff.

5.8.4 Nurse led services

Nurse-led eye care refers to the episode of eye treatment delivered to patients that is coordinated and managed by ONPs at the Hospital. The development of the ONP role has changed the way care is delivered in various Hospital departments. ONPs undertake assessment, diagnosis and treatment of patients in the primary care clinic and the minor procedures room. In both areas of clinical settings ONPs manage care of patients and only those who require prescriptions are referred to the medical staff for further consultations.

“If there is an emergency case you can carry out the assessment and treatment in a comprehensive manner apart from prescribing. Patients can be managed by ONPs who are capable of meeting all patients’ needs”. Interview 4: 89-92.

In the minor procedures room, all minor surgical procedures are undertaken by ONPs. Previously, patients were given appointments for such minor procedures as doctors had a large work volume. However, ONPs are able to perform such minor operations as patients presented with the complaints and need not to be given appointments. Patients attending the Hospital (primary care clinic patients) without appointment are directed to the primary eye clinic where they are managed by ONPs. Previous to the role
development, the department was managed by ophthalmologists and currently only one ophthalmologist works in the department alongside ONPs. The ophthalmologist working in the department is responsible for prescribing medications for patients who are seen by ONPs.

“The way we deal with patients has changed. We are able to see eye patients and they can have specialized room for their care which is run by the NPs”. FG: 131-133.

5.8.5 Advanced nursing status

ONPs enjoyed acceptance and appreciation for their advanced roles from patients, colleagues and medical staff. This acceptance and respect for the role ONPs undertake, has improved the image of nursing as a profession at least at the hospital. This new status was earned as nurses gained more knowledge and clinical expertise that has put them in a position to carry out roles traditionally performed by doctors. Such advancement in the status has enabled ONPs to participate in the teaching of junior ophthalmologists.

“We have many years of experience and this has helped us to develop all these techniques and skills. Sometimes the junior doctors come to us to learn from what we do especially when they first start their training”. FG: 212-124.

“This (advanced/improved image of nursing at the Hospital) is mainly due to the fact that patients have more confidence in us. Interview 4: 102-103”.
“I think this role has made nurses to be more professional and knowledgeable and also to be respected by the medical staff”. Interview 2: 94-95.

This advancement in status of ONPs is argued to have advanced the status of nursing outside the hospital as well. However, this perceived change in image of nursing remains limited as on many occasions, there has been criticism of the ONP roles coming from ophthalmologists working outside the Hospital. There is evidence to support this where ophthalmologist working in the community objected to the work carried out by ONP particularly on the outreach. This criticism is claimed to be as a result of concern for safety of patients. However, there has been no criticism form ophthalmologist working elsewhere about the role of ONP working in the Hospital. This objection to the work of ONPs coming from ophthalmologist, who work in their private centres/clinics, could have been driven by economic reasons. It is believed that ONPs who work alongside ophthalmologist on the outreach mobile clinic are taking the work from privately practicing ophthalmologist.

However, doctors working at the Eye Hospital have to comply with standards of care delivery and ethical principles that are parallel to those practiced in any eye hospital in the UK. Such working environment influences attitude and perceptions of all health care providers. In addition, some of the practicing ophthalmologists are British/expatriates, who have influenced the role acceptance amongst local medical staff and assisted in shifting their perception and attitude towards nurses undertaking new roles.
Advancement in status of ONPs was explained by one of the respondents to be due to the positive shift in the attitude of patients towards the care delivered by the ONPs.

“I think the NP has advanced the status and knowledge of nurses at the hospital which must influence the status elsewhere”. Interview 3: 86-87.

In addition, the regulation of advanced practice carried out by nurses at the Hospital ensured that only those who are qualified ONPs are given a scope to undertake advanced role. This has given ONPs a legitimate role that other nurses look up to and learn from. ONPs enjoy a senior nursing status and are at a parallel salary scale to other senior nurses working in management i.e. charge nurses. ONPs are also represented in the department clinical governance and research committees. These inclusions of ONPs in committees that discuss clinical and research plans in the hospital highlight the seniority and status enjoyed by ONPs at the Hospital. However, such a shift in the status of nursing at the Hospital required patients to be assured that the care they receive is of a high quality.

“At the beginning patients refused that we examine them and provide care to them. Patients are now aware of what we can do and happy to accept this role”. Interview 1: 110-112.
5.9. Framework for ONP role development

A conceptual framework is described by Jabareen (2009) a network of interrelated concepts and their components to provide a better understanding of a complex phenomenon.

This framework, as depicted in figure 5.8 explains the development of the ONP role as a form of advanced practice nursing in Palestine. Themes and their components (subthemes) that emerged from data have been used to construct the framework. Three main components make the framework namely; role rationale, process of evolution, and role impact.

Role development rationale outlines why the role was created in the field of ophthalmology. This included, regulating ad hoc developed advanced nursing roles, perceived increased work load, UK influence that led to role transfer.

The second component of the framework, process of development, explains the process and contextual factors that influenced the ONP role development. Educational and clinical training of ONPs are at the centre of the evolution process. Challenges and obstacles that faced role evolution are also outlined. Factors that enhanced and facilitated the role development along with environmental factors are also explained.

The third component of the conceptual framework is the outcome of the role evolution (role impact). This component of the module explains how the evolution of the
ONPs role has impacted the care of patients, the profession of nurses and also the care delivery system in the hospital.

5.10 Conclusion:

From this analysis, it is evident that the evolution of the ONP roles in Palestine has been both challenging and complex. The rationale for development was driven by many factors including the need for community care that was not available and the separation wall that prevented access to health care. The increased demand for eye care due to chronic health conditions such as diabetes coupled with lack of medical human resources in ophthalmology were all instrumental in the evolution.

The ONP course curriculum was developed based on experience and knowledge gained from UK hospitals. The course included both clinical and theoretical complements. However, it is evident that the course work was rather clinically based and delivered by both medical and senior nursing staff.

Although the medical and nursing staff resisted the role due to lack of awareness about the nature and the scope of the ONP role, medical staff shifted their attitude to advocating the role and actively participating in the teaching and supervision of the student nurse practitioners.

Many factors have both facilitated and hindered the role development. It is evident that the role has transformed the care delivered at the hospital. There is evidence of
collaborative and nurse led care which appears to have positively influenced quality of care namely patients’ satisfaction and the provision of holistic care to patients.
Chapter Six: Ad hoc Advanced Nursing Roles

6.1 Introduction

The previous chapter has provided evidence about the development of the ONP role in Palestine. It is believed that various ad hoc similar advanced nursing roles exist in other health care settings within the Palestinian health care context. Although the ONP role is the only APN role that has formally developed in Palestine, other forms of advanced roles may also exist without such titles. Exploring the development of such roles should provide an insight into how and why such roles exist in a complex health care system of a country in conflict. Such a valuable knowledge should inform discussions with regards to the possibility of transferring APN roles to other specialties within the Palestine health care settings. In addition, understanding the context in which such ad hoc roles may have existed will enrich discussions and inform the development of any conceptual framework that underpins the introduction of APN roles to other specialties within the Palestinian care settings.

This chapter presents evidence of unplanned possible advanced nursing roles in a Palestinian health care setting specifically an accident and emergency department. The evidence is drawn from interviews with practicing nurses and their managers working in an accident and emergency department at an East Jerusalem Hospital. The evidence shows that nurses working in accident and emergency practice advanced roles. In this chapter evidence of such practices will be presented and discussed.
This chapter begins by providing a profile for the Hospital at which participants were interviewed. This is followed by a profile description of participating nurses. The accident and emergency department at which participants work is then described with emphasis on outlining work arrangements and types of casualties and cases the department deals with routinely. This is followed by evidence which is drawn from interviews with participating nurses. This evidence presented here has been organized around themes and subthemes with associated discussions. This chapter concludes by providing as summary of the main findings and discussions about ad hoc APN roles development.

6.2 Participants and their practice setting

This study was conducted at an East Jerusalem general hospital and specifically in its accident and emergency department. The Hospital is one of the leading Hospitals in East Jerusalem that provides care to patients from East Jerusalem and also the West Bank. The hospital provides specialist health care to Palestinians living in the West Bank and Jerusalem. Patients from Gaza are also referred to the Hospital for specialist surgery. The Hospital provides outpatient care in addition to in patient (medical, surgical, and intensive) care. The Hospital has its laboratory, X-ray, ultrasound and computerized tomography scan departments. It is considered one of the main referral hospitals for thoracic, urology, plastic, gynecology and neurosurgery in East Jerusalem.
In 2013, the Hospital treated 89,000 patients (inpatients, outpatients, and accident and emergency) and performed more than 5,000 operations (East Jerusalem Hospitals Network, 2014).

The accident and emergency department provides a 24 hour service and has 5 beds to receive casualties. The department has in total 10 registered nurses and 3 doctors who rotate from other departments within the hospital to work in the department on a monthly basis. On each span of duty, the department is staffed by 4 nurses and one doctor. The number of staff can be increased to respond to the department’s needs depending on the number of casualties attending the department particularly during political clashes where many casualties may arrive at the same time. The department cares for 22,000 patients who attend the department annually with an average of 70 patients every day (East Jerusalem Hospitals Network, 2014). The number of patients attending the department is relatively smaller than the number of patients attending other general hospitals.

Casualties seeking care at the Hospital arrive either by their own or public transportation or are transported by ambulances. Casualties attending the department may suffer from various acute complaints including cut wounds, chest pain, head injuries, gun shots, rubber bullet injuries and general unstable medical conditions such as elevated blood sugar or blood pressure.

When casualties arrive at the department, they are directed to the registration desk (if their health condition permits) and then they are received by a triage nurse who gives each patient a priority category 1-3, 1 being those patients who must be seen immediately.
including those with suspected heart attacks, open wounds, and those who were involved in road traffic accidents. Other patients who are assigned categories 2 and 3 are then seen by the nurse who carries out a series of observations and tests depending on the history of the complaint. Senior nurses (higher grade) may also order certain tests or carry out procedures they have mastered by experience or informal training. Patients are then seen by a doctor who carries out a physical examination and may order additional blood tests or other diagnostic procedures. A diagnosis is made by a doctor who then prescribes medications for the patients (as appropriate) who are then discharged. Nurses do not make diagnosis, prescribe treatment or discharge patients. All casualties (who are not admitted or transferred to other Hospitals) are discharged by the medical staff who provide patients with a summary report outlining their medical condition. Patients who suffer from serious health problems are admitted to the hospital or referred to other hospitals within Jerusalem.

Out of the 10 practicing nurses in the department who were invited, seven agreed to participate in the interviews. In addition, the Nursing Director of the hospital was interviewed to explore her views about potential advanced roles at the accident and emergency department. Nurses, at the department, work a three shift pattern, morning, evening and night. Nurses who were interviewed provided a good representation of nurses undertaking their duties in the three spans of duty. All interviews were scheduled at times convenient to the participants and ensuring that such interviews did not interfere with their work commitments. All interviews except one took place at the Hospital in a convenient place (nursing office with a closed door) where confidentiality could be assured. One
participating nurse asked to be interviewed outside the Hospital. This was carried out at a local café with a particular care given to ensuring confidentiality.

Participants have spent between 2 and 20 years working as accident and emergency nurses in the same department. One of the participants in the interviews was the Nursing Director of the Hospital and two other nurses had management responsibilities in addition to their clinical roles as accident and emergency nurses. Interviewing senior nurses and managers proved essential to explore management views about issues related to role development and quality assurance of work carried out by nurses who may have developed their roles in an ad hoc fashion. Five nurses have worked at the department 10 years or more. Only 2 females worked at the department and the remaining nurses were male. All participants were qualified nurses with a first degree in nursing (Bachelor of Science in Nursing) (BSN). Only one participant had a master’s degree in nursing management and two other senior nurses had post graduate Diplomas in accident and emergency. One nurse had a post graduate diploma in paediatric nursing from a local university. All nurses were practicing at the accident and emergency department except the Nursing Director who worked previously at the department prior to her promotion.

Table 6.1 provides a summary profile for participating nurses. The variation in the participants working profiles provides an opportunity to explore the views and experiences with regards to development of their de facto roles.
Table 6.1: Profile for practicing nursing staff

<table>
<thead>
<tr>
<th>Participant No</th>
<th>Gender</th>
<th>Nursing education</th>
<th>Years of general experience</th>
<th>Years working at the department</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>F</td>
<td>BSN, MA</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>BSN</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>M</td>
<td>BSN</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>BSN</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>BSN, Post graduate Diploma in Accident and Emergency Care</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>14</td>
<td>F</td>
<td>BSN</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>M</td>
<td>BSN, Post graduate Diploma in Accident and Emergency Care</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>M</td>
<td>BSN, Post graduate Diploma in Paediatric Nursing</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>

6.3 Analysis of data

Evidence from 8 nurses and managers working in an accident and emergency department was analyzed using the thematic analysis technique. Evidence consisted of transcribed data from interviews that aimed to explore three domains of inquiry:

1. Did any form of advanced nursing practice roles exist in the Department?
2. Why and how were ad hoc advanced nursing roles developed at the department?
3. How can such roles be regulated, formally introduced and transferred to other health care settings within the Palestinian Health care system.
For each domain of inquiry a number of open ended questions were used to explore the experiences and views of participants during interviews.

Evidence from each interview was transcribed on the same day, sometimes within hours of the interview. Evidence was analyzed by looking for patterns, similarities, and repetitions in each participant’s interview report and across participants’ reports.

Three clear themes surfaced from the data that captured the experiences of the eight accident and emergency nurses and managers. Themes that categorized the experiences of participants were: **Ad hoc substitution, willingness to expand role, resistance and support.** Themes and their associated sub themes are depicted in figure 6.1.

**Figure 6.1 Emerging themes and associated sub themes.**
6.4. Ad hoc substitution

Ad hoc in this context refers to the development of certain forms of advanced nursing practice that was not planned but has arisen to fulfil a need that emerged in the health care setting. Nurses performed certain advanced procedures/roles in order to substitute for shortages in the medical staff working in the Department. Such procedures are traditionally performed by the medical staff but nurses have acquired such advanced skills in order to compensate for the perceived shortages in medical staff. Similar contextual factors appear to have influenced the development of the emergency NP role in the UK. Tye (1998) pointed out that the role of the accident and emergency NP appeared in the UK in the mid-1980s. Read et al (1992) explained that accident and emergency NPs assess and treat patients either as an alternative to the medical staff or in the absence of the medical staff in the department. On the other hand, the RCN (2008) definition of an accident and emergency NP clearly identifies certain skills that are undertaken by the NP. These include comprehensive assessment, physical diagnosis, prescribing treatment and carrying out health promotion activities. Bache (2001) highlighted three specific advanced skills that accident and emergency NPs undertake in various hospitals in the UK: ordering radiographic examinations, interpreting radiographic films, and prescribing medications.

Although the hospital was established in more than 50 years ago, it was only 13 years ago that the accident and emergency department was established to enable the hospital deal with the increasing number of patients who have emergency conditions but presented to the outpatients department. Only one of the participants has been working at
Within the main theme of ad hoc substitution, three sub themes emerged: **learning on the job, confused accountability and response to increased workload.**

### 6.4.1 Learning on the Job

Although, all participants outlined that they undertake certain advanced procedures/skills as outlined in figure 6.2, none thought that what he/she was undertaking amounts to an advanced nursing role. Figure 6.2 outlines the main advanced jobs/procedures the participants undertake in the department. While two participants had undertaken a Diploma in Accident and Emergency nursing, these courses were not geared towards preparing them to undertake advanced nursing roles such as accident and emergency nurse practitioner roles.

*“Well during the accident and emergency course, we were educated about advanced roles but the training did not prepare us to undertake such roles in the department. Such roles did not exist in Palestine and we do not have this name or title [NP].”*

*Interview 11: 17-20.*

It took other nurses a number of years’ exposure to the realities of the emergency department work to acquire such advanced expertise and they clearly valued the long experience of seeing procedures done by others (both doctors and senior nurses) before
they were able to undertake such procedures. Nurses needed to see procedures for a number of times before they were allowed to practice them. Participants gave no indication that such learning by observation was carried out in a structured manner. However, participants indicated that when they first started performing certain procedures they were supervised (watched) by doctors or senior nurses. Furthermore, this form of supervision for nursing staff by the medical staff remained unstructured, entailed no formal training and lacked documentations or certification of training.

