



**Department of Nursing**

**Assessment of Knowledge, Attitudes, and Practice toward  
Diabetic Foot Ulcer among Nurses in Jordan**

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**This Thesis is submitted to the Faculty of Nursing as a Partial  
Fulfillment of the Requirement for Master program in Chronic Care  
Nursing**

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## Authorization Form

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## **DEDICATION**

This thesis is dedicated to the memory of my beloved father, Ahmad Al-ma'ani, who passed away before I finished my master's degree.

I also dedicate this work to my mother; thank you for the unconditional love, guidance, and support that you have given me.

I extend my deepest gratitude to my wife, Dr. Rowida Al-ma'ani, for her support and patience. I could not have completed this study without her love and support.

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## TABLE OF CONTENTS

Authorization Form .....	i
Committee Decision .....	ii
Dedication .....	iii
Acknowledgment.....	iv
Table of Contents .....	v
List of Tables .....	ix
List of Appendices.....	x
List of Abbreviation .....	xi
Abstract .....	xiii
Chapter One: Introduction.....	1
Chapter Overview .....	1
Background .....	1
Problem Statement .....	5
Significance of the Study .....	6
Purposes .....	7
Variables of the Study .....	7
Theoretical and Operational Definitions of the Main Variables .....	7
Research Questions .....	8
Summary .....	8
Chapter Two: Literature Review .....	10
Chapter Overview .....	10
Search Strategy.....	10
Overview of Diabetic Foot Ulcers .....	10
Factors Influence the Nurses' KAP on DFU.....	12
Knowledge of Diabetic Foot Ulcer .....	16
Attitudes toward Diabetic Foot Ulcer .....	21

Practices of Diabetic Foot Ulcer .....	23
Prevention of Diabetic Foot Ulcer .....	24
Effects social media on Diabetic Foot Ulcer .....	26
Summary of the Literature .....	27
Chapter Three: Methodology .....	28
Chapter Overview .....	28
Research Design .....	28
Study Setting .....	28
Sample Size .....	29
Population .....	29
Inclusion Criteria .....	30
Exclusion Criteria .....	30
Sampling .....	30
Ethical Considerations .....	30
Data Collection Procedure .....	31
The Questionnaire of Data Collection .....	32
Pilot Testing .....	35
Data Analysis .....	35
Summary .....	37
Chapter Four: Results .....	39
Chapter Overview .....	39
Description of the Study Sample .....	40
Research Questions .....	41
The First Research Question .....	41
The Second Research Question .....	42
The Third Research Question .....	43
The Fourth Research Question .....	43

The Fifth Research Question .....	44
Relationships between the Knowledge and Demographic Characteristics ....	45
Relationships between Attitude and Demographic Characteristics .....	47
Relationships between Practice and Demographic Characteristics.....	50
Summary .....	53
Chapter Five: Discussion.....	54
Chapter Overview .....	54
Demographic Characteristics of Participants .....	54
Knowledge of DFU .....	56
Attitudes toward DFU .....	58
Practices of DFU .....	59
Correlation among KAP of DFU .....	61
Relationship between Demographic Variables and Knowledge of DFU.....	61
Relationship between Demographic Variables and Attitudes toward DFU...64	
Relationship between Demographic Variables and Practices of DFU.....	65
Limitations of the Study .....	66
Implications of the Study .....	67
For Nursing Practice.....	67
For Nursing Education.....	67
For Nursing Administration.....	68
Recommendations .....	68
Conclusion.....	69
REFERENCES .....	70
Appendices .....	78
Appendix (1) .....	78
Appendix (2) .....	79
Appendix (3) .....	82



Appendix (4) .....	84
Appendix (5) .....	86
Appendix (6) .....	95
Appendix (7) .....	98
الملخص.....	99

