Women’s Perspectives about Menopause
in the Gaza Strip

Sally Mohammed Salha

MPH Thesis

Jerusalem-Palestine

1440/2019
Women’s Perspectives about Menopause in the Gaza Strip

Prepared by
Sally Mohammed Salha

BSc. of Pharmacy- Al-Azhar University Gaza, Palestine

Supervisor: Prof. Dr. Yehia Abed
PhD, Public Health Consultant - School of Public Health

A Thesis Submitted in Partial Fulfillment of Requirements for the Degree of Master of Public Health/Epidemiology
School of Public Health- Al-Quds University

1440/2019
Thesis Approval

Women’s Perspectives about Menopause in the Gaza Strip

Prepared by: Sally Mohammed Salha
Registration No.: 21610996

Supervisor: Dr. Yehia Abed

Master thesis submitted and accepted, Date: / / 

The names and signature of examining committee members are as follow:

1- Head of committee: Dr. Yehia Abed Signature: .............
2- Internal Examiner: Dr. Khitam Abu Hamad Signature: .............
3- External Examiner: Dr. Abd Alrazak El-Kurd Signature: .............

Jerusalem – Palestine

1440/2019
Dedication

To the soul of my dear father
To my beloved mother
To my kind brothers and sisters
To my friends and colleagues
To whom helped me and wished the best for me
I dedicate this research for all of them

Sally Mohammed Salha
Declaration

I certify that this thesis submitted for the degree of master is the result of my own research, except where otherwise acknowledged, and that this thesis or any of its parts has not been submitted for higher degree to any other university or institution.

Signed:

Sally Mohammed Salha

Date: --------/--------/--------
Acknowledgment

First of all, I would like to thank my supervisor, Dr. Yehia Abed, who has always been a source of support and encouragement for me, and has been a good example for humanity and respect. All the gratitude and appreciation extended to his endless patience, transferable experience, and his fatherly way of treatment throughout the accomplishment of this project.

I am also grateful to all the professors who have taught me during my studying years at the School of Public Health, esp. Dr. Bassam Abu Hamad, and Dr. Khitam Abu Hamad for their guidance and frequent support to complete this thesis. They are very appreciated for their kindness and respect.

I would like also to thank all the experts who helped me in reviewing the study tools; all the women who agreed to participate in the data collection are very thanked as without their help, this study could not have been possible, the thanks are also extended to the data collectors.

Deep thanks are also oriented to my family for their spiritual support esp. my mother for everything she did and is doing for me, my sister Dalia for her advices and guidance, and Mahmoud for his frequent help and support; and all who helped me through this study are truly thanked and appreciated.

Finally, I would like to thank every person helped me in establishing this thesis, and my colleagues everywhere for their kind support.

With my appreciation and respect,

Sally Mohammed Salha
Abstract

Menopause is a transitional stage in women’s life. Menopause is viewed as a normal ageing process; however, signs and symptoms associated with this process and their impact on women were not discussed before among menopausal women in Gaza Strip. An analytic cross sectional study was conducted to understand the concerns and challenges of menopausal women in terms of knowledge, Attitude, and Practice (KAP) in addition to the Quality of Life (QoL); and to identify recommendations that can help menopausal women overcome these challenges.

The research study was conducted using a sample size of 400 menopausal women aged 40-60 years old residing in Gaza for at least 2 years. The sample of menopausal women was selected randomly from three main primary health care facilities in Gaza strip. The study used a quantitative method analysis by administering a survey composed of three parts targeting socioeconomic, KAP and QoL situation.

The main results of the study showed that the mean age for the women is 52.47 years with only 17.8% who had bachelor and/or high studies degrees. Around 86% of these women are unemployed and half of the families of these women have a monthly income of less than 1000 NIS. The mean age of menarche was 13.7 years, while the mean age of menopause was 47.12 +/- 3.89 years. 55.2% used birth control methods at one point in their life. The mean of the pregnancy times for the women was 7.73; the mean number of children was 6.29; and 14.7% had more than two abortions. 70% were between 14-21 years at their first pregnancy.

Around 49% of the surveyed women had poor to moderate level of knowledge about menopause with 75.3% had their source of information from family and friends. 66% positively viewed menopause; while 56.8% negatively viewed hormone replacement therapy. The mean for the knowledge, attitude, and practice scores was 59.8%, 60.3%, and 46.8% respectively.