“I learned to undertake these procedures from experience and also from one of our senior nurses who has many sophisticated clinical skills who is also willing to teach us”
interview 15: 30-31.

“I have worked in the department for many years, I have seen doctors doing this [Advanced procedures as outlined in figure 6.2] and have learned most of this from the doctors. Interview 8: 39-40.

“The doctors watch us when we do certain procedures and then they trust us, they [doctors] sometimes also supervise what we do” interview 12: 48-49.

One of the senior nurses described teaching some of his nurses in a step by step manner so that they can fulfil their duties in the department. This form of training remained irregular as it had no structure, formality or assessment of achievement. Furthermore, this ad hoc form of training was not given to everybody but only to those who were willing to learn. Willingness to learn is decided based on the nurses motivation and is judged by the senior
nurse based on his perception. Nevertheless, all participating nurses indicated that they undertake certain advanced procedures they have acquired over years.

“I do that [training] step by step. Nurses who come to the department need to learn some procedures to be able to function in the department, those nurses who are happy to learn more skills, I am happy to teach them” Interview 11: 60-62.

Other nurses explained how the formal training they received outside the department was beneficial. This however, was training for a specific advanced life support procedure. This procedure is the only advanced procedure that nurses were formally trained and certified to undertake. Training was conducted outside the hospital (at a local training institute that is specialized in advanced life support training) and all participants except one (who had the least experience in the department) had a two day course and were certified competent to undertake such a procedure. The remaining skills/procedures did not receive any formal training. It seems that due to the nature of advanced life support skills and the value management placed on such an advanced life support procedure, most nurses were certified to undertake this role. An added reason for this could be the availability of such training at a local institution, which encouraged management who were keen to send most nurses on this training course. This may imply that availability of advanced training for nurses could play a pivotal role in encouraging management to introduce APN roles in their departments.

In addition to this form of informal, unstructured on the job training for nurses, doctors had also a supervisory (watching) role to ensure that nurses were able to perform
procedures. However, this was unstructured, informal and lacked any form of
documentations and formal feedback. Doctors would allow some nurses to undertake
advanced procedures but deny others based on the doctors’ perception of the nurses’
capabilities. Therefore, the doctors seemed to control who learns a new procedure and who
can undertake such a procedure. This in many ways signifies the power doctors had on
advancing nurses’ knowledge and experience in the clinical setting. Thus according to the
nurses doctors appear to have been selective in allowing the development of such roles
based on their perceptions of nurses’ abilities.

“If you are not capable, doctors will not be happy for you to do that (advanced
procedures)” interview 9: 72-73.

This implies that doctors in the department played a gate keeper role and that nurses
needed to impress the doctors to gain their approval for further advanced training.

The 12 advanced skills/procedures outlined in figure 6.2 are traditionally performed
by the medical staff both in Palestine and worldwide, as these have been part of their
medical training. Therefore, such procedures when performed by nurses fall under the
category of advanced procedures/skills as nurses need to both extend and expand their
roles to undertake such procedures. All procedures in Figure 6.2 were outlined as
advanced skills undertaken by Accident and Emergency nurse practitioners in various UK
hospitals (Bache, 2001).
All participating nurses indicated that they undertake most of the advanced procedures/skills. Only one senior nurse indicated that he can perform all advanced skills procedures as outlined in Figure 6.2.

**Figure 6.2: advanced skills/procedures performed by accident and emergency nurses.**

6.4. Accountability

Accountability in this context refers to the obligation upon both accident and emergency nurses and their employer to take responsibility for their actions and report the outcomes of
such actions accordingly. Such a definition of accountability captures the responsibilities of both the nurse and his/her employer for the actions and omissions undertaken by the nurse. However, exploring the work carried out by participants at the accident and emergency department identifies many shortcomings in accountability arrangements and can easily lead to confusion in the understanding professional accountability.

All participants signed a job description that identifies their level of responsibility and accountability at the start of their employment. According to the Nursing Director, job descriptions for accident and emergency nurses were identical, except for the charge nurse where additional management responsibilities have been added to his job description. However, there are no competency frameworks that participants need to work within i.e., the job description does not identify what skills are needed to carry out the work. Even when nurses acquired new advanced skills as identified in Figure 6.2, their job descriptions remained unchanged.

“I am not sure my job description has changed (to accommodate new acquired advanced skills)” Interview 14: 18-19.

The charge nurse was very clear in describing that although his job description had not changed following his training in accident and emergency nursing, he was keen to undertake advanced procedures in the department.

“My job description is general and does not identify any special skills that I need to undertake but I am happy to perform such skills and undertake more roles as I am able
to apply what I learned at the university [Diploma in accident and emergency nursing].”

Interview 15: 43-46.

A gap between what nurses do and what they are formally accountable for within the organization could be attributed to the lack of formal assessment of the nurses’ advanced skills. Although, all participating nurses working in the department have acquired at least some advanced skills there was no written evidence to say that they have acquired a specific competency and they that were allowed to perform such procedures. In addition, nurses acknowledged that they perform procedures that are not originally nursing but they have extended their role to the medical profession.

“Yes of course I do many procedures that are normally done out by the doctors such as taking arterial blood gases, suturing of wounds” Interview 16: 33-35.

Nurses are accountable for their actions like any other professionals. The Palestinian Nurses Charter (2000) stipulates that every nurse is responsible for the actions he/she undertakes and that nurses are responsible and accountable to their managers and to the organization in which they work (Palestinian Nurses Council, 2013). In the Accident and Emergency context nurses are performing advanced procedures that are not part of their competency framework as identified by their contractual agreement with the employer. However, they do that based on medical orders and perceive that the doctors are responsible if there are litigations or when nurses do not perform such procedures according to standard. It is likely that in the absence of a formal training and assessment,
nurses who perform procedures outside their scope of practice, will on certain occasions, deliver substandard care to patients.

“You know doctors have overall responsibility for the care,……., and they like to give orders” interview 12: 56-57.

It seems that the nursing management is in agreement with this perception which is contrary to any professional accountability. One professional cannot take responsibility for another professional’s work. Doctors are also hospital employees and are bound by their professional medical regulations. This ambiguity in accountability, although may be beneficial to the employer who does not recognize advanced nursing roles, but ultimately it may lead to litigations against nursing and medical staff and also against the hospital,

“There has been no objection from my manager. She is happy as long as I know what I am doing and also the doctor takes responsibility as he gives the orders for me to do things. I do not usually do any procedure without asking the doctor first” Interview 15: 34-37.

The only example participants were willing to share when asked about possible complications that may have resulted from nurses undertaking such advanced procedures/roles in the department was outlined by one nurse:

“Things may go wrong sometimes, for example, one of our nurses did suturing on a leg of a patient last week and the suturing line was not correct, the doctor then took over and changed all the sutures” interview 14: 38-40.
He added that:

“The doctors are responsible and they take the blame if something goes wrong because we are working extra to help them and reduce their workload” interview 14: 43-45.

This clearly highlights a misperception that doctors are responsible for the work of nurses in the event of litigation when this is not so. Nurses are responsible for their actions and or omission of actions and that nurses must always work to safeguard the best interest of patients (NMC, 2008; Palestinian Nurses Council, 2013). However, the hospital malpractice insurance does allow nurses to work under the direct supervision of the doctors which in many ways has given the nurses this impression about their legal responsibility. If nursing is to be recognized as a profession in Palestine, such an attitude remains to be an obstacle in empowering nurse who have fought to establish their professional body and lines of accountability. One must emphasize the professional nursing responsibility and accountability which highlight that nurses are accountable and responsible for their actions or lack of actions.

“Legally [according to the law] we may not be allowed to performed many procedures [we currently undertake] but we do that under the direct supervision of the doctors. So they [doctors] are happy for us to help and everything is under their care” interview 12: 41-43.

It could be argued that nurses in this context are working outside their scope of practice without ensuring that they are responsible for their work. This may be viewed as nurses undertaking their duties outside the law. When nurses undertake extended roles, tasks are
delegated by doctors but the employer has the responsibility to ensure that training and competency guidelines are in place and as a result the employer carries liabilities for the nurses’ actions. It is clear that participating nurses have not received formal structured training and therefore formal assessment of competencies to prepare them undertake such extended and expanded roles while safeguarding the best interest of patients.

**6.4.3 Response to increased workload.**

One doctor is allocated per span of duty and 4 nurses work on a morning shift, 3 work on an evening shift and 1-2 nurses’ work at night. On average 25 patients are seen and managed each shift. However, this workload can vary and the doctor can always ask for help from the on call doctor working in other departments, if he/she requires help especially when resuscitation of patients is required or there are many casualties as a result of an incident mainly political. From this description it can be argued that one doctor working at the department at any given time may not be sufficient especially when casualties with critical conditions arrive at the department. This perceived shortage of medical staff was indicated by the participating nurses as a main reason why they need to undertake such advanced procedures at the department.

“They [doctors] see me doing suturing of wounds and they are happy with what I can do. Sometimes the doctors are busy and we have only one doctor so I am happy they allow me to do this job” Interview 16: 51-54.
The perceived large number of patients attending the department as compared to the number of medical staff on duty was also seen by participants as the main drive as why nurses were allowed to acquire new and advanced clinical skills.

“I think the main thing is the large number of patients we have and one doctor cannot deal with so many patients. The doctor will see the patients and ask me to continue doing things such as suturing or applying a cast. So the doctor can see other person/patients while we carry out the treatment. Interview 11: 89-93.

Another aspect of this ad hoc substitution centres on giving prompt care to patients by reducing their waiting times at the department. Nurses believed that their current work which involved medical duties/procedures as outlined in figure 6.2 is paramount in providing quality care to patients. Nurses indicated that reducing waiting times for patients is an indicator for quality care.

“Patients have good care and they do not wait for the doctor as the nurse can do most of the work. Interview 10: 79-80.

However, such a perception could be challenged as although patients may wait for less time at the department, the care they receive is arguably provided by less trained and competent health care professionals. Furthermore, there has been no formal assessment of quality of patient care that is delivered by nurses. Such an evaluation of care should examine patients’ satisfaction, patients’ revisits and patients’ compliance.

Respondents defended their involvements in carrying out advanced procedures by explaining that they only do advanced procedures when the department is busy and when
doctors asked them to do so. Participants indicated that when critical cases arrive at the
department most of the doctor’s effort focuses on the care of one single patient which
results in delaying the care for other patients. Despite that, participants explained that not
all doctors have faith in nursing staff undertaking all procedures and some doctors prefer to
undertake procedures themselves.

“This [carrying out advanced procedure] depends on the doctors’ trust in what we do,
........, but when there are many patients, doctors in general are happy for us to do a
bit more that what we usually do” Interview 14: 24-33.

This discussion has clearly highlighted that participating nurses undertake advanced
procedures/skills to substitute for medical staff but such substitution is dictated by the
medical staff and is based on their preference and judgment about nurses’ abilities to
undertake such roles/procedures.

6.5. Support and resistance.

The accident and emergency nurses have faced a number of challenges when they
developed their roles in the department. Nurses were not fully engaged in this
development (this in many ways, was directed by the medical staff) as there was no formal
training process where nurses had guidelines as what skills they need to learn and how
their competencies will be achieved or assessed. In many ways this development was done
on the basis of need and only when nurses are needed to perform additional procedures
they are allowed to do so. All of this has led to de facto roles being created with nurses responding to departmental needs which varied from day to day and from shift to shift.

Doctors’ ambivalent attitudes and organizational flexibility explain both the support and the resistance nurses faced in developing their advanced procedures and roles.

6.5.1. Doctors’ ambivalent attitudes.

Nurses working in the department received both support and resistance from doctors. Although nurses were trained by (some) doctors, others were not keen on nurses undertaking such roles. According to participating nurses, reasons for such skeptical attitudes from doctors varied from lack of trust in nurses’ abilities to lack of need for such roles especially when the department is not busy.

As a result, this advanced nursing role for the nurses was dictated in many ways by the medical staff as the organization had no policy to govern the work of nurses outside their scope of practice.

“This [undertaking advanced skills] depends on the doctors’ trust,….., some doctors like to be in charge of the department and like us to follow their orders and only do procedures that are simple” Interview 14: 28-29.

According to participants, senior doctors were more comfortable with nurses to undertake such procedures. This could be a result of their greater knowledge of nurses’ abilities as senior doctors had extensive experience working in the department and therefore, they
were comfortable with nurses performing such advanced skills or procedures. In addition, senior doctors are likely to be more confident and may be more secure with their own role and status and therefore, they were more keen for nurses to undertake such advanced skills/procedures. This was not the case for junior medical staff who are likely to be less experienced and also more conservative in their practices.

“I think the doctors [senior doctor] or at least most of them are happy for us to take care of patients. However, junior doctors do not like this [nurses performing advanced skills/procedures] because we take the opportunity for them to learn [practice] new skills but the seniors [medical staff] are happy. Interview 11: 100-103.

According to the nurses, many of the junior doctors (who may be allocated to the department) are keen to develop their own clinical skills before they delegate such advanced clinical procedures to nurses. Most doctors have been very supportive and even provided informal training and supervision for nurses in support of their roles. However, this remained a de facto phenomenon and that doctor seemed to have supported this advanced role as a way of dealing with staffing issues. A shortage of medical staff has facilitated this change in nurses’ roles. Doctors look towards nurses to help them accomplish their work.

“I have seen doctors doing this [advanced procedures] and some of the doctors are very happy for us to do these procedures. I have learned most of this from one doctor who is always keen to train and help us” Interview 16: 40-42.
Doctors’ prior knowledge of nurses’ ability was used as a parameter to show flexibility with regards to training nurses and allowing them perform procedures that are traditionally medical. In their research, Wilson et al (2002) revealed that lack of doctors’ trust in nurses’ ability to perform advanced roles, was one of the main obstacles for APN role developments. It is more likely that doctors, who worked with competent nurses and believed in their abilities, trust them in their work. It was perceived by participants that this kind of professional relationship was influential for the doctors to decide that a nurse can perform a procedure or not.

“*So I think it is different for each doctor, but those who know we can perform skills call us and ask us to do things*” Interview 15: 53-54.

6.5.2. Organizational flaccidity

Nurses like other health care professional work in an organization that provides them with job descriptions for which they can be held to account. Responsibility for nursing professional conduct lies with the individual nurse but s/he is accountable to both the management and the organization s/he works for. In this context the organization has demonstrated a great deal of flaccidity that could have compromised both safety of patients and also professional nurses’ roles. As a result of this nurses perceived responsibility of their actions (when performing advanced procedures) to lie with the medical profession. Nevertheless, all participants were adamant that their manger/s was keen for them to extend their role and felt that the nursing management was also supportive.
“Yes my manager is keen that I develop my skills and undertake these procedures [advanced roles]” Interview 9: 52-54.

The managers themselves were also keen for nurses to undertake such extended roles, but indicated that nurses only carry out procedures outside their job descriptions when needed and under the supervision of doctors. This cannot be true all the time as the role developed to help doctors due to shortages of medical staff and that doctor’s supervision is not always evident and even possible. This flexibility in interpreting accountability and responsibility for nurses’ roles is evident in the lack of documentation and formal assessment of competencies which has led to shortcomings in the job descriptions that outline nurses’ duties.

Lack of formal training and assessment has led to nurses undertaking roles in a disorganized manner as there were no guidelines as who can perform a certain procedure and what is the level of his/her competency.

“You need to have some time, like one year in the department and watch others do things and you learn from them” Interview 10: 73-74.

Nursing management did not feel that there was a need to standardize such roles as this may create demand for titles such as NP title that are not present in the department. Whatever nurses are doing at the department, this does not by any mean mount to the work of NPs according to previously discussed internationally recognized APN attributes. However, many of the procedures nurses undertake in the department are extended roles but remain under regulated. Nurses’ titles require both quality assurance measures to be in
place but also a pay scale that reflects the level of responsibility and competency advanced nurses undertake. This was identified as a reason why advanced nursing roles were not formally introduced at the Hospital. When the Nursing Director was asked how she felt about employing/developing NP roles at the accident and emergency department, she replied:

“If they [nurses] are trained [to function as NPs] yes. But this requires me to pay them more which I am not sure we can afford to pay them [NPs] differently. I mean higher [pay scale] than the other nurses” Interview 13: 52-54.

