The provision of tuberculosis patient care: A Sociological perspective on primary health care nurses in the Qwa-Qwa district of the Free State

By
Thomas Setefane Moloi

Supervisor: Ms. M. H. Pietersen

Submitted as part of the requirement for the degree in
M. A. Sociology

In the
Faculty of Humanities
University of Pretoria

2003
ACKNOWLEDGEMENTS

The following individuals deserve my acknowledgements for their help and advice in various aspects of this research study. Their time, effort and thoughts have contributed positively towards the successful completion of this work, and for that I am most grateful.

- God, the Lord, for wiping every tear from my eyes.

- Ms. M. Pietersen for her excellent supervision and advice. Many thanks.

- Ms. N. Bomela for her valuable comments and suggestions, which have improved the quality of this study. Much appreciated.

- Prof. J. L. van Tonder for his statistical advice. Grateful thanks.

- Tuberculocis district co-ordinators in the government clinics in Qwa-Qwa district of Free State, Mrs. M. Khatseane and Mrs. T. A. Tshabalala, who assisted me in recruitment of nurses to participate in my study in government clinics in Qwa-Qwa.

- All nurses who were able to share their knowledge and experience about this topic at such short notice, and without whom the completion of this study would have been an illusion. Their participation is highly appreciated.

- My mum, Emily Mphuthi, who struggled and always stood by my side.

- My sisters, Elsie and Goodness for their consistent encouragement and trust in me.
SUMMARY

Tuberculosis is one of the major health tragedies facing South Africa. It is estimated that nearly two-thirds of the population of the country are infected with the tuberculosis bacterium and 160 000 South Africans from all walks of life become ill with tuberculosis every year (Department of Health, 1997: 4). An innovative approach is needed to fight the problem of tuberculosis. In view of the important role played by primary health care nurses with regard to the care of patients with tuberculosis, the overall aim of the study is to contribute to an improvement of tuberculosis patient care, *inter alia*, by attending to the problems pertaining to the provision of tuberculosis patient care at the government clinics in the Qwa-Qwa district of the Free State.

The study attempts to describe the difficulties that primary health care nurses at the government clinics in Qwa-Qwa experience in the provision of tuberculosis patient care, and how their attitudes towards patients affect their service. The nurses need to be informed about how their attitudes influence their service. The perceptions of primary health care nurses in this matter are ascertained to assess their personal experience in their routine care of tuberculosis patients.

The results of this research study indicate the following obstacles for primary health care nurses to render effective tuberculosis patient care at the government clinics in Qwa-Qwa:

- Lack of knowledge, training and skills amongst some of the nurses in the treatment of tuberculosis,
- Poor access to tuberculosis information, which include the procedures that protect nurses from tuberculosis infection;
- Poor management system for nurses in tuberculosis patient care;
- Lack of key health resources related to tuberculosis treatment;
- Fear of the consequences of contracting tuberculosis by some of the nurses, and;
- Negative attitudes of some nurses towards tuberculosis patients as well as towards their work.
In Suid-Afrika is tuberkulose een van die ernstigste gesondheidsprobleme waarmee rekening gehou moet word. Daar word beraam dat meer as twee derdes van die Suid-Afrikaanse bevolking geïnfekteer is met die tuberkulose bakterie en dat 160 000 individue uit alle vlakke van die gemeenskap elke jaar geïnfekteer word (Departement van Gesondheid, 1997: 4). ‘n Innoverende benadering is nodig om die probleem van tuberkulose te beveg. In die lig van dié belangrike rol wat primêresorg-verpleegpersoneel speel in terme van pasientsorg in die stryd teen tuberkulose is die oorhoofse doel met hierdie studie om te fokus op die probleme wat verpleegpersoneel ondervind in staatsklinieke in die Qwa-Qwa-districk van die Oranje Vrystaat.

Hierdie studie beoog om die probleme te beskryf wat primêresorg-verpleegpersoneel in staatsklinieke ondervind in terme van tuberkulosepasiëntsorg. Dit beoog ook om hulle houdings en persepsies weer te gee wat ‘n moontlike impak mag hê op hulle dienslewing. Daar sal gefokus word op die persepsies van die tuberkulose-verpleegpersoneel se persoonlike ondervinding in hulle daaglikse rotineverpleging van tuberkulosepasiënte.

