DOCTORS AND NURSES KNOWLEDGE AND USE OF PAIN ASSESSMENT TOOLS: A CASE STUDY OF TWO TERTIARY HOSPITALS

BY

DONALD MUMA KALOLO

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH

THE UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE July 2010

Declaration

I hereby declare that this report has not been submitted for a Degree in this or any
other University.
Full Names:
Signature:
Date:

Acknowledgements

I would like to acknowledge the support of the respondents that created the evidence in this dissertation whose commitment and support made the project possible. I take parallel cognizance of the support that I received from the Ministry of Health. I say thank you for granting me study leave and sponsoring my studies and this research. I wish to pay my special tributes to my supervisors; Professor Siziya and Dr. Mungo for their tireless efforts and direction to see that the work came out in the end. Thanks also to Mr. Mwanza for his painful criticisms though inspiring.

Dedication

My dearly beloved wife Musanya Kalolo, here to with is the products of your labours and an unrivalled patience.

Contents

Declaration	ii
Acknowledgements	iii
Dedication	iv
Abstract	vii
Certificate of Approval	Viii
Certificate of Approval of Dissertation	ix
List of tables	X
List of figures	xi
List of Appendices	xii
CHAPTER ONE- INTRODUCTION	1
1.0 Background	
1.1 Statement of the Problem	3
1.2 Research Question	
1.3 Study Objectives	5
CHAPTER TWO- LITERATURE REVIEW	6
2.0 The Literature Search	6
2.1 Pain	6
2.2 Suffering	7
2.3 Pain Characteristics and the Identification of Pain Syndromes	7
2.4 Pain Intensity	7
2.5 Pain Quality	8
2.6 Pain Distribution	8
2.7 Temporal Relationships	8
2.8 Pain Assessment and Characterization	9
2.9 Pain Guidelines	10
2.10 WHO normative guidelines	10
2.11The Step Ladder and Pain Management	11
2.12 Role of nurses and pharmacists	16
2.13 Previous Research on Pain	17
2.14 Pain assessment Tools	19
2.14.1 The Visual Analogue Scale	21
2.14.2 Simple Descriptive Pain Intensity Scale	22
2.14.3 The Brief Pain Inventory	22
CHAPTER THREE - RESEARCH METHODOLOGY	23
3.0 Research Design	23
3.1 Research setting	
3.2 Population Sample Size and Sampling	
3.3 Inclusion criteria	
3.4 Piloting	
3.5 Ethical Considerations	
3.6 Statistical Analyses	26

CHAPTER FOUR- RESULTS	27
4.0 Introduction	27
4.1 Demographic Profile	
4.2 Patient Loads	
4.3 Levels of Knowledge on Pain Assessment and Priority to Assess Pain	
4.4 Pain Management and Use of Tools	
4.5 Comparing the levels of knowledge and use of pain management tools	
CHAPTER V- DISCUSSION AND CONCLUSIONS	33
5.0 Introduction to Key Findings	33
5.1 What this study shows	34
5.2 Conclusions and Recommendations	
5.3 Limitations and Strengths of the Study	38
References	40

Abstract

This study was necessitated by many gaps in pain research in Zambia. The percentage of doctors and nurses that assess pain using any indicator and what doctors and nurses do to treat pain. Therefore this study sought to answer the following overarching question. What do doctors and nurses do to patients that have pain?

A cross-section non interventional comparative study in three clinical areas (medicine, surgery and oncology) was done using a 33 item survey questionnaire. SPSS software, version 17.0 (SPSS, Chicago, IL), was used for statistical analyses. The Pearson's Chi-squared test was used to compare proportions. The cut off point for statistical significance was set at 5%.

Totals of 26 doctors and 76 nurses took part in the study. Concerning knowledge of the World Health Organization Pain Relief ladder, the proportions of doctors and nurses who reported to be aware of it was surprising low across the two professions (Fisher's exact test, p=0.246) with 26.9% of doctors and 15.8% of nurses reporting being familiar with the WHO ladder. Significantly more nurses (27.6%) than doctors (3.8%) reported that doctors and nurses rated pain (χ^2 =6.48, p=0.011). Most respondents (26.3% of doctors and 32.4% of nurses) treated pain just like all other manifestations.

Pain assessment and management are poorly done by both nurses and doctors. Though pain is assessed, it is not by using any pain assessment tools. The doctors and nurses seem to use subjective assessments in their practice. The hospital authorities ought to endeavour to facilitate the development of pain management tools and guidelines based on local practices or consider the use of the five tools which are: Visual Assessment Scale, the Visual Rating Scale and the Numeric Pain Inventory Scale (NPIS), the Simple Descriptive Pain Intensity Scale (SDPIS) and the WHO pain ladder management tool.

Certificate of Approval

This report has been approved as partial fulfilment of the requirements for the	award
of the Master of Public Health degree (MPH) by the University of Zambia, Lusa	ka.

Supervisor:	 	
Signature:		
Date:		

Certificate of Approval of Dissertation

The University of Zambia approves this Dissertation of Donald Muma Kalolo in partial fulfillment of the requirements for the award of degree of Master of Public Health.

Head of Department: Name:	
Signature:	Date:
Examiner: Name:	
Signature:	. Date:
Examiner: Name:	
Signature:	. Date:
Examiner: Name:	
Signature:	. Date:

List of tables

Table 1 Sex distribution of respondents across profession	28
Table 2 Comparative Distribution across sex of the respondents	29
Table 3 The commonest encountered pain	29
Table 4 Familiarity with WHO pain relief ladder	30
Table 5 Rating pateints' pain using pain scales	30
Table 6 Percent priority of pain assessment (regularity)	31
Table 7 Priority ranking of pain assessment	31
Table 8 Nurses and doctors perception of patient relief satisfaction index	32
Table 9 Profile of need for help in the area of pain assessment and management	32

List of figures

Figure 1 WHO pain relief ladder	12
Figure 2 Qualifications of respondents	28

List of Appendices

APPENDIX I INFORMED CONSENT	46
APPENDIX II PERMISSION FROM AUTHORS	48
APPENDIX III BUDGET	49
APPENDIX IV SURVEY QUESTIONNAIRE	50