However, this shortsighted argument is invalid as nurses at the department have been engaged in some form of advanced roles which are unregulated and mismanaged. Both patients’ safety and professional accountability may have also been compromised which may lead to litigations which could cost the hospital more. If nurses are trained (formally) to undertake advanced roles and that they have the necessary certifications and licensures, this will reflect positively on the quality of care and also on the nursing profession.

6.7 Nurses’ motivation

All participants identified that they undertake certain aspects of advanced roles. However, this varies according to experience, seniority and education. The charge nurse who completed a higher Diploma in accident and emergency care undertakes all advanced procedures identified in Figure 6.2. A number of the participants underwent certain aspects
of both on the job training and attended study days outside the Hospital. The only aspect of formal training for all participants was that they all received instructions and training in advanced life support techniques which was both formal and certified.

Nurses’ motivation to learn and acquire new skills was seen as one of the main facilitating factors that enabled nurses to assume such roles. Nurses indicated such motivation in many ways. One nurse started that:

“Nurses are willing to learn from the doctors, especially young nurses like to do more”

*Interview 9: 78-79.*

Although all nurses who participated in the study have acquired additional advanced skills, young nurses seem more keen and motivated to learn and acquire new skills. The ability to perform new skills may be perceived by young nurses as a source of power which earns them respect and trust by the medical staff.

“This [training] takes years…………., but if the nurse is keen to learn, he/she will do that quickly” *Interview 8: 71-72.*

One participant outlined that willingness to learn was an important factor that helped them advanced their roles and responsibilities.

“There are many reasons [for advancing clinical skills], but the most important that we are happy to learn from the doctors, and some of the doctors are happy to teach us”

*Interview 8:  77-78.*

Participants outlined the impact of their extended roles on patients’ care as a motivator to learn and acquire new skills. Participants believed that because of their
contribution to the care of patients by performing advanced skills and helping the doctors, patients receive timely care.

“I think we help patients so they do not have to wait for a long time. After all we are helping the doctors to finish seeing patients” Interview 12: 36-37.

Nurses acquiring new skills and advanced procedures has led to professional satisfaction amongst participants. Advanced knowledge and skills were viewed as sources of power and means by which doctors respected and trusted nurses. This respect from doctors was very much valued by nurses and they felt that by performing medical procedures they gained that respect from what is perceived as a more respectable and powerful medical profession.

“I have learned many skills and procedures; I can help the doctors in performing almost all procedures in the department. I have good relationship with them and they respect my knowledge and like us to do more” interview 11: 38-40.

Such an attitude from nurses towards doctors is a clear indication of the imbalance in power in the Palestinian health care system. It is clear those doctors, at least in this context, had professional power over nurses and that nurses endeavor to gain the medical professionals’ respect, trust and appreciation for their roles. It could even be suggested that nurses are conscious of the doctors power due to the perceived superior knowledge that they have and therefore, nurses are keen to develop advanced knowledge and skills so that they enjoy the prestige/status when dealing with the medical staff. Furthermore, nurses who undertake advanced procedures/skills may also feel more satisfied with their
achievements and feel that they are more likely to be respected by their patients and the society at large.

Although nurses were happy to extend their roles and appeared keen to learn from doctors, most participants identified a need for formal university training to prepare them to undertake such advanced roles more competently and without restrictions.

“I think the most important thing is education, I think we will benefit from degrees and diploma for example in accident and emergency nursing “Interview 16: 104-105.

“We have many qualified nurses, but we need the universities to provide more advanced education and training to ensure that nurses are ready to do more and take more responsibilities for the care of patients” interview 14: 80-82.

In addition participants advocated the need for advanced roles within their department and viewed such role as positive to help meeting the needs of patients. Some went further to suggest advancing the roles of nurses in many specialties within the Palestinian health care system such as community and primary care settings.
6.8 Conclusion

This chapter has presented evidence gathered from interviewing eight nurses working at a local accident and emergency department within a general hospital. It is clear that some form of advanced nursing roles is practiced by participants. However, such roles have developed ad hoc and as a result remained both unregulated and underdeveloped.

Training for such roles was fragmented and only two nurses underwent university training in accident and emergency nursing which prepared them to undertake certain aspects of the advanced nursing roles in the department. The other participants received training on the job by watching senior nurses and doctors performing advanced procedure. There was no evidence that such training has been structured. On the contrary evidence clearly demonstrates that there has been no quality control over what nurses have learned or what they are capable of undertaking competently.

This lack of cohesion in the structure and implementation of training is added evidence that such ad hoc roles have not been evaluated or their impact on the care has been monitored. This in many ways is a critical issue in modern health care settings where patients’ quality care and safety are paramount to all health care managers and providers. Although nurses value the impact of their role on the care of patients and perceive this impact to be positive, there is little evidence to support those views.

Nurses’ willingness to expand their roles and acquire new skills and advanced knowledge was clearly identified as a motivating factor for nurses. However, such motivation was driven by the need to acquire more power within the health care team.
This in itself is not a disadvantageous but it indicates the power struggle nurses have in their working environment. Nurses valued the respect they receive from doctors especially when they are able to perform advanced skills and take over from the medical staff.

Most participants advocated their role as it is valuable for the health care setting in which they work. They also added that there is a need for such advanced roles in other health care setting. Interestingly, all participants indicated that formal university education is needed if they are to continue with their roles without restrictions.
Chapter Seven: A conceptual framework for the introduction of APN roles

7.1 Introduction

The previous chapters have presented evidence that explored the development of ONP as an instance of APN roles in Palestine. In addition, evidence from an ad hoc APN role development in an accident and emergency setting was also discussed. In an analysis of the data, 7 major themes and 20 subthemes have emerged. These themes and subthemes highlighted the experience of APN role development focusing on how and why such roles developed as well as factors that facilitated and or hindered such development, in addition to the impact of APN role development. From perspective of nurses, it has become clear that although APN roles developed in Palestine (both in planned and ad hoc fashions), there are essential prerequisites and conditions for the successful introduction of such roles in Palestine or similar health care context. Furthermore, analysis of the Palestinian health policy revealed 7 pertinent themes that were also used to inform this study.

In this chapter, a conceptual framework (outlined in figure 7.1) that guides the introduction of APN roles in Palestine or similar health care settings will be discussed. The framework has been developed based on the empirical evidence generated from the data. The framework offers a guide for policy makers wishing to introduce these roles in other health care settings in Palestine or in countries with similar health care settings.
7.2 A conceptual framework for the introduction of APN roles in Palestine

A conceptual framework has been defined by Jabreen (2005, p 51) as a “network of interrelated concepts that together provide a conceptual understanding of a phenomenon”. Frameworks provide understanding and interpretation of social realities (Urguhart et al, 2013) and can be constructed from analysis of qualitative data (Jabreen, 2005). Frameworks “profile the structure, main features and processes of a phenomenon” (Brown, 1998, P157). Therefore an APN conceptual framework can guide role development, map role domains, inform policy making and enhance further research agenda into APN roles (Brown, 1998).

Following analysis of the data from 4 sources (table 7.1), a conceptual framework was developed to guide the introduction of such roles within in the Palestinian (and similar) health care system. The framework identifies the key conditions and pre-requisites for the potential introduction and development of APN in other health care settings in Palestine, as well as factors which are able to frustrate and or facilitate such development. The conceptual framework has been developed on the basis of the identification of 128 codes derived from interviews with accident and emergency nurses, interviews and a focus group with ONPs and interviewing policy makers, as well as reviewing historical data pertinent to the development of ONPs in Palestine. Codes were then merged together to form 20 subthemes, from which 7 themes have emerged. Furthermore, analyzing the Palestinian health policy revealed 7 pertinent themes. All
themes, derived from the 4 data sets, were further categorized and conceptualized to reduce data further and enhance its level of abstraction (Bendassolli, 2013). To achieve this, the researcher further categorized themes in order to be able to explain and conceptualize the findings. Further conceptualization and contextualization of themes has resulted in the identification of four elements that constitute the framework. This was achieved by weaving together evidence from the four sets of data from this research with existing knowledge to enable the researcher provide a holistic account of the phenomenon and make data both relevant and meaningful (Bendassolli, 2013).

Table 7.1: Sets of data used to inform the conceptual framework

| 1. Interviews and focus group with ONPs and analysis of relevant historical data pertaining to the evolution of the ONP role. |
| 2. Interviews with health policy makers. |
| 3. Interviews with accident and emergency nurses. |
| 4. Situational and policy analysis of the Palestinian health care system. |

The framework “introducing APN roles in Palestine” developed here has 4 main elements (assessing the need for APN roles, planning for the introduction of APN roles, implementing APN roles, and outcome of APN roles). The framework uses 4 elements to identify broad categories and uses concepts to identify smaller components within the broad categories (elements) (Kilpatrick et al, 2013). As a result, in each of these 4 elements of the framework, a number of pertinent and related concepts are outlined. All the concepts that constitute each of the 4 elements of the framework will be discussed in
the context of available APN global literature. Each element and its associated concepts will be discussed, and threads will be drawn together with discussion how such concepts are interrelated to make the emerging conceptual framework for introducing of APN roles in Palestine.

7.2.1 Elements of the conceptual framework

1. Assessing the need for APN roles

In the needs assessment part of the conceptual framework two main concepts exist (assessing the need for APN and providing a rationale for APN role introduction). This part of the framework provides a means of assessing health care needs of the population and identifies how population health care needs can be met by introducing APN roles. At the organizational level, assessing health care needs of specific patients, e.g. patients suffering from cancer, can be carried out to identify gaps in meeting such needs and identifying how APN roles can meet such needs.

2. Planning for APN role introduction

Under the planning element of the framework a number of concepts that are pertinent to the planning of a successful APN role introduction have been identified. These planning concepts are: stakeholders, advocacy group, health care culture, education and regulation.
3. **Implementation of APN roles**

Under the implementation element of the framework are two main aspects APN role domains that identify roles undertaken by Advanced Practice Nurses and the provision of organizational culture and policies that support APN roles implementation.

4. **Outcome of APN roles**

Under the outcome element of the framework are a number of concepts that identify the impact of APN roles on the care of patients, health care system and the nursing profession.

7.2.2 **Propositions and relationship between concepts**

The framework considers the introduction of APN roles at the national level by providing essential elements that facilitate the introduction and also provides a systematic process that leads to the introduction of the role at the organizational level as well. The framework proposes that specific relationship exists between its four elements. The major proposition of the framework reflects that for a successful introduction of APN in Palestine, a systematic process needs to be undertaken to facilitate such an introduction and to ensure that the appropriate APN outcome are realized. The 4 elements have logical sequences that are based on the process of assessment, planning, implementation and evaluating impact.
In each of the elements of the framework, it is proposed that a sequential process that link between concepts is also followed. The relationship amongst the various concepts is necessary to provide explanations of the dynamics of the introduction of APN roles as a phenomenon by identifying how these concepts are interrelated (Brown, 1998). This framework proposes the following linkage between concepts based on emerging evidence:

1. Assessment of the need for APN roles is an essential first step to provide rationale for role introduction based on evidence.
2. Assessment is followed by a planning process that involves stakeholders’ identification and the formulation of an advocacy group to facilitate education; training and regulation of APN roles as well as ensuring resources are available to support the planning process.
3. Careful planning should lead to the successful introduction of APN roles and create a health care environment that supports such an introduction and enables APNs to fulfil their role domains.
4. The outcome of APN roles can be measured based on their impact on the care of patients, health care system and the nursing profession.

7.3 Other APN conceptual frameworks and models.

A number of conceptual APN frameworks have been developed but most focused on evaluating the impact of APN (Gerrish et al, 2013; MeiLing, 2009; Sidani and Irvine 1999). Others focused on other aspect of APN roles such as education (Brown, 1998),
organization (Whitcomb et al, 2002), types of roles (Lincoln, 2000), nature of APN roles (Brown, 1998; Hamric, 1996) role enactment, function and perception (Kilpatrick et al, 2012; Manley 1997). Two frameworks were developed to guide the introduction of APN (De Geest et al, 2008, and Bryant-Lukosius and Di Censo, 2004). De Geest et al (2008) reviewed literature and identified 5 drivers to be reflected on and taken into consideration when APN roles are introduced into a health care setting. The framework considers general driving forces (health care needs, practice pattern, education, work force issues and legal and policy issues). This framework was not empirically developed nor tested. This framework does not consider planning or implementation issues and does not identify outcomes for APN roles. However, this framework presents two elements (health care needs and education) as drivers for APN/NP role introduction which are present as concepts in the framework for the introduction of APN roles in Palestine developed and presented in this thesis.

The other conceptual framework that considers role introduction was developed by Bryant-Lukosius and Di Censo (2004). The participatory, evidence-based, patient-focused process, for guiding the development, implantation, and evaluation of advanced practice nursing framework (PEPPA), outlined 9 steps to guide implementing and evaluation APN roles. This framework, although comprehensive, but it was developed from a Canadian context and therefore, has addressed issues related to that context. The focus of the framework is more applicable to introducing APN roles at the organizational level and in the context where APN roles have been developing for the past 40 years (CNA, 2008). Furthermore, the framework was not empirically developed but was adapted from two
previous models (Spitzer’s, 1970 and Dunn and Nicklin, 1995) that were both developed in a Canadian context as well.

The conceptual framework presented here (introducing APN in Palestine) has been empirically developed to overcome shortcomings in previous conceptual frameworks and models. It has considered contextual factors that affect such role development in a country in conflict where a comprehensive health care system has yet to develop and is facing many challenges. It is inconceivable that APN roles are introduced in a health care system without understanding the underlying context in which such roles will function (De Geest et al, 2008).
7.1: Conceptual framework for the introduction of APN roles in Palestine

Outcome of APN roles
Evaluating the Impact of APN roles
Patient/population outcomes (quality care & holistic care).
Health care system outcome (collaborative care model).
Nursing profession outcomes (advanced nursing status & practice).

Implementing APN roles.
- Organization policies and culture.
- APN role domains (advanced practice, practice development, education, research, consultation and leadership).

Planning the introduction of APN
- Regulation.
- Education and resources.
- Health care culture
- Advocacy group.
- Identification of stakeholders by Lobby Group.

Assessing the need for APN roles.
- APN role rationale.
- Population health care needs (epidemiological data, demography).
7.4 Assessing the need for APN roles

7.4.1 Assessing population health care needs:

Assessment in this context refers to gathering and analyzing of information about health care needs of a population including health care workforce by using multiple sources to identify gaps in the care that can be filled by introducing APN roles.

The introduction of APN has been influenced by health care needs (Hain and Fleck 2014; 2013; Odell, 2013). The successful introduction of the ONPs role in Jerusalem was based on perceived health care needs of patients seeking eye care both at the Hospital and the community. It is the proposition of this framework that the introduction of APN in Palestine is not imposed nor haphazard but is based on the identification of health needs of the nation. The framework proposes that the first step in the APN role introduction is the assessment of health care needs and identification of gaps in health care that APN can fill. Thus, APN roles development will be shaped by the context in which it exists (De Geest, et al 2008). APN roles developed in England, for example, were based on different health care needs from those roles developed in Palestine. It is inconceivable to introduce APN roles in any health care system without conducting comprehensive assessments of the population health care needs (De Geest et al, 2008; Sawatzky, 2013). In addition, assessment of alternative solutions to meet the health care needs of the population needs to be carried out. Such alternatives may include addressing issues related to shortages and employment of medical staff. Economic factors and lack of resources mainly shortages of medical staff was the main driver for the introduction of ONP roles. This was determined to be an affordable alternative solution to recruiting additional medical staff who may not
be available in the country. In the USA and UK, APN roles developed in primary care settings as a response to increased GP workload and shortages of medical staff willing to work at the community and primary care levels (Hamric, 2013; Horrocks et al, 2002).

Bryant-Lukosius and Di Censo (2004) in their conceptual framework refer to assessment of patients’ needs so as to adapt the health care model to meet such needs. In the conceptual framework presented here, the main purpose for assessing deficiencies in the health care system is to identify a rationale for the introduction of APN roles to fill such gaps and meet otherwise unmet health care needs.