Die uitslag van hierdie studie dui op verskeie probleme waarmee die primêre-gesondheidsorgpersoneel te kampe het om ‘n effektiewe diens te kan lewer aan tuberkulose pasiënte in staatsklinieke in Qwa-Qwa. Die volgende probleme is geïdentifiseer:

- In die algemeen onvoldoende kennis, opleiding en vaardighede onder verpleegpersoneel.
- Swak toegang tot inligting oor tuberkulose. Dit sluit spesifieke kennis in om personeel te beskerm teen moontlike tuberkulose-infeksie.
- Swak bestuurstelsels vir verpleegpersoneel in pasiëntsorg.
- ‘n Tekort aan gesondheidshulpbronne in terme van tuberkulosebehandeling.
- Vrees vir die moontlike gevolge van dienslewing, naamlik infeksie deur die tuberkulosebakterie, by sommige verpleegpersoneellede.
- Negatiewe houdings van sommige verpleegpersoneel teenoor hulle tuberkulosepasiënte en hulle werk.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of figures</td>
</tr>
<tr>
<td>List of tables</td>
</tr>
<tr>
<td>Acronyms</td>
</tr>
</tbody>
</table>

1  **INTRODUCTION AND STUDY OVERVIEW**  
1.1 **BACKGROUND OF THE STUDY**  
   1.1.1 A historical background of tuberculosis in South Africa  2  
1.2 **THE RECENT TRENDS OF TUBERCULOSIS IN SOUTH AFRICA**  5  
1.3 **PROBLEM STATEMENT**  9  
1.4 **JUSTIFICATION OF THE STUDY** 11  
1.5 **STUDY OBJECTIVES** 11  
1.6 **ASSUMPTIONS OF THE STUDY** 12  
1.7 **DEFINITION OF CONCEPTS** 12  
   1.7.1 Primary health care  12  
   1.7.2 Tuberculosis  12  
   1.7.3 Multi-drug resistant tuberculosis  13  
   1.7.4 Attitude  13  
   1.7.5 Perception  13  
   1.7.6 Support system  13  
   1.7.7 Preventive care  14  
   1.7.8 Traditional healing  14  
   1.7.9 Self-care  14  
   1.7.10 Tuberculin test  14  
   1.7.11 CD4 lymphocytes  15  
1.8 **ORGANISATION OF THE REPORT**  15  

