

High Risk Pregnancy: Counseling Program for Advanced Maternal Age's Mothers during Antepartum Period in Rural Areas

Thesis

Submitted in Partial Fulfillment of the Doctorate Degree in
Nursing Science
(Community Health Nursing)

Submitted By

Tabia Bedier Shaban Sharaf
M.Sc Community Health Nursing

**Faculty of Nursing
Ain Shams University
2015**

High Risk Pregnancy: Counseling Program for Advanced Maternal Age's Mothers during Antepartum Period in Rural Areas

Thesis

Submitted in Partial Fulfillment of the Doctorate Degree in
Nursing Science
(Community Health Nursing)

Supervision By

Prof. Dr. Nawal Mahmoud Soliman

*Professor of Community Health
Nursing Department*

**Assist. Prof. Dr. Magda Abdel Sattar
Ahmad**

*Assistant Professor of Community
Health Nursing Department*

**Assist. Prof. Dr. Hala Mohammed
Hussein**

*Assistant Professor of Community
Health Nursing Department*

**Faculty of Nursing
Ain Shams University
2015**



وَوَصَّيْنَا الْإِنْسَانَ بِوَالِدَيْهِ حَمَلَتْهُ أُمُّهُ وَهْنًا عَلَىٰ
وَهْنٍ وَفَصَّلَهُ فِي عَامَيْنِ أَنِ اشْكُرْ لِي
وَلِوَالِدَيْكَ إِلَى الْمَصِيرِ ﴿١٤﴾

صدق الله العظيم

سورة لقمان آية (١٤)

Acknowledgment

First and foremost, I fell always indebted to Allah, the most kind and the most merciful.

I would like to express my sincere appreciation and my deep gratitude to Prof. Dr. Nawal Mahmoud Soliman, Professor of Community Health Nursing, Faculty of Nursing, Ain Shams University who assigned the work, and helped me to complete this thesis.

I wish to express my sincere thanks and gratitude to Dr. Magda Abdel-Sattar, Assist. Prof. of Community Health Nursing, Faculty of Nursing, Ain Shams University for the great support, and helpful to complete this thesis.

I wish to express my sincere thanks and gratitude to Dr. Hala Mohamed Hussein, Assist. Prof. of Community Health Nursing, Faculty of Nursing, Ain Shams University for the great support and encouragement.

Last but not last I also deeply thanks for all participant in this study and appreciate everyone who has given me assistant.

I extend my gratitude to my husband and my lovely children for their consistent encouragement throughout the time it took me to complete this thesis.

Contents

Subjects	Page
• Abstract	
• Introduction.....	1
• Aim of study and hypotheses.....	5
• Review of literature	
• Part I:	
A-The anatomy and physiology of the female reproductive system	6
B-Normal pregnancy.....	16
• Part II:	
High-risk pregnancy	35
• Part III:	
Nursing intervention for the prevention of high risk pregnant.....	44
• Part IV:	
Counseling	58
Role of community health nurse in improving counseling in advanced maternal age mothers' high risk pregnancy.....	64
• Subjects & Methods.....	80
• Results	91
• Discussion.....	130
• Conclusion	176
• Recommendations.....	177
• Summary	179
• References	187
• Appendix	
• Arabic summary	

List of Tables

Table no.	Title	Page
Tables of review		
1	The uterus parts	12
2	The walls of the uterus	12
Tables of results		
1	Distribution of the studied sample according to their characteristics, (n =84).	92
2	Distribution of the studied sample according to their previous medical, gynecological and obstetrical history, (n =84).	94
3	Distribution of the studied sample according to their present history of pregnancy, (n =84).	97
4	Distribution of the studied sample according to their knowledge about anatomy & physiology of female reproductive system in pre, post and follow up program, (n =84).	99
5	Distribution of the studied sample according to their knowledge about normal change, high risk and warning signs of pregnancy in pre, post and follow up program, (n =84).	101
6	Distribution of the studied sample according to their knowledge about their hygiene during pregnancy in pre, post and follow up program implementation, (n =84).	103