Assessment of health care needs of the population includes aspects related to health problems, available services and resources, health care structure, access to services, public awareness and shortcomings in meeting such needs (Odell, 2013). Assessment should specifically address the following pertinent questions:

1. What are the health care problems?
2. What are the consequences of these problems?
3. How are these problems/needs addressed?
4. What needs are not being met and cannot be met in the current system?
5. What other resources can be used to address these needs? (what are the possible solutions) (Bryant-Lukosius and Di Censo, 2004; De Gesst et al, 2008).

In Palestine, sources of information to answer these questions could be the MoH, health reports, epidemiological data, demographical data, and other health care providers such as NGOs, UNRWA and WHO. Palestinian national health statistics issued by the PBCS and
the MoH provide an insight into the health care needs with regards to aspects related to morbidity, mortality, disability, life expectancy, child and maternal health indicators. Where data are lacking, Bryant- Lukosius and DiCenso (2004) advocate the use of interviews, surveys and focus group techniques to identify health care needs.

Chapter four in this thesis identified various challenges facing the health care system in Palestine as outlined in table 7.2. These include, fragmentation of the system (UNRWA, 2013), high prevalence of chronic diseases (MoH, 2012), and poor access to health care services due to the low number of clinics, shortages of medical staff as well as the ongoing political instability of the country (MoH, 2012; UNRWA, 2013). Once needs are identified, it is important to determine available resources and solutions to address the gaps in meeting such needs. This will also require appraising the system of care available to address their needs. Changes to the system may also be required in order to address the gaps and meet health care needs of the nation/population (De Geest et al, 2008).

The prevalence of chronic diseases, as an example of need, is not unique to Palestine but presents a challenging phenomenon for many developing countries particularly in the Middle East (WHO, 2010). In Palestine, current health care provisions for patients with chronic diseases follow the principles of the medical model (UNRWA, 2013). Patients suffering from chronic diseases are managed by physicians who are overwhelmed with the number of patients (MoH, 2010). This gives little opportunity for physicians to provide patients with the appropriate advice/information to enable patients to control and manage their health problems. Yet it is well documented that the principles
of caring for patients with chronic diseases are based on supporting self-care, providing
health promotion, and accessibility to community care (UNRWA, 2013).

<table>
<thead>
<tr>
<th>Table 7.2: Challenges facing the Palestinian health care system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fragmentation of services.</td>
</tr>
<tr>
<td>2. The presence of multiple health care providers.</td>
</tr>
<tr>
<td>3. Shortages of medical staff and over supply of nurses.</td>
</tr>
<tr>
<td>4. Shortages of health care resources and funding.</td>
</tr>
<tr>
<td>5. High prevalence of non-communicable diseases.</td>
</tr>
<tr>
<td>6. Poor access to health care services.</td>
</tr>
<tr>
<td>7. Influence of political instability context.</td>
</tr>
</tbody>
</table>

7.4.2 APN role introduction rationale

APN working in primary care will be in an advantageous position to enhance
patients’ self-care abilities, provide appropriate monitoring, and follow up and advice to
such patients (Fagerstorm, 2013; Di Censo et al, 2007). The escalation of chronic diseases
and poor access to health care as well as increased public expectation for better health care
were identified as driving forces for the introduction of APN roles (Fagerstorm, 2013). In
support of this phenomenon Pulcini et al (2010) identified that as many as 60 countries are
at the various stages of exploring and developing APN roles worldwide to meet various
health care needs.

Reviewing the current challenges facing the Palestinian health care system may provide an
opportunity for the introduction of APN roles. The vast prevalence of chronic diseases
namely diabetes which is quoted to affect 12% of the adult population (UNRWA, 2013;
Husseini, 2003), provides an opportunity for APN to fill the gap created by poor public health services including health promotion activities (Hamdan and Imam, 2014).

According to the PBCS (2014) one in ten people living in Palestine have at least one chronic disease. Such a striking figure clearly points towards the need for prevention at the primary care and community levels. A recent study conducted in Palestine by Hamdan and Imam (2014) has clearly advocated the development of advanced nursing roles to meet the pressing needs of the Palestinian people at the primary care and community level to deal particularly with the burden of non-communicable diseases (NCD’s) mainly diabetes.

Furthermore, access to health care has been severely compromised by the political instability of the country. As a result there has been a call for restructuring primary and community health care in Palestine to ensure better access to health care by all patients (Mahmoud, 2013). Such restructuring needs the inclusion of APN roles such as NPs to provide well-established and accessible facilities that is staffed by APN (Mahmoud, 2013).

In order to achieve this, the Palestinian Authority should initiate a system to educate nurses at advanced level to meet the unique needs of the community (Mahmoud, 2013). Such an approach will provide both preventative and curative and accessible community services (Hanucharurnkul et al, 2007). This was echoed by Hammdan and Imam (2014) who called for advanced practice nursing education which should be obtained through professionally approved educational programmes and certification.

It is evident that APN can fill the gap in the health care provision in Palestine. Once the need for APN roles has been established, then careful planning for such an introduction is
needed. Planning should take into consideration all stakeholders involved and ensure that all appropriate resources are available.

7.5 Planning for the introduction of APN roles.

Planning in this context refers to processes and strategies employed to ensure that all prerequisites are in place to achieve the objective of introducing APN to the Palestinian health care system. The planning process should be led by motivated nursing scholars and influential leaders (lobby group) who will play a pivotal role in the planning phase of APN role introduction. Planning for the introduction of APN into the Palestinian health care system requires the consideration of the following elements:

1. Identification of stakeholders.
2. Identifying an advocacy group.
3. Addressing health care culture (medical dominance, resources).
4. Education for advanced practice nurses.
5. Regulation for advanced practice nurses.

All steps identified in the planning element of the framework need to be implemented in a sequential and logical manner.

7.5.1 Identification of stakeholders

In this context stakeholders refer to all individuals, organizations, and government bodies who may affect or will be affected by introducing APN roles in the health care
system. It has become evident from the introduction of ONP role in Palestine that involvement of certain stakeholders, namely physicians at the organizational level, was critical for the successful role introduction. Failure to involve stakeholders in the introduction of APN roles has been identified as an obstacle in role implementation (Brown, 1998; Bryant-Lukosius and Di Censo, 2004; De Geest et al, 2008).

When planning for the introduction of APN roles, the lobby nursing group should identify all stakeholders who need to be involved in the planning process. At the national level, stakeholders in APN role introduction include representatives from patients’ groups, government policy makers, nursing association, medical association, employees, universities, NGOs, UNRWA, MoH and private health care providers. The identification of all stakeholders at the planning stage ensures support for the introduction of such roles into the health care environment (De Geest et al, 2008) With regards to patients’ representatives, using existing patients’ societies such as Diabetic Patients Society and Cancer Patients Society can provide an effective means of identifying patients’ representatives. Once all the stakeholders have been identified, the next step involves the identification of participants to form an advocacy group that leads the planning process for the introduction of APN roles.

7.5.2 Advocacy group:

The nursing lobby group plays a pivotal role in the formulation of the APN advocacy group. An advocacy group refers to representatives from all stakeholders who take on the responsibility to work together to plan for introducing APN roles by means of supporting,
lobbying, enhancing public awareness and leading a process of change in the health care system.

The advocacy group members’ selection from the stakeholders should be based on the ability of participants to contribute to discussion and invest time in the subsequent work (Bryant-Lukosius and Di Censo, 2004). Participants should also be representatives of the interests of the various stakeholders so that they can enrich discussions and ensure that all decisions made have taken into consideration the concerns of all stakeholders. Bryant-Lukosius and Di Censo, (2004) warned against over representation of certain stakeholders (such as medical staff) over other stakeholders and therefore a balanced group should be formulated. The main function of the advocacy group is to negotiate with gate keepers and plan for a smooth introduction for APN into health care systems. The APN role advocacy group armed with results from assessment of the population health care needs will be in a better position to advocate and lobby for such an introduction. Pulicini et al (2010) outline a number of strategies to remove global barriers to APN role implementation. They advised that communicating the value of APN roles in providing access to care, facilitates such roles development. This can be achieved by conducting proactive lobbying campaigns to advocate for the role (Pulicini et al, 2010). Another function of the advocacy group would involve negotiating a consensus decision with regards to transform traditional health care models to ensure a more integrated care model is in place to meet the health care needs of the population (Bryant-Lukosius and Di Censo, 2004). The shift of a traditional medical model to a more collaborative and holistic approach to care that promotes wellbeing, will form a major care model shift that requires a collaborative
decision to be made by all participants of the advocacy group (De Geest, 2008). Such a shift in the care paradigm forms a platform that prepares for the introduction of APN roles (Bryant-Lukosius and Di Censo, 2004). However, the advocacy group should be well informed, by the nursing lobby group, about APN roles so that they are able to identify types of roles needed to meet the needs of the patients. Representatives from the nursing society can be responsible for educating other participants and enhance their understanding of APN roles. For APN roles to be successfully implemented within the Palestinian Health care system, the essence of such role and how it can be utilized to address the health care needs of the population must be highlighted (De Geest, 2008). Education for APN roles and regulation of such roles as well as ensuring resources are available, are all responsibilities that the advocacy group can undertake as part of the planning process.

**7.5.3 Health care culture**

Health care culture in this context describes the health care environment that supports the introduction of APN to the Palestine health care system. Davies et al (2000) explains that health care culture refers to the social constructions and interactions functioning in the health care environment. As culture is an attribute of an organization or a system (Davies et al, 2000), it therefore, can be influenced, manipulated and changed.

In this context, a conducive health care culture is a pre-requisite for a successful introduction of APN roles within the current health care system in Palestine. Two main aspects of the health care environment emerged from the data as essential pre-requisites
that need to be addresses prior to APN role introduction, namely medical dominance and available resources.

7.5.3.1 Medical dominance.

Medical dominance refers to the “longstanding phenomenon of the culture of medicine exerting sovereign power over other professions such as nursing” Bleakley, 2013, p25). Such dominance is viewed as an obstacle in the path of APN role introduction as nurses are unable to function autonomously and independently of the medical staff (Bleakley, 2013; Pearson, 2001). Adamson et al (1995) identified various features of medical dominance that include autonomy of doctors, their ability to control resources and direction of advancement in health care as well as doctors’ dominance over other health care professionals such as nurses. Medical dominance of nursing was conceptualized by Adamson et al (1995) in four aspects: first nurses’ knowledge stems from medical knowledge, second doctors control treatment of patients, third nurses work is requested by doctors and forth nurses do not have equal status with medicine.

Many may not associate the care of patients with power within the health care environment. But Mantzoukas and Jasper (2004) asserts that the use of power is evident in any health care setting. Viewing power from an organizational and management theory perspective, Davies et al, (2000) asserts four dimensions of power in health care: opportunity for professional advancement, availability of information, access to resources and availability of support. Evidence generated in this research has suggested that there is a power imbalance between medical and nursing staff. Nurses practicing at an advanced
level in the accident and emergency were dependent on the on the medical staff approval of their work and therefore, were only permitted to function at an advanced level when there was a shortage of doctors. Power in itself is not problematic, however, when power of a profession is used in a way that can obstruct the development of another profession such as APN role development, then power can be viewed as a problem (Bleakley, 2013).

In health care setting, nursing has been viewed conventionally as inferior to medicine (Christensen and Hewitt-Taylor, 2006). Such traditional opinion stems from a historical view that men practiced medicine and women practiced nursing (Bleakley, 2013). Society viewed women (nurses) a politically naïve and therefore subordinate to men (doctors) (Christensen and Hewitt-Taylor, 2006). Although such divisions are changing where more women are enrolled into medicine and also more men are undertaking nursing duties, this perception remains unchanged in many societies including the Palestinian. In fact almost 49% of nurses in Palestine are men (Palestinian Nursing Council, 2013). Despite this, medicine in Palestine remains to be male dominant. Another source of power for the medical staff is the perceived superior education and knowledge that enable the medical staff to make scientific decisions that affects the health of patients. (Mantzoukas and Jasper, 2004). Such a perception was translated into health care settings, where doctors were seen as the most powerful and that the health care systems were driven by a medical model (Christensen and Hewitt-Taylor, 2006). A medical model of care refers to the traditional approach used by physicians to treat illness. This model emphasizes a problem solving approach to assesses, diagnose and treat diseases.
Pearson (2001) describes that monopolized medical leadership in health care also makes doctors’ impact on health care more evident. This is certainly the case in Palestine where most of the senior leaders and policy makers working at the MoH are doctors. And therefore this according to Pearson (2001) enables doctors to be more influential on legislations as they have more political presence. Although such a medical dominant system has been challenged in many parts of the western world, the situation of medical staff leadership and control of health care systems remain true in Palestine. All dominant posts at the Palestinian Ministry of Health including policy making level are taken by the medical staff. In fact, in many hospitals, nursing staff are under the authority of medicine where nursing directors are accountable to the medical directors.

In the ONP work environment, the medical staff appeared to resist the role at the beginning. This was explained by ONP as lack of understanding of the role and its values. However, even involving the medical staff at a later stage of the role introduction particularly training and assessment of ONPs appear to have shifted the attitude of medical staff from resisting to advocating for the role. In addition, doctors working at the St. John Eye Hospital need to comply with principles and standards of care delivery that area parallel to any eye hospital in the UK. Such a British influenced working environment could have positively influenced the way doctors related to nurses and therefore has helped to shift their attitude towards ONP role development. Such shift in attitude may also have been influenced by the positive attitude of the remaining expatriate doctors working at the Hospital and who have been instrumental in supporting the ONP role development. Furthermore, this support could have been facilitated when Doctors realized that ONPs
role was not a threat to their status (Neville and Swift, 2012), and that the role can complement rather than replace doctors’ roles (Dowling, et al, 2012).

These critical factors need to be discussed earlier on at the advocacy group level to ensure a shift in the doctors’ attitudes and therefore facilitate role introduction. This is vital as doctors who dominate the health care environment may prove to be prominent gate keepers for APN role introduction.

In the environment of the accident and emergency nurses, there appeared to be, according to nurses interviewed, a mixed Doctors’ attitudes that ranged from actively participating in coaching of nurses to a lack of interest in the development of such advanced roles. However, the role of APN developed in an ad hoc fashion where doctors were not officially asked to train nurses but they chose to do so themselves. Doctors’ motivation appears to have been driven by self-interest as nurses were trained to help doctors to deal with an increased load of work.

Evidence from both ONP and accident and emergency environments clearly indicates that the medical staff operating within the health care environment play a pivotal role in the introduction of APN roles. This conclusion was echoed by Por (2008), Gardner et al, (2006) and Cumming et al (2003). It is therefore, essential that the medical staff are involved at all stages of the role implementation and development. This should start at the Ministry of Health policy level and filtered down to the departments where such roles are implemented. The advocacy group has a critical role to play at all levels in order to negotiate with all gate keepers at the organizational, policy making and legislative levels.
Palestinian nurses need to challenge traditional views, values and boundaries in order to realize international perspective to their clinical settings. Challenging medical dominance in health care needs to be an integral component of advanced nursing education (Bonnel, 2013). Addressing the power imbalance in the health care and the society at large requires grass root attention where nurses need to be made aware of such difference in power. Advocating for more women involvement at the policy making level, community organizations and at the workplace should lead to enhancing women status and therefore, more involvement in decision making within the workplace.

APN in its nature challenges the power status within the health care environment (Di Geest, 2008). APN equipped with advanced knowledge and skills can themselves challenge such power imbalance in health care (Shields, 2013). In addition, APN are able to make health care decisions and therefore have the autonomy that brings about power and status. In fact, the successful introduction of APN in any health care setting indicates a paradigm shift in the way nurses, doctors and other health care professionals operate (De Geest, 2008).

7.5.3. 2 Resources

Resources in this context refer to the availability of those infrastructures that support the successful introduction of APN roles. Provision of resources such as educational resources, administrative support, practical resources and role protection were highlighted as crucial for the successful introduction and development of APN roles (De Geest et al 2008; Bryant-Lukosius and Di Censo, 2004). Other resources necessary for the
role introduction as identified by Sidani and Irvine (1999) include role formalization, employment conditions and pay incentives. The availability of appropriate educational infrastructure was viewed by ONPs as an essential aspect that facilitated the role development at St. John Eye Hospital. This infrastructure supported both the theoretical and clinical learning of ONPs and was seen as critical for the role development. On the other hand, absence of such formal teaching resources was evidently an obstacle voiced by nurses undertaking advanced roles in an accident and emergency setting. Nurses undertaking advanced role in this setting, were not supported by an educational system that outlines their required level of both theoretical and clinical competence.