2  **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**  16  
2.1 **INTRODUCTION**  16
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2</td>
<td>THEORETICAL FRAMEWORK OF THE STUDY</td>
<td>16</td>
</tr>
<tr>
<td>2.3</td>
<td>THEORETICAL CONSTRUCT: SOCIOLOGICAL PERSPECTIVE RELEVANT FOR THE STUDY</td>
<td>17</td>
</tr>
<tr>
<td>2.3.1</td>
<td>Functionalism</td>
<td>18</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Parsons: model of doctor-patient relationship</td>
<td>18</td>
</tr>
<tr>
<td>2.4</td>
<td>LITERATURE REVIEW</td>
<td>20</td>
</tr>
<tr>
<td>2.4.1</td>
<td>The epidemiology of tuberculosis</td>
<td>20</td>
</tr>
<tr>
<td>2.4.1.1</td>
<td>Age</td>
<td>20</td>
</tr>
<tr>
<td>2.4.1.2</td>
<td>Gender</td>
<td>21</td>
</tr>
<tr>
<td>2.4.1.3</td>
<td>Ethnic group</td>
<td>21</td>
</tr>
<tr>
<td>2.4.1.4</td>
<td>Socio-economic status</td>
<td>22</td>
</tr>
<tr>
<td>2.4.2</td>
<td>The relationship between tuberculosis and human immunodeficiency syndrome</td>
<td>22</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Population at risk of tuberculosis</td>
<td>23</td>
</tr>
<tr>
<td>2.4.3.1</td>
<td>Patients and health care workers</td>
<td>23</td>
</tr>
<tr>
<td>2.4.3.2</td>
<td>Population at risk of multi-drug resistant tuberculosis</td>
<td>24</td>
</tr>
<tr>
<td>2.4.3.3</td>
<td>Homeless people</td>
<td>24</td>
</tr>
<tr>
<td>2.4.3.4</td>
<td>Farm workers</td>
<td>25</td>
</tr>
<tr>
<td>2.4.3.5</td>
<td>Inmates of correctional facilities</td>
<td>25</td>
</tr>
<tr>
<td>2.4.3.6</td>
<td>Elderly in nursing homes</td>
<td>25</td>
</tr>
<tr>
<td>2.4.4</td>
<td>Factors contributing to the spreading of tuberculosis</td>
<td>25</td>
</tr>
<tr>
<td>2.4.5</td>
<td>The socio-economic constraints of tuberculosis control</td>
<td>27</td>
</tr>
<tr>
<td>2.4.5.1</td>
<td>Poverty</td>
<td>27</td>
</tr>
<tr>
<td>2.4.5.2</td>
<td>Employment</td>
<td>27</td>
</tr>
<tr>
<td>2.4.5.3</td>
<td>Community service</td>
<td>28</td>
</tr>
<tr>
<td>2.4.5.4</td>
<td>Referral system</td>
<td>28</td>
</tr>
<tr>
<td>2.4.6</td>
<td>The social impact of tuberculosis</td>
<td>29</td>
</tr>
<tr>
<td>2.4.6.1</td>
<td>Stigmatisation</td>
<td>29</td>
</tr>
<tr>
<td>2.4.6.2</td>
<td>The impact of tuberculosis on health care workers</td>
<td>29</td>
</tr>
<tr>
<td>2.4.6.3</td>
<td>The impact of tuberculosis on the family</td>
<td>30</td>
</tr>
<tr>
<td>2.4.7</td>
<td>Prevention of tuberculosis</td>
<td>30</td>
</tr>
<tr>
<td>2.4.7.1</td>
<td>Case finding</td>
<td>30</td>
</tr>
<tr>
<td>2.4.7.2</td>
<td>Sputum disposal</td>
<td>30</td>
</tr>
<tr>
<td>2.4.7.3</td>
<td>Occupation</td>
<td>31</td>
</tr>
</tbody>
</table>
2.4.7.4 Follow-ups 31
2.4.7.5 Chemoprophylaxis 31
2.4.7.6 Bacilli Calnette-Guerin vaccination 31
2.4.7.7 Screening 32
2.4.7.8 Health education 32
2.4.7.9 Housing 32

2.4.7 Primary health care and the role of nurses in tuberculosis patient management 33
2.4.7.1 Primary health care 33
2.4.7.2 The role of nurses in tuberculosis patient management 34

2.4.8 Self-care and alternative and traditional healing 36
2.4.8.1 Self-care 36
2.4.8.2 Alternative and traditional healing 37

2.4.8 Self-care and alternative and traditional healing 36

2.5 SUMMARY 38

3 RESEARCH METHODOLOGY 39
3.1 INTRODUCTION 39
3.2 METHOD OF DATA COLLECTION 39
3.2.1 Research instrument 39
3.2.1.1 Questionnaire 39
3.2.2 Validity of the instrument 40
3.2.2.1 Content validity 40
3.2.2.2 Face validity 41
3.2.2.3 Reliability of the questionnaire 41
3.2.2.4 Pilot study 41
3.3 TYPE OF RESEARCH 42
3.4 RESEARCH DESIGN 42
3.4.1 Descriptive research 42
3.5 DELIMITATION OF THE STUDY 43
3.6 THE SAMPLE USED 43
3.7 PERMISSION TO UNDERTAKE THE STUDY 45
3.8 ANALYSIS OF DATA 45
4 DATA ANALYSIS

4.1 INTRODUCTION

4.2 BIOGRAPHICAL INFORMATION
   4.2.1 Gender of respondents
   4.2.2 Age of respondents

4.3 GENERAL INFORMATION
   4.3.1 Educational level of respondents
   4.3.2 Position of respondents at clinic
   4.3.3 The length of service

4.4 BACKGROUND INFORMATION OF TUBERCULOSIS PATIENTS
   4.4.1 The number of tuberculosis patients that were seen
       per month
   4.4.2 The caseload of tuberculosis patients per nurse
   4.4.3 The distribution of tuberculosis patients cured per nurse

4.5 THE PERCEPTIONS OF THE RESPONDENTS REGARDING THEIR
   KNOWLEDGE AND SKILLS OF TUBERCULOSIS TREATMENT
   4.5.1 The perceptions of the respondents regarding their knowledge of
       tuberculosis treatment
   4.5.2 The perceptions of the respondents regarding their skill of
       tuberculosis treatment
   4.5.3 The need for more information on tuberculosis treatment
       and preferred ways of obtaining such information by
       the respondents
   4.5.4 Recommendations for future training of student nurses
       in tuberculosis treatment