Table no.	Title	Page
7	Distribution of the studied sample according to their knowledge about nutrition during antepartum Period in pre, post and follow up program,(n =84).	105
8	Distribution of the studied sample according to their knowledge about rest, physical exercises& immunizations during antepartum period in pre, post and follow up program, (n =84).	107
9	Distribution of the studied sample according to their total knowledge scale during antepartum period in pre, post and follow up program, (n =84).	110
10	Statistical significances of the studied sample according to their total knowledge during antepartum period in pre, post and follow up program, (n=84).	113
11	Distribution of the studied sample according to complete antenatal physical exercises practices as stated during antepartum period in pre, post and follow up program, (n =84).	114
12	Distribution of the studied sample according to complete breast care practices as stated during antepartum period in pre, post and follow up program, (n =84).	116
13	Distribution of the studied sample according to the dental care practices as stated during antepartum period in pre, post and follow up program, (n =84).	117

Table no.	Title	Page
14	Distribution of the studied sample according to their stated complete perineum care practice during antepartum period in pre, post and follow up program, (n =84).	118
15	Distribution of the studied sample according to complete the nutritional practices as stated during antepartum period in pre, post and follow up program, (n =84).	120
16	Distribution of the studied sample according to complete total practices as stated during antepartum period in pre, post and follow up program, (n =84).	124
17	Statistical significances of the studied sample according to total practices as stated during antepartum period in pre, post and follow up program, (n =84).	126
18	Distribution of the studied sample according to their postpartum health condition, (n =21).	127
19	Distribution of the studied sample according to their pregnancy outcome, (n =21).	129

List of Figures

Fig. No.	title	Page
Figures of review		
1	The external female reproductive organs.	6
2	The internal female reproductive organs (A).	10
	The external female reproductive organs (B).	10
3	The breast	15
Figures of results		
1	Distribution of advanced maternal age's mothers according to total good knowledge in pre, post and follow up program, (n =84).	109
2	Distribution of advanced maternal age's mothers according to total good knowledge in pre, post and follow up program, (n =84).	112
3	Distribution of advanced maternal age's mothers according to total complete practices in pre, post and follow up program, (n =84).	123
4	Distribution of advanced maternal age's mothers according to total complete practices in pre, post and follow up program, (n =84).	125

List of Abbreviations

AB	Antibodies(antiserum)
ABO	Blood Group
AMA	Advanced Maternal Age
B.M.I	Body Mass Index
CS	Caesarian Section
CST	Contraction Stress Test
EDC	Expected Date of Confinement
Elisa	Enzyme- Linked Immune Assay
FHR	Fetal Heart Rate
FHS	Fetal Heart Sound
FSH	Follicle stimulating hormones
G.D.	Growth & Development
HCG	Human Chorionic Gonadotrophine
HGB	hemoglobin
HRP	High Risk Pregnancy
LH	Luteinizing Hormone
LMP	Last Menstrual Period
M.C.H	Maternal Child Health center
M.O.H	Ministry of Health
M.O.H& P	Ministry of Health &Population
NST	Non Stress Test
P.P. period	Postpartum period
PG	Pregnancy Gastation
r/t	Resistance training
RBCs	Red Blood Cells
RIA	Radio Immune Assay
S1,S2,S3(S)	Sound 1,2,3
STDs	Sexually Transmitted Diseases

High Risk Pregnancy: Counseling Program for Advanced Maternal Age's Mothers during Antepartum in Rural Areas

By
Tabia Bedier Shaban Sharaf

Abstract

Advanced maternal age was defined that, as any expectant mother who will have made her 35th birthday by the time she delivers. Because this begins a high-risk group with their own set of risk factors besides all of the other risks of pregnancy and delivery. **Aim:** This study was to evaluate the effect of counseling program for advanced maternal age's mothers during antepartum period in rural areas. A quasi experimental design was conducted at antenatal care clinic for caring pregnant in Maternal and Child Health care center by El Sahal Al kably (from M. C. H. centers in health administration of Baltim). **Sampling:** This study composed of 84 pregnant women (advancement maternal age's mothers from 35years &more) at 1st trimester and free from chronic diseases. **Tools:** For data collection two tools was used: 1) An interviewing questionnaire to assess: -Socio-demographic data - Advanced maternal age mothers' knowledge and practices related to antepartum care. 2) Record review to collect data about antepartum care (first, second and third trimester): a- Initial visit may include diagnosis of pregnancy. b- Subsequent antenatal visits monitoring. c- Outcome pregnancy monitoring. **Results:** The present study found that minority of total knowledge A.M.A.'s mothers had a good about anatomy & physiology of reproductive system, normal change & warning signs, hygiene, nutrition of pregnancy, physical exercises and immunizations in preprogram, increased to majority after taking counseling program, while decreased to more than three quarters in follow up. Also the results of complete total practices as stated find that the minority of A.M.A.'s mothers had a good about meals intake, physical exercises and care of dental, breast & perineum. High significant differences between pre & post-program and follow up about total knowledge and practices. **Conclusion:** The advanced maternal age mothers during antepartum period in rural area are need & continuous awareness counseling programs about A.M.A. and high risk pregnancy. **Recommendation:** Increase all women's awareness about preconception & appropriate health because preconception advice is often neglected. Preconception care for advanced maternal age mothers will prepare her for the role will soon under take in pregnancy or care prior to increasing use of contraception.