In addition to a formal educational system, ONPs valued greatly the presence of clinical mentors who provided adequate coaching and advice particularly at the start of their role development. It was also evident that lack of resources in certain clinical settings, prevented ONPs to carry out their advanced roles appropriately. This included shortages of medical staff who were unable to provide clinical mentoring especially in the primary care setting.

The absence of financial incentives and higher pay grades were seen by accident and emergency nurses as obstacles to the full realization of the role. This could have also been influenced by the fact that these nurses, although they were undertaking some advanced nursing roles, those roles were not formally introduced. Nurses who undertake advanced roles must be recognized for what they do and this should be reflected in their pay and also grade (Kleinpell et al, 2014). Lack of APN title protection, was also seen as a factor that hindered the role development (Kleinpell et al, 2014), where nurses undertaking
advanced roles were not recognized as APNs and therefore, their role was both inconsistent and also underdeveloped (Pulicini et al, 2010).

As for the ONPs, title recognition and protection, coincided with a higher pay which has placed APNs at a higher scale than registered nurses. This in many ways was seen as a motivating factor for ONPs to undertake advanced roles.

Motivation of nurses to undertake advanced roles was evident in both settings (ONPs and accident and emergency nurses). In this context motivation is viewed as nurses’ willingness to undertake advanced roles which are traditionally performed by medical staff. In the case of ONPs, the incentives were evident for such motivation. This includes higher pay, promotion and status. It was interesting that despite the absence of these incentives in the accident and emergency setting, motivation to undertake advanced roles was not lacking.

7.5.4 Education for APN roles:

Education in this context refers to the “formal preparation of APNs in graduate degree-granting or post graduate certificate programme” (APRN Consensus Workshop and the NCSBN APRN Advisory Committee, 2008, P 8).

In order to facilitate the introduction of APN roles into the health care system, the provision of APN education programs should be an integral aspect of the planning process (CAN 2008; Hamric, 2013; ICN 2008; Marsden, 2003).
There are a number of universities that provide undergraduate nursing education in Palestine. Four of those universities provide post graduate nursing education in management, epidemiology, public health and community health nursing. Representatives from these universities must be represented in the advocacy group so that a shared values and vision of APN roles are transferred to the education curriculum. APN curricula should be based on international guidelines offered by the International Council of Nursing (ICN) that identify APN core competencies (ICN 2008). It is acceptable to suggest that advanced practice nurses working in different settings require specific competencies such as assessment, diagnosis, treatment and referral in the case of the role of the Nurse Practitioner (Bryant-Lukosius and Di Censo, 2004; Brown, 1998). Therefore, APN curricula should reflect both universal competencies and specific ones depending on the type of the role the curriculum is preparing (Hamric, 2013). With regards to education curricula, it is important that this meets the needs of both APN and also the health care organizations. APN is practice based and therefore, any education curricula must consider both the advanced theoretical and clinical components. (Furlong and Smith, 2005).

APN has pushed the professional boundaries of nursing into the medical territory (Reveley, 2001). For nurses to function at the advanced level, they need to possess both the advanced theoretical knowledge and practical competencies (ICN, 2008). Although, there have been no agreed standards or level of education to prepare nurses for APN roles, a Master’s degree level of education has been firmly advocated in the literature developed in a high income country settings (ANA 1995; Barton et al, 2012b; DoH, 2010; ICN 2008; the Scottish Government, 2008). In Palestine, ONPs underwent a six-month course that
included both theoretical and practical components followed by six months of consolidation. This was a valuable experience that prepared ONPs to undertake APN roles. However, lack of university education was seen by ONPs as an obstacle that may have prevented recognition of their role.

Nurses practicing at advanced level in the accident and emergency department did not undergo any formal APN education. This was seen by informants as one of the main obstacles they faced when crafting their ad hoc roles. Lack of formal university education was perceived as a reason why the practice of nurses, although at advanced levels, was not perceived or recognized as such.

For a successful introduction of APN in Palestine, education needs to be delivered within the multidisciplinary approach (Bonnel, 2013). After all APN work as part of the multidisciplinary team and in order to enhance such role introduction and reduce resistance, involvement of the medical staff in particular is crucial (Bryant-Lukosius and Di Censo, 2004). An added advantage of inter-professional education is sharing knowledge and also deepening understanding of APN roles amongst other health care professionals (Hain and Fleck, 2014; Wilson et al, 2002). However, such educational programmes need to be fully accredited in order to ensure certification and licensure.

7.5.5 Regulation:

The aim of regulation is to ensure control is exerted on the occupation and that standards of practice are upheld by a nurse which provides a benchmark against which
nurses can be measured and held accountable (Benton, 2013). The ICN (2008, p 7) defines regulation as “forms and processes whereby order, consistency, and control are brought to an occupation and its practice”. Such regulation is seen by Brown (1998) as necessary credentials to legitimize APN roles. Global survey revealed that restrictions on the development of APN roles include regulatory, cultural and educational barriers (Pulicin et al 2010). One of the barriers to APN in the USA has been the lack of uniformity with regards to regulation across the States where each State has its own regulation (Alleman and Houle, 2013). Such lack of uniformity requires that advanced practice nurses need to meet specific regulations in each State. As a result the American Practice Registered Nurses and the National Council of State Boards of Nursing developed a Consensus Model for regulating advanced practice nursing roles which includes licensing, accreditation, certification and education (Alleman and Houle, 2013). The model identifies the various elements that work together to determine the successful regulation of APN roles. However, such development in the States was only reached after more than 6 decades of APN role development.

The following section explains how the various element of regulation (accreditation, certification and licensure) can be applied to the Palestinian context.

### 7.5.5.1 Accreditation

In this context accreditation refers to the process of formally accrediting (recognizing) and approving APN education curricula by an accreditation body in Palestine
Practicing ONPs outlined lack of course accreditation as one of the main obstacle in the path of the recognition and regulation of their APN roles. Participating ONPs further outlined that this lack of recognition and accreditation for their certificates has led to lack of clear scope of their practice and restricted their professional autonomy.

In Palestine, the Ministry of Higher Education is responsible for accreditation of all post graduate studies/courses in nursing and or health care. It is recommended that APN education is at the Master’s degree level and accreditation for such education should be sought from the Ministry of Higher Education. Such an accreditation is essential to confirm that all APN educational curricula meet core nationally agreed standards (Rounds, 2013). Accreditation bodies will be in a position to ensure that all educational curricula address core theoretical standards and clinical competencies required by all APNs.

7.5.5.2 Certification and licensure

“Certification is the formal recognition of knowledge, skills and experience demonstrated by the achievement of standards identified by the profession” (APRN Consensus Workshop and the NCSBN APRN Advisory Committee, 2008, P 8). Licensure in this context refers to the formal permission that is given by an authority to APNs to practice at an advanced level.

From this study, it was pointed out by a policy maker at the Palestinian ministry of health that regulation and licensure are essential if APN are to be adopted in Palestine. All
accredited programmes should lead to the award of certificates for successful candidates. Such certification can be as a result of a nationally agreed examination that is administered by a professional regulatory body such as the Ministry of Health or the Nursing Association. Currently all registered nurses who complete an accredited programme are issued certificates by the awarding university. However, such nurses are unable to practice (have no license to practice) until they are successful at a nationally administered licensure examination which is administered by the Ministry of Health and the Nursing Association.

A similar mechanism can be employed for APN accredited programmes. Nurses who complete accredited APN programmes at a University are issued with a certificate that requires them to successfully complete a nationally agreed licensure examination which allows them to practice as advanced Nurses in a particular field. APN can then be placed on the Palestinian Nurses Association register and their role can be regulated by the Association, Ministry of Health and the employer. Figure 7.2 outlines the regulatory mechanisms proposed for APN in Palestine.
Figure 7.2: Regulation of APN in Palestine

A Master’s degree APN education Curricula developed by University Faculty

Curricula is approved by the Palestinian Ministry of Higher Education (Accreditation)

Nurses undertake Master’s degree in APN at a local university

APN are issued with Master Degree (certification)

APN undergo nationally standardized APN examination (licensure)

APN with certification and licensure to practice
7.6 Implementing APN roles

The advocacy group plays an essential role in the planning phase which results in the formal education and regulation (accreditation, certification and licensure) of APN roles in Palestine. The advocacy group continues to provide guidance to employers and health care organizations during the implementation phase as well.

Implementation in this context refers to the process used for the introduction of APN roles within the Palestinian Health care system. At this stage APN roles implementation of new initiatives and innovation in any health care setting is a complex process that requires careful planning (Sangster-Gromley, 2013). Various factors have been identified to influence the implementation of such an innovation at the organizational level (Jokiniemi et al 2012). Sangster-Gromley et al (2013) identified three interrelated concepts (involvement, intention and acceptance) that must be addressed when implementing new roles in health care settings. Involvement of all concerned stakeholders in the process of introducing APN roles, facilitate understanding of the intention of the role and the subsequent acceptance of the role. This requires a clear role definition and scope of practice for APN to ensure effective role introduction and development (Jokiniemi et al 2012; De Geest et al, 2008). In addition, role regulation at the organizational level requires consideration of issues related to scope of practice, perspective authority, diagnosis authority and referral which all can be influenced by the national policies and regulations (Bryant-Lukosius and Di Censo, 2004). Such regulations could be ensured by organizational policies and guidelines that reflect national and professional regulations. Such standards should outline APN main role domains and scope of practice.
Role domains describe the main functions/roles undertaken by APNs when their role is implemented in the clinical setting. Six domains of APN roles were derived from both evidence generated from this research and also analysis of pertinent international literature. These domains are:

1. Advanced clinical practice.
2. Practice development.
3. Education.
4. Research.
5. Consultation.

Various elements related to the six domains were reported by advanced practice nurses participated in this study. It is argued that APN roles are flexible as nurses are able to focus on the aspects of the domains to suite the types of work they undertake (Jokineim et al, 2012; Mitchell et al, 2010). So the degree to which APNs fulfil these domains may vary depending on their area of clinical practice.

Advanced clinical practice refers to the advanced knowledge and skills used by APNs in their clinical practice to ensure quality and patient-centered care. Advanced clinical practice is the heart of APN roles (Brown, 1998; Mitchell et al 2012) and there is a consensus that without advancing clinical practice, APN does not exist (Jokienem et al, 2010; Manley et al, 2008). The essence of advanced clinical practice incorporates superior skills and innovative practice (Por, 2008).

Practice development refers to the work carried out by APNs that leads to innovative and effective care. It is a continuous improvement process in health care to
ensure patient centeredness by enabling nurses to transform the culture and context of care (McCormack, 2002). Practice development is another domain that emerged from the evidence. Advanced nurses undertake practice innovation roles and lead quality initiatives in their areas of practice (Shiu et al, 2011). This domain was identified by many authors (Manley et al 2008; Mitchell et al, 2010).

The educational domain of APN role was also evident in the work carried out by ONPs in their daily clinical work and involved patients health education as well as staff education. Patient education was the core aspect of the role reported and was identified as the main pillar for the provision of holistic care. The educational domain of APN role has been widely reported in the literature (Hamric, 2013; Manley et al 2008; Mitchell et al, 2010). This domain can take the form of formal and informal education where APNs act as experts in education for both patients and staff (Jokiniemi et al, 2012). Manley (2000) elaborated that nurse consultants function as enablers and developers of other staff,

Undertaking clinical research was reported as an integral part of ONP role in their clinical settings. ONPs participated with doctors in conducting clinical research which was seen as an outcome of collaboration between APN and the medical staff. APNs involvement in research is not confined to conducting research but the utilization of evidence in clinical practice (Gardner et al, 2007). Research as an APN domain has been widely debated (Hamric, 2013; Manley 2000; Mitchell et al, 2010). Manley (2000) reported that nurse consultants function as experts in clinically-based research. The domain of research is seen as a way of generating new knowledge to advance clinical practice (Gardner et al, 2007). However, this domain varies from one setting to another.
where APN undertake no research activities to other settings where research forms an integral aspect of APN roles (Jokineimi et al, 2012).

Consultation is an integral role of APNs who act in an advisory capacity for patients, other nurses, and health care workers. Such role requires superior knowledge, expertise and confidence (Jokiniemi et al, 2012). Consultation as a domain of APN roles has been well reported in the literature (Mitchell et al 2010; Manley et al 2008; CNA, 2008). This is seen as an integral role which allows for sharing expertise with colleagues and other health care workers (Gardner, et al, 2007). Consultation as a domain involves APN acting a source of expertise, problem solving and experts in professional and organizational development (Jokiniemi et al, 2012).

The final domain identified is leadership which was reported by many authors (Brown, 1998; Manley et al, 2008; Mitchel et al, 2010). Clinical leadership refers to that aspect of APN which involves getting the best from others, fostering innovation and enhancing productivity (Manley et al , 2008). The Royal College of Nursing (2008) identified clinical leadership as an essential requirement for ensuring and sustaining quality care. The essence of APN roles challenges status quo, initiates and leads innovation and change (Por, 2008). APN are well equipped to provide leadership (Mitchell, 2010) which is a core role to transform and advance clinical practice (Dowling et al, 2012; Manley, 2000). Manley (2000) refers to nurse consultants as transformational leaders who influence effective health care and organizational culture.
7.7 Outcomes of APN role

The final part of the conceptual framework identifies the outcome anticipated from the introduction of APN roles in Palestine. Outcomes of APN role implementation are the result of assessment, planning and implementation elements of this framework. Outcome describes the impact of the intervention, process or change (Kleinpell, et al, 2014). In this context, outcome consists of the effects of the introduction and engagement of APN roles on the health care system, patients and the nursing profession.

As APN roles will be newly introduced in the Palestinian health care system, therefore, performance indicators can be formulated for each category of outcomes and can be used to evaluate the impact of APN role. The framework presented here can guide the collection of data that assess outcomes of APN role implementation, please see table 7.3. In fact, Manley et al (2011) confirm that one of the pillars of quality care is nurses measuring the outcome of their care. This can be achieved by evaluating set standards (agreed outcomes) that form integral components of nursing practice.
Table: 7.3: Impacts of APN roles and their evaluation indicators.

<table>
<thead>
<tr>
<th>APN roles outcome</th>
<th>Evaluation indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient outcomes:</td>
<td>Patient level of satisfaction.</td>
</tr>
<tr>
<td>Holistic care</td>
<td>Continuity of care.</td>
</tr>
<tr>
<td>Quality care</td>
<td>Access to care.</td>
</tr>
<tr>
<td></td>
<td>Provision of health promotion.</td>
</tr>
<tr>
<td></td>
<td>Patient waiting times.</td>
</tr>
<tr>
<td></td>
<td>Safety of care.</td>
</tr>
<tr>
<td></td>
<td>Appropriateness of care.</td>
</tr>
<tr>
<td>Nursing profession outcomes</td>
<td>Improved status of nursing.</td>
</tr>
<tr>
<td></td>
<td>Acceptance of advanced nurses’ care by patients.</td>
</tr>
<tr>
<td></td>
<td>Respect and appreciation of APN roles by other health care professionals.</td>
</tr>
<tr>
<td></td>
<td>Higher pay scale for advanced nurses.</td>
</tr>
<tr>
<td>Health care system outcomes</td>
<td>Nurse led care/service</td>
</tr>
<tr>
<td></td>
<td>Collaborative /shared care</td>
</tr>
<tr>
<td></td>
<td>Collegiality</td>
</tr>
<tr>
<td></td>
<td>Efficient use of health care resources</td>
</tr>
<tr>
<td></td>
<td>Blurring of boundaries between health care professionals.</td>
</tr>
</tbody>
</table>

The outcomes identified in the framework derived from this study that was conducted in a Palestinian context. Evidence from both ONPs and Accident and Emergency nurses has clearly outlined the positive impact of APN roles on the care of patients and the health care delivery systems. Such positive impact included enhancing quality of care, provision of holistic services, enhancing nurses’ status in addition to enhancing team work and collaborative approach to health care delivery.