Regarding lifestyle factors, more than half of the surveyed women don’t practice exercise (workout) and 82.8% try to follow a special type of diet. Also, 35% indicated the use of food supplements and almost all of them don’t smoke. Around 56% of the surveyed women evaluated their health as being between poor and fair. All surveyed women identified at least one stressor in their life with large effect on one third of them; and 41.6% of surveyed women can poorly to moderately handle stress. All surveyed women indicated to have at least one disease with sight problems (31.3%) followed by diabetes, teeth and gum problems and fatigue, around 20% each.

Inferential statistics showed that the menopausal age is affected by the BMI, employment status, pregnancy times, herbal drinking, and menarcheal age; however, no correlation between menarcheal age and menopausal age was found. It was also found that the knowledge score is affected by women’s age, marital status, refugee status, educational status, employment status, menopausal status, as well as being the main breadwinner for the family. The attitude score is affected by the refugee status, educational level, practicing exercise; self-evaluation of health and stress management. The practice score was found to be affected by the marital status, educational level, employment status, BMI and being the main breadwinner. The QoL score is affected by the marital status, employment status, being the main breadwinner, longevity of menses, severity of dysmenorrhea, number of meals, drinking herbal and caffeinated drinks, and the varied life stressors. Furthermore, it was found that practice score is positively correlated with the knowledge score; however, the knowledge and the attitude were not correlated. The QoL score was correlated to both the knowledge and the attitude scores.

This research study identifies a set of recommendations to improve KAP and QoL among menopausal women and concluded that additional multidimensional studies need to be conducted locally and regionally to further tests associations and casualties, and urges to inform the development of evidence-based policies and programs to improve women's health throughout their menopausal years.
Table of Contents

Dedication........................................................................................................................................i
Declaration........................................................................................................................................ii
Acknowledgment.......................................................................................................................... ii
Abstract............................................................................................................................................iii
Table of Contents............................................................................................................................iv
List of Tables .....................................................................................................................................viii
List of Figures .................................................................................................................................... xi
List of Abbreviations .........................................................................................................................xii

Chapter One ..................................................................................................................................... 1

1.1 Introduction ..............................................................................................................................1

1.2 Problem Statement ................................................................................................................3

1.3 Problem Justification ..............................................................................................................7

1.4 Overall Aim ............................................................................................................................8

1.5 Objectives ...............................................................................................................................8

1.6 Research Questions ................................................................................................................8

1.7 Context of the study ...............................................................................................................9

1.7.1 Demographic context .........................................................................................................9

1.7.2 Socio-economic context ..................................................................................................10

1.7.3 Healthcare context ..........................................................................................................11

1.7.4 Cultural Context .............................................................................................................12

1.8 Operational Definitions .......................................................................................................14

1.8.1 Natural menopause ........................................................................................................14

1.8.2 Premenopause ................................................................................................................14

1.8.3 Perimenopause .................................................................................................................14

1.8.4 Menopausal transition ....................................................................................................14

1.8.5 The climacteric ................................................................................................................14

1.8.6 Simple hysterectomy ....................................................................................................15

1.8.7 Menstruation (periods) ................................................................................................15

1.8.8 Hormones .......................................................................................................................15

1.8.9 Premature menopause ..................................................................................................15

1.8.10 Induced menopause ....................................................................................................15

1.8.11 Menarche .....................................................................................................................15

1.8.12 Post-Menopause .........................................................................................................16

1.8.13 Hot Flashes ..................................................................................................................16

1.8.14 Psychological Distress ...............................................................................................16
Chapter two ................................................................................................. 17