4.6 THE PERCEPTIONS AND ATTITUDES OF THE RESPONDENTS
   REGARDING THEIR INTERVENTION WITH TUBERCULOSIS
   PATIENTS
   4.6.1 The attitudes of the respondents towards treating tuberculosis
       patient
   4.6.2 The perceptions of the respondents regarding tuberculosis
       patient care
   4.6.3 The knowledge of the respondents regarding printed
       educational material for the prevention and treatment
4.6.4 Problems encountered by the respondents in their routine care of tuberculosis patients at clinics

4.6.5 The perceptions of the respondents regarding specific issues/problems associated with tuberculosis that should be considered by nurses at clinics

4.7 THE ATTITUDES OF THE RESPONDENTS REGARDING THEIR SERVICE

4.7.1 The attitudes of the respondents regarding their work

4.7.2 The attitudes of the respondents regarding their interaction with patients

4.8 THE PERCEPTIONS OF THE RESPONDENTS REGARDING FACTORS THAT CAN IMPROVE TUBERCULOSIS

4.9 SUMMARY

5. FINDINGS AND CONCLUSION

5.1 Discussion of results

5.2 Conclusion

6. BIBLIOGRAPHY

APPENDIX 1: Questionnaire used in the survey

APPENDIX 2: Geographical areas for health and welfare in Qwa-Qwa
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Risk of tuberculosis infection (tuberculosis surveys, 1972 to 1985)</td>
<td>5</td>
</tr>
<tr>
<td>4.1</td>
<td>Gender of respondents</td>
<td>47</td>
</tr>
<tr>
<td>4.2</td>
<td>Length of service</td>
<td>50</td>
</tr>
<tr>
<td>4.3</td>
<td>The number of tuberculosis patient seen per month per nurse</td>
<td>51</td>
</tr>
<tr>
<td>4.4</td>
<td>The caseload comprised of tuberculosis patients per nurse</td>
<td>52</td>
</tr>
<tr>
<td>4.5</td>
<td>The distribution of the number of TB patients cured per nurse</td>
<td>53</td>
</tr>
<tr>
<td>4.6</td>
<td>The preferred ways of obtaining information on tuberculosis treatment</td>
<td>57</td>
</tr>
<tr>
<td>4.7</td>
<td>The attitudes of the respondents about treating tuberculosis Patients</td>
<td>59</td>
</tr>
</tbody>
</table>
### LIST OF TABLES

<table>
<thead>
<tr>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
</tr>
<tr>
<td>2.2</td>
</tr>
<tr>
<td>3.1</td>
</tr>
<tr>
<td>4.1</td>
</tr>
<tr>
<td>4.2</td>
</tr>
<tr>
<td>4.3</td>
</tr>
<tr>
<td>4.4</td>
</tr>
<tr>
<td>4.5</td>
</tr>
<tr>
<td>4.6</td>
</tr>
<tr>
<td>4.7</td>
</tr>
<tr>
<td>4.8</td>
</tr>
<tr>
<td>4.9</td>
</tr>
<tr>
<td>4.10</td>
</tr>
<tr>
<td>4.11</td>
</tr>
<tr>
<td>4.12</td>
</tr>
<tr>
<td>4.13</td>
</tr>
<tr>
<td>4.14</td>
</tr>
</tbody>
</table>
4.15 The positive attitudes of the respondents regarding their interaction with patients 70
4.16 The perception of the respondents regarding factors that can improve tuberculosis prevention 71
ACRONYMS

AIDS  Acquired immune deficiency syndrome
EMB  Ethambutol
CDC  Centre for Disease Control and Prevention
DOTS  Directly observed treatment short-course strategy
HIV  Human immuno-deficiency virus
INH  Isoniazid
IUAT  International Union Against Tuberculosis
MDR TB  Multi-drug resistant tuberculosis
PZA  Pyrazinamide
RIF  Rifampin
SANTA  South African National Tuberculosis Association
SASA  South African Sociological Association
SM  Streptomycin
SPSS  Statistical Package for Social Science
TB  Tuberculosis
TBCP  Tuberculosis Control Programme
WHO  World Health Organisation