Key words: High Risk Pregnancy- Advanced Maternal Age's Mothers- Rural Areas

Introduction

Advanced maternal age was defined by (*Bulletin of the World Health Organization, (2009)*) that, as any expectant mother who will have made her 35th birthday by the time she delivers. The magic number of 35 still stands as a turning point in prenatal surveillance, because this begins a high-risk group with their own set of risk factors besides all of the other risks of pregnancy and delivery. Becoming pregnant after the age of 35 puts women into a category that was a growing trend. The pregnancy rate for mothers over 35 is significantly rising.

Maternity mothers in rural areas face some different health issues than maternity mothers who live in towns and cities. Getting maternal health services can be a problem in rural areas. Pregnant woman might not be able to get to a hospital quickly in an emergency and want to travel long distances to get routine checkups and screenings. Because health problems in rural residents may be more serious by the time they are diagnosed. Pregnant woman in rural areas of the Egypt have higher rates of risk pregnancy than pregnant woman in urban areas, (*El-Zanaty and Way, 2009*).

High-risk pregnancy was generally thought of as one in which the mother or the developing fetus has a condition that places one or both of them at a higher-than-normal-risk for complications, either during the pregnancy (antepartum), during delivery (intrapartum), or following the birth (postpartum), (***American College of Obstetricians and Gynecologists, 2009***).

There are risks and concerns associated with advanced maternal age. All expectant women will experience complications during their pregnancy. Such as high blood pressure, gestational diabetes, preterm labor, miscarriage, placental abruption, placenta previa, low-birth weight baby, higher caesarean rate, higher chance of maternal death, stillbirth, ectopic pregnancy and birth defects, (***Fouad, 2003***).

Antenatal care was the name of the particular form of medical supervision given to a pregnant woman and her baby starting from the time of conception up to the delivery of the baby. It includes regular monitoring of the woman and her baby throughout pregnancy by various means including a variety of routine regular examinations and a number of simple tests of various kinds, (***Maville and Huerta, 2007***).

Counseling is defined as use of an interactive helping process focusing on the needs, problems, or feelings of the patient and significant others to enhance or support coping, problem solving, and advice offered by a counselor to the patient as a regular part of the healthcare process through interpersonal relationships, (*Janas,2005*).

The community health nurse as a pregnancy counselor and health care provider should be knowledgeable enough to correct rumours and misbeliefs about problems of pregnancies. Another important role of the counselor is to empower the woman to make her own choices when needed, (*Fraser et al, 2003*).

Justification of the study:

Every day, 1600 women and more than 10 000 newborns die from preventable complications during pregnancy and childbirth occur in the developing world according to *WHO (2007)* and maternal mortality ratio in Egypt (per 10000 live births) 62.7 (2005), (*El-Zanaty and Way, 2006*).

Many studies in Egypt have shown the roughly 30% of admission and about 40-50% of death of occurring in pediatric hospitals are accounted for children with genetic disorder or congenital malformation, (*Gomaa, 2007*).

As well ***El-Sobkey (2007)*** mentioned that almost all this problems due to about 41.3% for advanced maternal age high risk pregnancy.

The Egyptian Demographic and Health Survey (DHS) (2006) mentioned that, advanced maternal age representing 39%of the high risk pregnancy, (***El-Zanaty and Way, 2006***).

Total females of the reproductive group 2288183 (from 15-45years) representing 30.6% of the total population in the Egypt which was 72,798,031 at 2006 from the last population count which done by Central Agency for Public Mobilization and Statistics (CAMPAS), (***M.O.H, 2008***).

The counseling program's approach focuses on evidence-based interventions that address the most prevalent health issues that affect mothers and newborns. Each focused antenatal care visit includes interventions that are appropriate to the woman's stage of pregnancy and that address her overall health and preparation for birth and care of the newborn, (***World Health Organization, 2011***).

The community health nurses play an important role in high risk pregnancy counseling because they are irregular contact with advanced maternal age, frequently