2.1 Conceptual Framework ........................................................................... 17

2.2 Literature Review .................................................................................... 19

2.2.1 Menopause .......................................................................................... 19

2.2.1.1 Pre-menopause .............................................................................. 19

2.2.1.2 Peri-Menopause ............................................................................ 20

2.2.1.3 Post-Menopause .......................................................................... 21

2.2.1.4 Premature Menopause ................................................................... 22

2.2.2 Prevalence, knowledge and attitude towards menopause ................. 23

2.2.3 Risk factors of menopause .................................................................. 25

2.2.3.1 Physical Activity .......................................................................... 25

2.2.3.2 Diet ............................................................................................... 26

2.2.3.3 Smoking ......................................................................................... 29

2.2.3.4 Socioeconomic Status .................................................................. 29

2.2.3.5 Reproductive and Individual Factors ............................................. 30

2.2.3.6 Medical History ............................................................................. 32

2.2.4 Consequences ..................................................................................... 32

2.2.4.1 Hot Flushes .................................................................................... 32

2.2.4.2 Cardiovascular Disease ................................................................. 33

2.2.4.3 Diabetes Mellitus ......................................................................... 33

2.2.4.4 Asthma .......................................................................................... 34

2.2.4.5 Urinary Incontinence .................................................................... 34

2.2.4.6 Vaginal Atrophy .......................................................................... 34

2.2.4.7 Uterine Bleeding .......................................................................... 35

2.2.4.8 Skin ............................................................................................... 35

2.2.4.9 Hair ............................................................................................... 35

2.2.4.10 Eyes ............................................................................................. 36

2.2.4.11 Hearing impairment ..................................................................... 36

2.2.4.12 Teeth and Oral Cavity ................................................................. 36

2.2.4.13 Osteoporosis ................................................................................. 36

2.2.4.14 Quality of Life ............................................................................ 37

2.2.4.15 Body Weight ................................................................................ 38

2.2.4.16 Work Ability ................................................................................. 39
Chapter four Results and discussion ........................................................................53