Various APN roles outcome are measured in health care including physical, psychological, financial, quality of life, functional and satisfaction (Kleinpell et al, 2014). Fagerstorm (2012) classified APN outcomes into: patient outcomes, care outcomes and performance outcomes. Patients related outcomes describe the impact of APN work on patients’
satisfaction, knowledge and preference. Care-related outcomes include aspects related to length of hospitalization, cost of health care and patient symptoms. Performance related outcomes describe the impact of APN on quality of care. Other conceptualization of APN role evaluation used structure, process and outcome frameworks (MeiLing, 2009; Irvine et al, 1998). In this respect, structure describes resources including material, human and organizational resources that support APN role. Process outcomes describe the work and services provided by advanced practice nurses. Outcome indicators refer to the impact of APN roles on care of patients such as symptoms control, morbidity, mortality, satisfaction and quality care. Gerrish et al (2013) developed a framework for evaluating the impact of Nurse Consultants’ work in the UK. They identified three main outcomes: clinical (symptomology and quality of life), professional (impact on other health care professionals) and organizational (contribution of the role to the efficient management of the organization).

The outcomes of APN roles have been studied empirically in a range of health care settings and across different countries (Coster et al, 2006; Fairley and Closs, 2006; Kleinpell et al, 2014; McCanley et al, 2006). However, as advanced practice nurses work within a team, it has not always been possible to evaluate their contribution to health care and therefore made evaluating their impact problematic (Fairley and Closs, 2006). It is also argued that the complex nature of APN roles makes it often difficult to evaluate the direct input of such roles on health care settings (Dowling et al, 2013). However, there has been a wealth of literature that examined the impact of APN roles on health care. As many as 30
outcome indicators for APN roles have been identified in the literature (Ingersoll et al, 2000).

Based on evidence from this study, the outcome element of the framework identifies three main dimensions (patient/population outcomes, health care system outcomes and nursing profession outcomes).

7.7.1 Patient/ population outcomes:

Patient/population outcomes in this context refer to APNs interventions that affect patients’/population level of knowledge, satisfaction and quality of care. APN role implementation develops to meet the patients/population health care needs (Jokiniemi et al, 2012; Bryant-Lukosius and Di Censo, 2004). In this study, the most frequently reported patient outcome was the provision of holistic care to patients by advanced practice nurses. In this context holistic care refers to the care that is delivered by advanced practice nurses which meets the comprehensive needs of patients (physical, psychological, educational and social needs). Manley et al (2011) argue that nurses achieve their outcomes by the provision of patient-centred, individualized, safe and effective care.

Promoting patients’ wellbeing was another element of holistic care provided by advanced practice nurses (Li et al 2013; Jokiniemi et al, 2012). Shiu et al (2011) argue that holistic care is an integral outcome of APN roles implementation. This positive contribution according to evidence from the ONPs was seen as an integral aspect of the care that is missing within the primary and community care in Palestine. Advanced
practice nurses have an essential health promotion (health education, prevention and protection) role NMC (2006) in addition to the promotion of self-care amongst patient suffering from chronic diseases (Li et al, 2013).

The most frequently reported indication of quality is patients’ satisfaction followed by patient outcomes (Bonnel, 2013). In a systematic review carried out by Donald et al (2013) it was reported that advanced practice nurses provide quality care and enhance positive individual patient healthy behaviors. Patients’ level of satisfaction with the care provided by advanced practice nurses has been empirically documented (Hain and Fleck, 2014). Patients reported high level of satisfaction with the work carried out by advanced nurses and the subsequent availability and continuity of care (Li et al, 2013; Bergman, et al 2013). In a randomized control study, the care provided by APNs was associated with reduced symptoms and improved patients’ satisfaction (Jo-Ann et all, 2012) and enhanced patients’ functional abilities (Cunningham, 2004). Other studies reported that APNs reduced waiting times for patients and relieve doctors to attend to more acute and critically ill patients (Li et al, 2013).

In general, it is well documented that APN provide safe, quality care as well as an essential contribution to advancing health through health education and the provision of holistic patients’ to care (Hain and Fleck, 2014; Newhouse et al, 2011).
7.7.2 Nursing profession outcomes

In this context, nursing profession outcomes refer to those advancements brought to the nursing practice and status as a result of the introduction and development of APN roles. Advanced nursing status, in this context refers to improvement of the position of nursing amongst health care providers and in the society by advancing nurses’ knowledge and clinical practice. APN roles are seen as drivers for the evolution of nursing practice and improvement of nurses’ status (Laperriere, 2008). Nurses believed that enhanced knowledge and advanced roles are forms of power which is an essential aspect of human motivation as described by David McClelland’s (1961) theory. When performing such advanced roles, nurses felt that they gained more respect from the medical staff. This is called by McClelland’s (1961) theory of motivation as needs for affiliation. By undertaking advanced roles, nurses felt that they can be affiliated with what is perceived to be a very prestigious medical profession. Advanced roles were also seen as a way to excel and achieve success. Jokiniemi et al (2012) argue that one of the main manifestations of APN role implementation is the advancement of nursing practice and professional competence. Nurse’s undertaking advanced roles in both settings, were confident that such roles were a source of satisfaction and achievement.

Status of advanced practice nurses is enhanced when their contribution to care is valued by other health care professionals (Gardner et al, 2013). In a study conducted by Pearson (2013) APNs identified their perceived autonomy and professional status as the most satisfying elements in their roles. Enhanced status of advanced nurses should increase job
satisfaction and enhance nurses’ productivity, quality of care and reduce burnout (Pearson, 2011).

The enhanced status of advanced practice nurses was also evident in both settings (ONPs’ and accident and emergency) where nurses in both clinical settings referred to advanced nurses as senior, experienced and knowledgeable nurses. Li et al (2012) argue that advanced nurses serve as role models for junior colleagues and encourage other nurses to undertake advanced roles. In addition, advanced nurses were seen as a role model as their role involved teaching and coaching junior nurses and doctors. Williamson et al (2012) elaborate that advanced practice nurses perceived superior knowledge and skills as instrumental in enhancing the role model status enjoyed by advanced practice nurses. However, it is important that nurses need to enjoy professional status within the society, prior to an evolution of APN roles. It was clear from evidence that improved status of nursing as a profession was a clear outcome of the ONP role implementation. ONPs have been accepted by both patients and medical staff. In addition, ONPs enjoy a senior status that attracts both higher pay grade and level of authority that enable them to participate in senior clinical staff committees and meetings. According to evidence from ONPs, such an improved image for nursing was only an outcome of both advanced knowledge and clinical competencies. This change in attitude was not unique to the medical staff, but patients’ attitude has also shifted in favor of APN. In the ONP work environment, patients resisted (at the beginning) the role of ONP. However, such an attitude changed once patients became aware of the role and the capability of ONPs. Challenging public views about
nursing may need to be a gradual initiative which requires advanced practice nurses to uphold their professional attributes to advocate for such an acceptance of their role.

7.7.3 Health system outcomes

Health system outcomes outline the impact of APN role introduction on the structure and function of the health care delivery system. An integral aspect of the function of APN roles involves transforming the health care system so that it places more emphasis on quality care and the efficient use of resources (Hain and Fleck, 2014).

Collaborative care was identified as the main outcome of APN role implementation as a paradigm shift in the provision of health care. In this context collaborative care refers to the care provided by APN, doctors and other health care professionals to achieve common health care goals where each member’s contribution is valued (Li et al, 2013; De Geest, 2008). Shiu et al (2013) refers to collaborative care as an integrated team work that involves collaboration between APNs, physicians and other health care professionals. Central to collaborative care is the recognition of the unique care provided by all members of the team (Heale, 2012), and is characterized by skill mix and identification of responsibilities with the aim of achieving a common goal of quality care (De Geest, 2008). In fact, the expanded role and scope of practice for APNs provides the platform for collaboration between health care professionals particularly nurses and physicians (De Geest, 2008). As an outcome of APN implementation, collaborative care is far more superior to the care provided by one profession alone (Newhouse et al, 2011; De Geest,
Collaborative care can be achieved despite that health care professionals may not have equal power (Bourgeault and Mulvale, 2006).

Unfortunately such collaboration between APNs and doctors may vary even in countries where APN roles are well established (Heale, 2012). Barriers to collaboration between APN and doctors include lack of understanding of APN roles as well as the traditional medical practice model (Hain and Fleck, 2014).

Collaborative care in this context, when achieved, forms a good indication of curbing medical dominance (Bourgeault and Mulvale, 2006). This is the case as collaboration is about sharing responsibilities, decision making and power (Bourgeault and Mulvale, 2006). Collegiality, respect and patient-focused care are the corner stones of collaboration in health care (Hain and Fleck, 2014). The nature of APN requires that nurses undertake roles previously carried out by the medical staff. This in itself contributes to blurring the boundaries between professional (Dowling et al, 2013) and therefore, advocates for collaborative and interdependent approach to care (Bourgeault and Mulvale, 2006). When such a shift in the paradigm of care from a traditional medical model to a collaborative one is realized, this demonstrates a change on the emphasis of the care where all health care professionals work together to advance the health of the nation/patients (Heale, 2012).
7.8 Conclusion

This chapter has provided discussion of a theoretical framework for the introduction of APN roles that has emerged from analysis of data obtained from conducting a qualitative enquiry. The framework presented here is unique in many ways as it addresses contextual issues related to a country in conflict context. The framework highlights that introducing APN roles is a complex process that requires careful planning and commitment at the national and organizational levels. Involvement of all concerned is a key feature presented in this framework to ensure successful role implementation.

Discussion of the 4 elements and their related concepts of the framework provides better understanding of the complexity of introducing APN roles in a challenging environment. Each of these elements has been discussed in relation to both data emerging from the study and also international literature.

In the next chapter, strengths and limitations of the framework will be critically analyzed. The contribution of this study to the developing body of global knowledge on APN will also be highlighted. The implication of the findings of this study to international research and practices will also be outlined.
Chapter Eight: implications, recommendations and conclusion

8.1 Introduction

This study has investigated the development of ONP as an instance of APN roles in Palestine. This is the first study to be conducted in this context where APN roles, except for ONPs, have not been fully developed and regulated.

This study has resulted in the development of a conceptual framework for the introduction of APN roles in other fields within the Palestinian health care system. Building on the findings of this study that have been examined in the light of international literature on APN, the researcher has identified three main contributions of this study.

The first of these discusses the contribution of this study to the developing body of knowledge on APN roles. The second discusses the strengths and application of the developed conceptual framework to local clinical practice. The third outlines the contribution of this study to international research and the practice of advanced practice nursing.

From this study, the researcher has identified specific recommendations for four main areas: policy, education, practice and research.
8.2 Contributions to the body of knowledge

This study confirms the existing international body of knowledge that APN roles development is a complex phenomenon that is contextually based (Hamric, 2013; Bryant-Lukosius and Di Censo, 2004). This study, although was conducted in a country in conflict, it clearly confirms established propositions that multi contextual factors play critical roles in the introduction, implementation, development, and evaluation of APN roles. However, contextual factors differ from one country to another and therefore this study has emphasized that the unique contextual factors in each settings play pivotal roles in determining the successful implementation and utilization of APN roles. Therefore, studying such contextual factors is a prerequisite for introduction of APN role in any health care setting.

This study makes three specific contributions to the state of international body of knowledge on APN roles. First, it explicates a scientific process for the introduction of APN roles in a complex health care setting and in a country in conflict context. The Palestinian health care system is complex and unique in many ways but this study has highlighted the unique contextual factors that may facilitate and or hinder APN role development in a complex environment. Understanding such contextual factors may overcome barriers to the utilization of APN in countries with similar contextual circumstances and therefore, aid other health care professionals and policy makers in the successful introduction of such roles.
Secondly, in the absence of a similar framework that addresses pertinent contextual factors that operate in a similar health care context, the conceptual framework developed was empirically constructed and resulted from a scientific process on the introduction of APN roles in Palestine. On the theoretical level, this framework has a particular value as it was empirically driven and developed in a unique context that has not been researched before. The framework provides specific guidelines that should help policy makers, professionals and employers to successfully introduce APN in complex health care settings.

Thirdly, this research provides operational information for the introduction of APN roles in Palestine. This research builds on previous work and takes debate in this field further to include countries with similar health care systems and complex environmental and contextual settings. This contribution in itself provides the basis for further research to validate the proposed conceptual framework.

8.3 Strengths of the framework and implication for practice

One of the main strengths of the framework is that it has resulted from the experience of APNs working in a Palestinian context. Elements and related concepts have been derived from data obtained from a research carried out on APNs working in ophthalmic and accident and emergency settings. Previous conceptual frameworks have focused on specific issues related to APN role such as education (Brown, 1998) role evaluation (Gerrish et al, 2013), implementation at the organizational level (Whitcomb et al, 2002), types and nature of APN roles (Brown, 1998; Hamric, 1996). Other Frameworks
that explored aspects related to role introduction (De Geest et al, 2008 and Bryant-Lukosius and Di Censo, 2004) were developed from available literature rather than being data driven. In addition, both of the later frameworks have developed in contexts that differ from that of the Palestinian culture and health care setting.

Although there has been an increased utilization of APN roles worldwide (Pulicin et al, 2010), limited data are available that guide the introduction of APN roles (Bryant-Lukosius and Di Censo, 2004). Available frameworks have examined such role introduction from a western world perspective (Bryant-Lukosius and Di Censo, 2004). The only framework that was developed from a developing country perspective was not empirically developed and was only geared for the evaluation of APN roles and more specifically NP roles (MeiLing, 2009).

The introduction of APN roles into any health settings requires careful assessment that considers multiple contextual factors. (Bryant-Lukosius and Di Censo, 2004). This coincides with the nature of this inquiry “realities are wholes which cannot be understood in isolation from their context” (Lincoln and Guba 1985, P 39). Furthermore, APN roles should be crafted according to the context in which such roles are introduced (De Geest et al, 2008). The new conceptual framework developed from data collected using both qualitative and quantitative methods where elements and concepts were identified inductively. This framework accounts for the various contextual factors that influence such possible role introduction. By doing so, the framework has been developed to provide a road map that facilitates such an introduction of roles in a complex and challenging health care and political settings. It should provide a resource that health policy maker,
health care professionals and managers can use in order to introduce APN in their health care setting.

The conceptual framework provides empirical-driven structure which should increase understanding of the introduction of APN roles and therefore facilitates such an introduction into Palestinian or similar health care settings. It demonstrates the importance of identifying the need and rationale for the introduction of APN roles by conducting a comprehensive assessment of the health care needs. The role of the advocacy group identified by this framework is an integral part of any successful introduction of the roles at the national level.

Although, this framework has been constructed to aid in the introduction of APN roles at the national level, its four elements can be easily adapted and used at the organizational level as well. The assessment element of the module could be used to assess health care needs of a particular group of patients seeking care at organization e.g. diabetic patients. At the planning level, stakeholders, advocacy groups, organizational culture, education and regulation all can be adapted and applied at the organizational level. Implementation of APN roles at the organizational level needs a clear scope of practice which could be governed by policies and procedures at the organizational level. The outcome of APN roles can be identified and evaluated once the role is implemented locally.

At the practical level, the most important step to be taken in the short term involves advocacy for the introduction of APN roles in other health care settings in Palestine.
Identifying an advocacy group that is led by nursing scholars and influential nursing leaders would be the first step to enhance awareness about APN roles. Such awareness may need to start at the nursing levels before it moves to include other health care professionals, policy makers and the public. The advocacy group should be able to lobby for such an introduction by highlighting the nature, attributes and values of APN roles. Focusing on how APN roles can be successfully employed to address the various health care needs of the Palestinian population as identified by the MoH Annual Health Report (2014) would form a platform for such role introduction. Once such awareness is heightened, the next course of action needs to involve conducting professional debates at the national level involving all stakeholders to discuss education, recognition, licensure, regulation and governance of APN roles.

Although this framework has been empirically developed, one of its main limitations is that it has not been evaluated and its effectiveness in introducing APN roles in countries in conflict remains to be determined.