## LIST OF TABLES

<b>Table number</b>	<b>Table title</b>	<b>Page</b>
1	Theoretical and Operational Definitions	7
2	Statistical Tests	36
3	Demographic characteristics of participants	40
4	Levels of knowledge	42
5	Levels of Attitude	42
6	Levels of Practice	43
7	Correlation Matrix of KAP	44
8	Relationships between Demographic Characteristics and Knowledge	45
9	Binary Logistic Regression for Knowledge and Demographic Variables	46
10	Relationships between Attitude and Demographic Characteristics	48
11	Binary Logistic Regression for Attitude and Demographic Variables	49
12	Relationships between Practice and Demographic Characteristics	50
13	Binary Logistic Regression for Practice and Demographic Variables	52

## LIST OF APPENDICES

Appendices	Description	Page
1	Approval Letter from Isra University	78
2	IRB Approval Letter from Ministry Of Health	79
3	Informed consent in English	82
4	Informed consent in Arabic	84
5	Knowledge, Attitude and Practice of Diabetic Foot Ulcer Questionnaire	86
6	Judgment of the content validity table	95
7	Certificate of Proofreading	98
8	ملخص باللغة العربية	99

## LIST OF ABBREVIATION

<b>Abbreviation</b>	<b>The meaning of the abbreviation</b>
ABI	Ankle-brachial index
ADA	American Diabetes Association
CINAHL	Cumulative Index to Nursing and Allied Health Literature
DF	Diabetic foot
DFU	Diabetic foot ulcer
DM	Diabetes mellitus
ICU	Intensive Care Unit
IFD	International diabetes Federation
IWGDF	International Working Group on the Diabetic Foot
JNC	Jordanian Nursing Council
JNMC	Jordanian Nurse and Midwifery Council
KAP	knowledge, attitudes and practice
KAP-DFUQ	Knowledge, Attitude, and Practice of Diabetic Foot Ulcer Questionnaire
LPN	Licensed practical nurses
M	Mean
MOH	Ministry of Health

NICE	National Institute for Health and Care Excellence
OPD	Outpatient department
P-value	Significant Value
RN	Registered nurses
SPSS	Statistical package for social sciences
US	United State
WHO	World Health Organization

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**ABSTRACT**

Background: Diabetes mellitus is one of the main causes of death around the world. Diabetic foot ulcer (DFU) is one of the most common complications that leads to increase morbidity, mortality, expenditure, and reduce the quality of life among patients have diabetes mellitus.

Purposes: a) to assess nurses' diabetic foot ulcer knowledge, attitudes, and practices; b) to assess the relationships between nurses' demographic characteristics and DFU knowledge, attitude, and practices.

Methods: A cross-sectional, descriptive design was used to guide the current study. Using convenience sampling, 256 nurses from nine governmental hospitals located in the central, north, and south of Jordan country, were participated in the current study. Based on international guidelines the researcher develop assessment tool entitled "The Knowledge, Attitudes, and Practices of Diabetic Foot Ulcer Questionnaire (KAP-DFUQ)", which contains 34 items. Descriptive statistics; a nonparametric test (chi-

square test); binary logistic regression model; and the Pearson correlation coefficient were used to analyze and answer the different research questions.

Results: Half of the participants had an inadequate level of knowledge (55%; n = 141), a negative attitude (52%; n = 132), and insufficient practices (50.4%; n = 129) toward DFU. The knowledge of nurses was affected by the following variables: age and working area (OR = .107, p=.040). Attitudes of nurses affected by the following variables: age group (41-50 years, OR = 3.891, p=.009) and training (OR =.576, p=.048). Furthermore, course training regarding of DFU had a significant positive effect on the attitudes of nurses (p = 0.042). The practices of nurses were affected by the following variables: gender (p = 0.040); and working area (OR = 5.712, p=.026). There was a significant positive correlation between nurses' knowledge and attitude scores (r = 0.384, p ≤ 0.01); in which furthermore, a positive correlation between nurses' knowledge and practice scores was reported (r = 0.313, p ≤ 0.01) as well as between nurses' practice and attitude scores (r = 0.572, p ≤ 0.01).

Conclusion: Jordanian nurses had inadequate knowledge, negative attitudes, and insufficient practices of DFU. Healthcare organizations should have a national plan to encourage nurses to participate in theoretical and practical DFU training program, to improve their knowledge and practices of DFU.

Keywords: diabetic foot ulcer, knowledge, attitude, practice, nurses, Jordan