4.1 Introduction .................................................................................................53

4.2 Descriptive statistics ..................................................................................53

4.2.1 Demographic variables ...........................................................................53

4.2.2 Socio-economic variables .......................................................................55

4.2.3 Somatic characters ..................................................................................57

4.2.4 Menstrual characteristics .......................................................................58

4.2.5 Pregnancy and family planning ...............................................................69

4.2.6 Replacement therapy (RT) ......................................................................80
List of Tables

Table (4.1): Distribution of participants by socio-demographic related data (N=400)........ 53
Table (4.2): Distribution of participants by demographic and educational related data (N=400) ........................................................................................................................................ 54
Table (4.3): Distribution of participants by employment status and income related data (N=400) ........................................................................................................................................ 55
Table (4.4): Distribution of participants by height and weight related data (N=400)........ 57
Table (4.5A): Distribution of participants by menstrual period related data (N=400)........ 58
Table (4.5B): Distribution of participants by menstrual period and menopausal related data (N=400) ........................................................................................................................................ 66
Table (4.6A): Distribution of participants by pregnancy and family planning related data (N=375) ........................................................................................................................................ 69
Table (4.6C): Distribution of participants by pregnancy and births related data (N=359) . 75
Table (4.7): Distribution of participants menopausal information and view towards menopause related data (N=400) ........................................................................................................................................ 79
Table (4.8): Distribution of participants by RT indicators related data (N=400)............... 80
Table (4.9): Distribution of participants by physical exercise related data (N=400) ........ 83
Table (4.10A): Distribution of participants by diet related data (N=400)....................... 85
Table (4.10B): Distribution of participants by diet related data (N=400)....................... 86
Table (4.11): Distribution of participants by smoking and beverages drinking habits related data (N=400) ........................................................................................................................................ 91
Table (4.12A): Distribution of participants by health and stress related data (N=400) ...... 94
Table (4.12B): Distribution of participants by health and stress related data (N=400) ...... 95
Table (4.13A): Distribution of participants by symptoms, diseases related data (N=400) . 96
Table (4.13B): Distribution of participants by symptoms, diseases related data (N=400) . 99
Table (4.13C): Distribution of participants by symptoms, diseases related data (N=400) 103
Table (4.14): Distribution of participants by biochemistry related data (N=400)............ 106
Table (4.15): Distribution of participants by knowledge about menopause related data (N=400) ........................................................................................................................................ 109
Table (4.16A): Distribution of participants by attitude towards menopause related data (N=400) ........................................................................................................................................ 111
Table (4.16B): Distribution of participants by attitude towards menopause related data (N=400) ........................................................................................................................................ 112
Table (4.17A): Distribution of participants by practice towards menopause related data (N=400) ........................................................................................................................................ 114
Table (4.17B): Distribution of participants by practice towards menopause related data (N=400) ........................................................................................................................................ 115
Table (4.18): Distribution of participants by quality of life related data (N=400)......... 116
Table (4.19): The relationship between the menopausal age and socio-demographic related variables (N=400) ........................................................................................................................................ 119
Table (4.20): The relationship between the menopausal age and the BMI (N=400) ..... 120
Table (4.21): The relationship between the menopausal age and socio-economic related variables (N=400) ........................................................................................................................................ 120
Table (4.22): The relationship between the menopausal age and menstrual period related variables (N=400) ........................................................................................................................................ 121
Table (4.23A): The relationship between the menopausal age and the pregnancy related variables (N=375) ........................................................................................................................................ 122
Table (4.23B): The relationship between the menopausal age and the pregnancy related variables (N=359) ........................................................................................................................................ 123
Table (4.24): The relationship between the menopausal age and births related variables (N=375) ........................................................................................................................................ 124
Table (4.25): The relationship between the menopausal age and life style related variables (N=400) ........................................................................................................................................ 125
Table (4.26): The relationship between the menopausal age and the life style related variables (N=400) ........................................................................................................................................ 126
Table (4.27): The relationship between the menopausal age and stressors related variables (N=400) ........................................................................................................................................ 127
Table (4.28): The relationship between the menopausal age and the women’s view about menopause (N=400) ........................................................................................................................................ 128
Table (4.29): The relationship between the knowledge score and the socio-demographic variables (N=400) ........................................................................................................................................ 128
Table (4.30): The relationship between the knowledge score and the socio-economic variables (N=400) ........................................................................................................................................ 130
Table (4.31): The relationship between the knowledge score and the menopausal variables (N=400) ........................................................................................................................................ 131
Table (4.32): The relationship between the knowledge score and the rated knowledge by the participants about menopause (N=400) ........................................................................................................................................ 131
Table (4.33): The relationship between the attitude score and the socio-demographic variables (N=400) ........................................................................................................................................ 132
Table (4.34): The relationship between the attitude score and the socio-economic variables (N=400) ........................................................................................................................................ 133
Table (4.35): The relationship between the attitude score and the BMI variable (N=400)134
Table (4.36): The relationship between the attitude score and the menstrual period related variables (N=400) ........................................................................................................................................ 134
Table (4.37A): The relationship between the attitude score and the dysmenorrheal related variables (N=400) ........................................................................................................................................ 135
Table (4.37B): The relationship between the attitude score and the dysmenorrheal related variables (N=400) ........................................................................................................................................ 136
Table (4.38): The relationship between the attitude score and the pregnancy related variables (N=375) ........................................................................................................................................ 136
Table (4.39): The relationship between the attitude score and the menopausal related variables (N=400) ........................................................................................................................................ 137
Table (4.40): The relationship between the attitude score and the life style related variables (N=400) ........................................................................................................................................ 137
Table (4.41): The relationship between the attitude score and the rated knowledge by the participants about menopause and their view about menopause (N=400) ........................................................................................................................................ 138
Table (4.42): The relationship between the attitude score and the stressors related variables (N=400) ........................................................................................................................................ 139
Table (4.43): The relationship between the practice score and the socio-demographic related variables (N=400) ................................................................. 140
Table (4.44): The relationship between the practice score and the socio-economic related variables (N=400) ........................................................................ 142
Table (4.45): The relationship between the practice score and the BMI variable (N=400) ........................................................................................................ 142
Table (4.46): The relationship between the practice score and the rated knowledge by the respondents about menopause (N=400) ......................................................... 143
Table (4.47): The relationship between the QoL score and the socio-demographic related variables (N=400) ........................................................................ 144
Table (4.48): The relationship between the QoL score and the socio-economic related variables (N=400) ................................................................. 145
Table (4.49): The relationship between the QoL score and the BMI variable (N=400) ... 146
Table (4.50): The relationship between the QoL score and the menstrual period related variables (N=400) ........................................................................ 147
Table (4.51): The relationship between the QoL score and the menopausal related variables (N=400) ........................................................................ 148
Table (4.52): The relationship between the QoL score and the pregnancy related variables (N=375) .................................................................................. 149
Table (4.53): The relationship between the QoL score and the births related variables (N=375) .................................................................................. 150
Table (4.54): The relationship between the QoL score and the life style related variables (N=400) .................................................................................. 151
Table (4.55): The relationship between the QoL score and the life style related variables (N=400) .................................................................................. 152
Table (4.56): The relationship between the QoL score and the stressors related variables (N=400) .................................................................................. 153
Table (4.57): The relationship between the QoL score and the rated knowledge and view about menopause related variables (N=400) ......................................................... 155
Table (4.58): The correlation between the knowledge score, and the attitude and practice scores .................................................................................. 155
Table (4.59): The correlation between the QoL score, and the knowledge, attitude, and practice scores .................................................................................. 156
List of Figures

Figure (2.1): Conceptual Framework ................................................................. 17