Another shortcoming in the proposed framework is due to its rationalistic approach for the introduction of APN roles. This framework proposes a logical approach to the introduction of APN roles (assessment, planning, implementation and outcome). However, in real life situation such an idealistic proposition may not be possible to realize. No doubt, there will be other actors, gate keepers and circumstances that may influence such a process of APN role introduction.
Having acknowledged this shortcoming, the intension of the framework is to provide a road map that can assist professionals when introducing APN roles. Therefore, this framework provides the flexibility for professionals to accommodate for other unseen factors, circumstances and players who may influence the introduction of APN roles.

8.4 Implications of the study globally

This study was conducted in a Palestinian context where unique political, socioeconomic and demographic factors exist. Therefore, the transferability of the findings of this study may be constrained by its specific examination of a context based phenomenon. However, the findings of this study could be utilized to inform similar research on APN roles in similar contexts.

The development of a conceptual framework for the successful introduction for APN roles is the core outcome of this study. The framework adopts a systematic process that is familiar to all nurses (assessment, planning, implementation and outcome) and therefore provides a logical process that can be easily followed and put into practice. In addition, several of the concepts used in this framework were used by other international APN models and conceptual frameworks (De Geest et al, 2008; Bryant-Lukosius and Di Censo, 2004; Brown 1998).

This study and its findings can be used by other international researcher to inform future research into the introduction and development of APN roles in both developing and developed countries. Further research in this area is needed to determine the effectiveness
of this framework and its value in APN role introduction in a Palestinian or a similar
country in conflict context.

This study concludes that APN roles can make critical contribution to meeting the health
care needs of patients both in developed and developing countries. In addition, the burden
of chronic diseases particularly in developing countries can be addressed by crafting APN
roles that meet the health care needs of the people with chronic diseases.

8.5 A reflection on conducting the study

Conducting this qualitative study has been both a challenging and rewarding
experience. Taking the opportunity to reflect on how this study was conducted, provides a
means to identify areas that the researcher could have approached differently or improved
on which will be taken into consideration in future research endeavors. The main
challenges the researcher faced were related to the use of qualitative research methods and
the conduct of this study on a part time basis.

When the researcher embarked on this study, he was a novice researcher
particularly in qualitative research methodologies and methods. Choosing a research
methodology was challenging as the researcher needed to be familiar with a number of
available qualitative methodologies. Having decided to undertake this qualitative study
using a case study approach presented a challenge as well. Case study qualitative research
methods are not well defined in the literature. This is particularly true with regards to
adopting case study approach that is consistent with the Constructivist Paradigm. However, this has prompted the researcher to read widely about the various qualitative research approaches/methodologies. Undertaking this project, has prepared the researcher for future qualitative research projects and has given him the confidence to determine the applicability and use of the various qualitative methodologies and methods.

The researcher’s plan to conduct a focus group and interviews with all ONPs appeared very feasible at the beginning of the study. However, only 4 ONPs agreed to participate in personal interviews and 6 participated in the focus group. In addition, data collected from other informants (policy makers) lacked depth and therefore, the researcher decided to expand data collection to another setting where some form of APN roles were believed to exist. Although, it was assumed that the research was not perceived to cause any physical or psychological harm, only 4 ONPs agreed to participate in the personal interviews. All ONPs received information about the purpose of the study and the nature of their contribution in addition to assurance about their anonymity and confidentiality. It is possible that the perceived power imbalance between the researcher and ONPs played part in preventing some ONP from participating in this study. In future, research initiatives, similar situations may be managed by using a second experienced qualitative researcher to conduct such interviews.

Another challenge faced by the researcher was related to the analysis of a large volume of qualitative data collected from multiple sources. Sorting such data to ensure that pertinent information to the research questions is acknowledged, proved to be a
demanding exercise. This however, has provided the researcher with the adequate level of expertise in organizing and analyzing large volumes of qualitative data.

As a part time researcher and full time Director, I found it very challenging to keep engaged in the research I was conducting. This was partly due to increased work commitment following a change of job which required the researcher to interrupt the study for six months. However, I realized that I needed to keep close to the study I was conducting and to ensure that at least on a weekly basis I was able to dedicate time for the study. On reflection, conducting such a study requires a constant contact with the research to ensure progress and maintain interest in the area being studied.

After completing this study, the researcher feels that it could have been advantageous to consider the experiences of two other stakeholders (patients and doctors). This study has clearly highlighted that medical staff can play the role of gate keepers with regards to the introduction of APN roles into any health care setting in Palestine. Other researchers conducting similar studies may benefit from extending data collection to acknowledge the experience of such stakeholders which may give a better insight in APN phenomenon.
8.6: Recommendations

Conducting this study has enabled me to identify a number of recommendations for policy, education, practice and research. These recommendations are as follows:

**Policy**

This thesis has clearly identified that lack of APN roles regulation at the national level was one of the main obstacles for the introduction and development of APN roles. Health policy makers at the national level need:

1. To take an active role in creating a regulatory system and process for APN roles by ensuring that the appropriate policies are in place to facilitate education, introduction and full utilization of the roles.
2. To ensure that APN regulating policies address related issues such education, scope of practice, prescribing authority and autonomy.
3. To regulate existing ad hoc APN roles by introducing policies which ensure that such roles fulfill their optimal function in the provision of safe and quality care to patients.

**Education**

Once APN policies have been established at the national level by health policy makers, nurse educationalist working at Palestinian universities need to:

1. Establish a Master’s degree level for APN education. Such a qualification should be an essential requirement for APN practice.
2. Base APN educational curricula on the international guidelines offered by the International Council of Nursing that identify APN core competencies (ICN, 2008).

3. Ensure that such curricula take into consideration the context in which it is developed and consider the health care needs of the population advanced nurses serve.

Practice

Once national policies that govern APN roles are in place and educational curricula have been formulated, the following are needed at the practice level:

1. Both advanced practitioners and employers need to ensure that APN roles are only introduced into practice following a comprehensive assessment of the population/patients’ health care needs.

2. When APN roles are introduced, health care leaders at the organizational level need to ensure that the organizational context, in which such roles are to function, is conducive for such a change in the health care provisions and structure.

3. At the organizational level, role scope and role rationale need to be made clear to all concerned stakeholders (advanced practice nurses, other nurses, medical staff, members of the multidisciplinary team, employers, managers, patients and the public).

4. APN roles also need to be regulated and governed by appropriate organizational policies and procedures that identify role domains as well as role scope of practice to comply with the national regulatory framework.
Clearly, the phenomenon of APN is in need for further exploration and research by both advanced practitioner and as well as managers. Transferability of the findings from this study depends largely on how similar is the context to which such findings maybe applicable.

The following are some of the areas that could benefit from further research:

1. Future research in Palestine needs to consider the voice and opinion of the medical staff as they can play a gate keeper’s role in the introduction and development of APN roles.

2. Future studies may evaluate the effectiveness of the conceptual framework developed in this study (introducing APN role in Palestine).

3. Evaluative studies of the impact of APN in similar context may prove of great value in to advocate for APN roles in Palestine or similar health care context.

4. Further studies could also explore the level of ad hoc APN roles in Palestine and how such role may impact the care of patients.

8.7 Conclusion

This chapter has discussed the contribution of this study to the global body of knowledge with regards to APN roles. The study confirms the importance of conducive
contextual factors in the introduction and development of APN roles. The conceptual framework developed in this study provides professionals with flexible guidelines to introduce APN both at the national and local levels.

This study is a unique initiative that explored the introduction of ONP roles as a form of APN roles in complex health care and political systems. Findings from the study may be applied to similar contextual settings.

The researcher faced a number of challenges when conducting the study. However, this experience has equipped the researcher with both the confidence and knowledge to overcome similar obstacles in future research initiatives.
References


Borthwich, J., and Horton, R. (2006) the Middle East and health, The Lancet, 367: 961-


Fenton, M and Brykczynski, K (1993) Qualitative distinctions and similarities in the practice of clinical nurse specialists and nurse practitioners. Journal of


St John Eye Hospital (2013) Annual report. SJEH, Jerusalem.

St John Eye Hospital (2014) Annual report. SJEH, Jerusalem.


Talbot, L (1995) Principles and practice of nursing research. USA, Moby


Appendix 1

Nurse Practitioners Focus Group Questions

1. Welcome the Participants and introduce myself
2. Provide a brief rationale upon the purpose of the focus group
3. Explain the audiotape recording system
4. Reinforce the confidentiality of the discussion and the issues of consent
5. Explain the duration of the focus group, approximately 1 hour.
6. Ask if the nurse practitioners have any questions
7. Start the focus group

8. How was the ONP role developed?

FOLLOW UP PROBING QUESTIONS
a) What education have you received? Was that sufficient?
b) What clinical training have you received? How long?

9. What factors facilitated this development?

FOLLOW UP PROBING QUESTIONS
a) Organizational structure
b) Medical staff involvement and encouragement
c) Education and clinical supervision
d) Management support
e) Financial incentives
f) Status
g) Satisfaction
10. What factors have hindered your role development?
FOLLOW UP QUESTIONS
   a) preparation for the role
   b) education and training
   c) medical staff resistance and lack of acceptance
   d) resistance from colleagues
   e) management support
   f) organizational structure
   g) prescriptive restrictions
   h) Legal and professional recognition.
   i) Confusion of scope

11) How was the evolution of the role managed?
FOLLOW UP PROBING QUESTIONS
   a) Has the organization been supportive and adaptive?
   b) More management involvement
   c) Role awareness
   d) Acceptance of role

12. How has the role impacted the care of patients?

   FOLLOW UP PROBING QUESTIONS
   a) waiting times for patients
   b) patient satisfaction
   c) quality of services
   d) medical staff flexibility to undertake other roles
Appendix 2

Interview protocol

Questions for nurse practitioner participating in the personal interviews

Introduction

1. Welcome the participants and introduce myself
2. Provide a brief rationale for the research project.
3. Explain the audiotape recording system and establish if the Nurse practitioner accepts this method of recording
4. Reinforce the confidentiality of the study
5. Discuss and clarify the consent form sent to the participating nurse practitioner prior to the interview
6. Explain the amount of time the interview will be expected to take, approximately 45 minutes to 1 hour
7. Ask if the nurse practitioner has any questions
8. Start interview

1. What are your personal experiences with regard to adequacy of training and education in preparation for the role?

   Possible probing questions

   a) How long have been practicing nursing?

   b) How long have you been a NP?

   c) How where you selected for the role?
d) How the training did prepare you for the role?

e) What clinical supervision and training did you receive?

2. **What are the factors that helped you in achieving this role development?**

   A) Training and education
   
   B) Experience
   
   C) Medical staff support
   
   D) Management support
   
   E) Personal driving factors

3. **What was the main obstacle that you had to overcome during your role development?**

   a) Confidence
   
   b) Resistance from medical staff
   
   c) Resistance from colleagues
   
   d) Role ambiguity
   
   e) Lack of management support

4. **If you were given the opportunity to manage the role development what will you do different?**

   a) Training
   
   b) Support
   
   c) Awareness
   
   d) Scope of the role
5. **How do you value the role of the ONP?**

   A) Professionally

   B) Impact on patients care

   C) Personal aspiration
Appendix 3

Interview Protocol

With Nurses working at an Accident and Emergency Dept.

Introduction

1. Welcome the participant and introduce myself.
2. Provide a brief rationale for the research project.
3. Explain the audiotape recording system and establish if government policy maker accepts this method of recording
4. Reinforce the confidentiality of the study
5. Discuss and clarify the consent form sent to the participant prior to the interview
6. Explain the amount of time the interview will be expected to take, approximately 45 minutes to 1 hour.
7. Ask if the participant has any questions
8. Start interview

9. How long have you worked as a nurse?
   Follow up question

A) How many years have you worked as an accident and Emergency Nurse?

B) What is your background education?

10. What do you know about advanced nursing roles?
    Follow up questions
A) How was your university education related to Advance nursing roles?

B) What kind of advanced roles exist in Palestine?

C) How much awareness do you think there is about advanced role in Palestine? What advanced roles do you have at your department? Advanced procedures, responsibilities?

11. Do the nurse/s at the Department (like you) undertake advanced roles or procedures?
   Follow up questions
   A) What roles/procedures that are not traditionally performed by nurses/ Roles that medical staff undertake, are undertaken by nurses at your department.
   B) How these (advanced skills) are reflected your job description?
   C) What training have you had to undertake these roles?
   D) Who do you learn from?
   E) Have you received any formal training/ education to undertake such procedures?
   F) How do you teach other nurses?

12. Why do think doctors are allowing you to undertake this role?

13. What about you senior managers? Are they happy for you to do that?

14. What is the title that you have?
   Follow up questions
   A) If you were called NP how do think the doctors will accept this role?
15. Who monitors your advanced roles? Who ensures that what you do is accurate?
Follow up questions

A) What assessment have you received to ensure your competency?

B) Did you have this formally? Did you have documented assessment? By whom?

C) Who is eligible to undertake these advanced roles at the department?

16. Why do you think there roles appear at the Hospital?
Follow up questions
A) In your opinion, how this role has impacted the care of patient?

B) How do think this has impacted the care delivery?

C) How do you think doctors value this role? Why?

17. How much support did you receive to undertake to advance you role? and from whom?

A) Can you give examples?

18. In order to formally introduce advanced nursing roles in Palestine what do you think is needed?

A) How do you think education will help you?

19. Would you like to add anything about your role?
13th June 2013

Ahmad Hamid Ma'ali
PhD Candidate
Faculty of Health & Life Sciences

Dear Ahmad,

Re: Ethics application – A case study of the evolution of Ophthalmic Nurse Practitioner as an instance of Advanced Practice Nursing role in Palestine with the view of exploring the development of APN roles in other specialties within the Palestinian Health Care context (ref: <<dmu ref>>)

I am writing regarding your application for ethical approval for a research project titled to the above project. This project has been reviewed in accordance with the Operational Procedures for De Montfort University Faculty of Health and Life Sciences Research Ethics Committee. These procedures are available from the Faculty Research and Commercial Office upon your request.

I am pleased to inform you that ethical approval has been granted by Chair’s Action for your application. This will be reported at the next Faculty Research Committee, which is being held on 20th June 2013.

Should there be any amendments to the research methods or persons involved with this project you must notify the Chair of the Faculty Research Ethics Committee immediately in writing. Serious or adverse events related to the conduct of the study need to be reported immediately to your Supervisor and the Chair of this Committee.

The Faculty Research Ethics Committee should be notified by e-mail to HLSFRO@dmu.ac.uk when your research project has been completed.

Yours sincerely,

[Signature]

Professor Judith Turner
Chair
Faculty of Health and Life Sciences
Research Ethics Committee
16.07.2013

Ahmad Ma’ali
PhD Candidate
St. John Eye Hospital

Dear Ahmad

Re: ethics application - Case study of the evolution of Ophthalmic Nurse Practitioner as an Instance of Advanced Practice Nursing in Palestine.

I am writing regarding your application for internal ethical approval for the research project titled to the above project. The ethics Committee has reviewed your application in accordance with the operational guidelines for the hospital.

I am pleased to inform you that your ethical approval has been granted by the committee so that you can conduct your research as outlined in the application documents.

Please note that any changes made to the research methods proposed should require an additional ethical application to the research committee.

Yours sincerely,

[Signature]
Tom Ogilvie- Graham
CEO, Head of Research and Ethics.
04.11.2014

Mr. Ahmad Maali

St. John Eye Hospital

Jerusalem

Dear Mr. Maali

Re: ethical approval to conduct a study at St. Joseph Hospital.

On behalf of the ethics committee at St. Joseph Hospital, I am pleased to inform you that we have approved your proposed research activity at our Hospital.

Research title: A case study of the evolution of Ophthalmic Nurse Practitioner as an instance of Advanced Practice Nursing roles with the view of exploring the development of APN roles in other specialties within the Palestinian health care context.

As stated in your application, we approve that you meet with nurses and interview them at their convenience.

Yours sincerely

Rima Awwad
Nursing Director
Appendix 6&7

Introduction Letter

Focus group participants

Ahmad Ma’ali, Doctoral Student
School of Health and Life Sciences
De Montfort University
England
Date:..............................

Dear ..............................

My name is Ahmad Ma’ali, and I am a doctoral student of the Faculty of Health and Life Sciences at De Montfort University England. I am conducting a case study research project on the evolution of the Ophthalmic Nurse Practitioner Role in Palestine.

The research project will focus on the contextual factors that both hindered and facilitated this development. In addition, I would like to explore the views and experiences of various stakeholders who either have been involved in the role development or could be involved in the future.

It has been suggested that the greater use of Nurse Practitioners roles could significantly benefit health systems in the country and I would like to learn about your views and experiences with regard to this role development. The focus group session which will be held with other ONPs and will take the form of guided discussion, sharing views and contrasting perspectives on the role. It is anticipated that this discussion will take about one hour. I will consult with you and other ONPs to schedule the session/discussion at a time and location convenient and feasible to all involved. I would like to audiotape the focus group session and, if you consent, a consent form is included in this letter.
Following the session, your views will be anonymised and no comments will be attributed to you by name either in the PhD or in any subsequent publications. I will hold your responses in confidence and your anonymity will be protected at all times after the focus group session. You will not be obliged to answer questions and you will be free to withdraw from the project should you so wish.

The researcher will be responsible for data storage and when appropriate dispose of data in a safe manner. Research data will be indexed and stored in a hard copy format and stored in a locked cabinet. Electronic data will also be stored and secured with a password. Raw and analyzed data will be kept for 5 years following the completion of the study and safely disposed off to ensure both confidentiality and anonymity of informants.

The results of this study will be disseminated and you will not directly benefit but the results may enhance the understanding of Advanced Practice Nursing Roles and their potential contribution in the advancement of health care services.

Thank you for consideration of my request. I plan to discuss this research and your involvement in a meeting that I would like to hold with all participants individually in order to answer all your questions you may have. Meanwhile please feel free to contact me if you have any questions.

I think that Advanced Practice Nursing is an important new initiative in Palestine and your participation in this study will result in recommendations for improving and advancing such roles.

Sincerely,

Ahmad Ma’ali

St John Eye Hospital

Tel: 02 5 828325

E-mail: nursingdirector@sjeh.org
Appendix 6&7

Information for Participants

**Study Title: a case study of the evolution of Ophthalmic Nurse Practitioner Nursing roles in Palestine.**

You are being invited to take part in this study. It is important that you read this information sheet carefully and understand the nature of your participation. Please feel free to ask any question you may have. It is perfectly acceptable for you to discuss this with your colleagues, friends and supervisors.

I must emphasize that your participation is entirely voluntary and you only agree to participate if you comfortable to do so. I have also included an introductory letter and a consent form you need to sign if you agree to participate.

**What is the aim of the study?**

This study aims to explore the evolution of the Ophthalmic Nurse Practitioner Role in Palestine as an example of advanced nursing role. The researcher aims to answer the following questions:

- Why was the role of Advanced Practice Nursing in the form of Ophthalmic Nurse Practitioner developed in Palestine?
- How was this role developed? What educational, organizational and clinical input was required?
- What were the main factors that hindered and or facilitated such development? And how were these managed?
- How has the role impacted the care of patients/clients and the organization of care delivered in the setting it was employed?
- How can this role be transferred to similar health services environments?
Who is going to participate?

This study will explore the views of various stakeholders who have been involved either directly or indirectly, in the evolution of the role of the ophthalmic nurse practitioner role including Ophthalmic Nurse Practitioner, policy makers and a nurse manager.

What is the nature of my involvement?

If you consent to participate, the researcher is interested to learn about your views, opinions and experiences pertaining to the evolution of the role. This will take the form of an individual interview and also a focus group session for the nurse practitioner participants.

Do I have to take part?

NO. Your participation in the study is voluntary. If you agree to participate you still have the full right of withdrawal at any stage of the study without explanation and without incurring a disadvantage.

When will the study take place?

I will contact you to arrange for the interview at a place and time convenient to you. As for the focus group session this will be arranged with consultation and agreement of all participants (only for ophthalmic nurse practitioners).

What if I have a question about the study?

If you have a question or a concern prior to, during or after your participation please contact me by e-mail: nursingdirector@sjeh.org , by telephone: 0546665962 or by post: nursing director, St. John eye Hospital, Po Box 19960, Jerusalem.

What is the major outcome of this study?

This study will form the main part of my PhD thesis.
The results of this study will be disseminated and you will not directly benefit but the results may enhance the understanding of Advanced Practice Nursing Roles and their potential contribution in the advancement of health care services.

**What will happen to the information collected?**

The researcher will have sole access to data and he will be responsible for data storage and when appropriate dispose of data in a safe manner. Research data will be indexed and stored in a hard copy format and stored in a locked cabinet. Electronic data will also be stored and secured with a password. Raw and analyzed data will be kept for 5 years following the completion of the study and safely disposed of to ensure both confidentiality and anonymity of informants.

**Can I be identified in the Research?**

If you participate in the focus group your views and perspectives will become known to other colleagues. But your name will not be used when writing the PhD thesis or in any subsequent publications.

If you participate in an interview your views and perspectives will be kept confidential during the research and the publication. Every attempt will be made to ensure that no information that may identify you will be revealed in written or other communications.

**Are there any risks in taking part in the study?**

There are no anticipated physical risks from participation. However, if you feel uncomfortable or disadvantages during the interview/focus group session, please make this known to the researcher. You of course have the full right to withdraw at any stage without giving explanation.

**Will my participation be kept confidential?**

Your views will be anonymised and no comments will be attributed to you by name either in the PhD thesis or in any subsequent publications. I will hold your responses in confidence and your anonymity will be protected at all times.

**What if I am not happy or there is a problem?**

All complaints can be directed to the first supervisor of the researcher. You can contact Ms. Sally Ruane by e-mail: srune@dmu.ac.uk
Appendix 8

Consent Form

Individual interviews

(Ophthalmic Nurse Practitioners)

Case Study of the Evolution of Ophthalmic Nurse Practitioner Roles in Palestine

This research project concerns your experiences in /views about the evolution of the Ophthalmic Nurse Practitioner Role in Palestine. I would like to request your participation. The interview will take about one hour with scheduling made at your convenience and in a location comfortable to you. I would like to audiotape the interview, if you consent.

The case study of the ophthalmic nurse practitioner role will be based on an analysis of relevant literature and data collected through interviews and focus groups.

This research project is in partial fulfillment of a doctoral degree in nursing at De Montfort University-England.

Be assured that I will keep your responses in confidence and your anonymity will be protected at all times. If you consent to have your interview audio taped, the tape, the transcript and all research notes pertaining to the study will be kept in secure location accessible only to the researcher. No comments will be attributed to you by name in any reports of this study. A pseudonym will be used in place of your name and the name of your institution. Furthermore, every effort will be made to attempt to ensure that no details that could identify you will be provided in any verbal or written reports. Your participation is voluntary and you can decline to answer any question or withdraw your participation in the study at any time without penalty. Please feel free to contact me for more information.

Please ticks the statements below as you see appropriate:

☐ I have read the information sheet and have had the opportunity to discuss my queries with the researcher.
☐ I understand that my participation is voluntary.

☐ I understand I can withdraw from the study at any time

☐ I understand I can refrain from answering any question

☐ I consent to being interviewed

☐ I consent to the interview being audio taped.

☐ I understand the audio tapping can be discontinued if I ask so and that notes can be taken instead.

If you agree to all the above statements, please sign below indicating that you have read, understood and agreed to participate in this research. Please return the signed copy to the researcher at the School of Nursing.

Name of participant:…………………………….Signature ……………………………

Date:…………………………………………

Ahmad Ma’ali

St John Eye Hospital

Po box 19960

Jerusalem
Appendix 9: Dealing with negative cases

In dealing with negative/deviant cases the following strategy was employed by the researcher:

1. Further examination of data was carried out to gain deeper understanding about why such deviant cases exist.
2. Member checking technique was also undertaken where the researcher went back and shared his interpretations with the informant/s. This helped to clear up any misunderstandings of what participants meant.
3. Concepts that were mentioned by one or two informants were considered weak (Castro et al, 2010). However, these were not discarded at the beginning of the data analysis but strategically retained for later analysis. Such concepts were kept under a temporary theme named “miscellaneous” and retained to once the researcher has better understanding of the various emerging themes. At this stage the researcher was able to make decisions whether some of these concepts and categories could be refined, merged, retained or discarded.
4. Data that presented a variant perspective from the main evidence in the data, prompted the researcher to look for explanation as why such perspectives emerged. This enabled the researcher to avoid accepting first impressions but to seek further explanation from other data sources (triangulation).
5. Negative cases that did not fit with the prevailing evidence in the data were also examined against existing literature related to the area of the study to enable the
researcher undertake further conceptualization of the data. This was achieved by employing an analytical approach to develop understanding why such cases exist. At times, this further analysis was influenced by the researcher’s experience and knowledge of the nursing professional, local practices and culture.

A clear example in dealing with difficult categories and themes can be outlined as follows:-

One weak subtheme emerged from data analyzed from the focus group with the ONPs. Only one of the ONPs out of six in the group referred to “advancing the status of nursing” as an impact of the APN on the nursing profession. This subtheme was considered problematic but was retained for further consideration. When the researcher conducted interviews with ONPs and other informants, this subtheme was probed further and as a result was confirmed by other informants. By referring to pertinent nursing literature, this subtheme was supported further. In addition, the researcher local knowledge of the senior status of the ONPs confirmed this subtheme. As a result this subtheme constituted part of the conceptual framework (7.1) under an element “outcome of APN roles”.

A second example of a subtheme that did not fit into the emerging evidence from the data can be outlined as follows:-

One difficult subtheme emerged from the analysis of data obtained from interviews with ministry of health officials. Two informants referred to “shortage of nursing staff” as an obstacle for APN development in Palestine. This subtheme did not fit with prevailing
evidence in the data but it was retained for further consideration. As a result this subtheme was further refined and names “lack of human resources” but still did not fit with any of the emerging themes. Reviewing pertinent literature did not support this subtheme either. On reflection, further probing by the researcher during the interviews could have shed some light as why such a subtheme emerged in the first place.

The researcher’s knowledge of the Palestinian health care system and local practices contradicted this subtheme and revealed that the availability nursing human resources were in fact a facilitating factor for APN role development. Furthermore, by considering evidence from other sources of data the researcher was unable to justify why this subtheme emerged and a decision was made to discard it.
Appendix 10 a: Example of data analysis - from transcript to framework

| Comment (AIH1) | Changed care |
| Comment (AIH2) | Dealing with casualties |
| Comment (AIH3) | Quick care |
| Comment (AIH4) | Reduced waiting times |

| Comment (AIH5) | No change |
| Comment (AIH6) | Pleasant patients |
| Comment (AIH7) | More information |

| Comment (AIH8) | Better informed patients |

| Comment (AIH9) | Changed care. NP examines pt. NP carries out assessment. |
| Comment (AIH10) | Examine pt. Dr work with NP |
| Comment (AIH11) | In appropriate treatment. |
| Comment (AIH12) | Better system. More patients are treated. |

| Comment (AIH13) | NP work with Drs. |
| Comment (AIH14) | Residual not |
| Comment (AIH15) | System needs attention |
| Comment (AIH16) | Unused role. Care not comprehensive |

---

**Extraction from the focus group session with the ONPs**

**A. You saying this role has made a difference to the care of patients; this leads us to the next subject. How do you think this role has made a difference to the delivery of patients care at the hospital?**

110. **MB.** The way we now deal with patients has changed, we are able to see emergency cases and they can have a special room for their care which is run the NP. This allows patients to be seen more quickly. You see patients do not have to wait for the doctors who may be busy!

A. Okay- anything else?

114. **NK.** I am not sure this has changed the way we see patients but it does make the patients more happy and pleased with the services as we give them more information than Drs.

A do you mean more information?

117. **NK.** Health information about their condition.

118. **WK.** It really depends on the area of practice, for example the outreach we have changed the way we work. I see all patients and carry out the examination but the doctor only make the final decision or even only sign the prescription.

122. **MK.** Yes we have a better system now and we are able to see more patients and help the doctors.

Two ONPs talking at the same time!

A. Can we please just listen to MS and then will give everybody a chance to speak?

124. **MS.** In a way this is true but to make an impact we still cannot function independently and therefore, the system we work in needs more attention so that the role is better used to give more comprehensive care to the patients.
Appendix 10b: An example of progression from transcript to conceptual framework

<table>
<thead>
<tr>
<th>Codes</th>
<th>Subthemes/categories</th>
<th>Themes</th>
<th>Conceptual framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed care</td>
<td>Holistic/better care</td>
<td>ONP role impact</td>
<td>Outcome of APN roles</td>
</tr>
<tr>
<td>Dealing with casualties</td>
<td></td>
<td></td>
<td>1. Patient/population outcomes</td>
</tr>
<tr>
<td>Quick care</td>
<td></td>
<td></td>
<td>(quality care, holistic care)</td>
</tr>
<tr>
<td>Reduced waiting times</td>
<td>Nurse Led care</td>
<td></td>
<td>2. Health care system outcomes</td>
</tr>
<tr>
<td>Pleased patients</td>
<td></td>
<td></td>
<td>(collaborative care model)</td>
</tr>
<tr>
<td>More informed patients</td>
<td>Collaboration Between ONP and doctors</td>
<td></td>
<td>3. Nursing profession outcomes</td>
</tr>
<tr>
<td>Better informed patients</td>
<td></td>
<td></td>
<td>(advancing nursing status and practice)</td>
</tr>
<tr>
<td>ONP examines patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONPs carry out assessment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctors approve treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More patients are treated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONP work with doctors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONP dependent on doctors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work within a system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexible care</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 11: Example of extracts from the various data sources that reflect the presence of shortage of medical workforce

1. Focus group with ONPs

“The role developed in order to help medical staff who had high workload and to reduce patients’ waiting times” FG: 127-128.

2. Interviews with ONPs

“We had many outpatients and very few ophthalmologists” interview 5: 35-36

3. Interview with accident and emergency nurses

“I think the main thing is the large number of patients we had and one doctor cannot deal with so many patients. The doctor will see the patients and ask me to continue doing things such as suturing or applying cast. So the doctor can see other persons/patients while we carry out the treatment” interview 11: 89-93.

4. Policy analysis showing shortage of doctors in Palestine as compared to other neighboring countries.

Comparable human resources indicators with countries in the region. Source: (WHO EMRO, 2011; MoH, 2012).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Palestine</th>
<th>Jordan</th>
<th>Egypt</th>
<th>Lebanon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician/1000 pop.</td>
<td>0.96</td>
<td>22.6</td>
<td>22.2</td>
<td>28.1</td>
</tr>
<tr>
<td>Dentist/1000 pop.</td>
<td>0.9</td>
<td>6.3</td>
<td>3</td>
<td>10.5</td>
</tr>
<tr>
<td>Pharmacist/1000 pop.</td>
<td>1.43</td>
<td>11.6</td>
<td>9.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Nurse and midwife/1000</td>
<td>18.3</td>
<td>29.5</td>
<td>26.5</td>
<td>11.6</td>
</tr>
</tbody>
</table>
Appendix 12. University Ethical approval for extension of data collection.

Dear Ahmad Hamid Ma’ali

RE: Ethics Application - A case study of the evolution of Ophthalmic Nurse Practitioner as an instance of Advanced Practice Nursing role in Palestine with the view of exploring the development of APN roles in other specialties within the Palestinian Health Care context (Ref: 1161)

Further to the original approval of the above named project, I can confirm that the Chair of the Faculty Research Ethics Committee has approved the amendment request submitted on 8th October 2014. This will be reported in the next Ethics Committee meeting on 29th January 2015.

Condition to approval: The Chair has requested we see written permission to conduct the study at the ‘hospital in Jerusalem’ as it is described as well as providing the full address details.

Should there be any further amendments to the research methods or persons involved with this project you must notify the Chair of the Faculty Research Ethics Committee immediately in writing. Serious or adverse events related to the conduct of the study need to be reported immediately to your Supervisor and the Chair of this Committee.

The Faculty Research Ethics Committee should be notified by e-mail to hlsfro@dmu.ac.uk when your research project has been completed.

Regards

Tom Moore
Faculty Research Ethics Committee
Faculty of Health & Life Sciences, De Montfort University
1.25 Edith Murphy House, The Gateway, Leicester, LE1 9BH
T: 0116 250 6122 / 0116 257 7775
Email: hlsfro@dmu.ac.uk