



Original Research Article

**Self Management of Pregnant Women Regarding Minor Discomforts in
Primary Health Care Centers in Erbil City**

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Abstract

Self-management regarding minor discomforts and practices during prenatal period is beneficial for pregnant women so knowledge and practices of women about self management is necessary for their health protection and the aims of study is to assess knowledge and practices of pregnant women regarding minor discomforts during pregnancy.

The current study is a descriptive study conducted for 370 healthy pregnant women at four Primary Health Care Centers (Nazdar bamarni- Nawroz- Brayati- Kurdistan) in Erbil City from October 2014 to November 2015. Data were collected through interview by using questionnaire methods. Questionnaire was designed and divided into four parts; the first part includes socio-demographic characteristics of pregnant women, the second part contains obstetric history, the third part deals with knowledge about minor discomforts and the fourth part comprises ten areas of practical care regarding minor discomforts during pregnancy. The questionnaire contains 53 items using 3 Likert scales. Reliability was determined by 24 experts.

The results showed that the majority of the study sample was between 18-25 years old, secondary school graduates, housewives and nuclear families. The evidence from this study showed that self management was poor and pregnant women had fair knowledge. Finding of the study revealed that self management practices of pregnant women regarding minor discomforts were very poor also.

There was a significant association between knowledge and age group, level of education and gestational age. While there was no significant association between self-management practices regarding minor discomforts and age group.

Key words: Self-management, pregnant women, minor discomforts.

الخلاصة

الرعاية الذاتية هي الاستدامة والأنشطة المتعلقة بالتكيف واكتساب المعرفة خلال فترة ما قبل الولادة والمساهمة في الرعاية الصحية العملية للامهات مع المعرفة لغرض حماية صحة الامهات الحوامل. أجريت هذه الدراسة الوصفية من اجل تقييم و ممارسات عدد من النساء الحوامل فيما يتعلق بعدم الراحة والمضايقات البسيطة خلال فترة الرعاية قبل الولادة. تضمنت نماذج الدراسة 370 من النساء الحوامل الموجودات في اربعة مراكز رعاية صحية اولية (نازدار بامرنى، نوروز، برايتى، كردستان) في مدينة اربيل حسب المنطقة الجغرافية. اجريت هذه الدراسة للفترة من تشرين الاول 2014 الى تشرين الثاني 2015 و تم جمع المعلومات بطريقتى المقابلة والاستبيان و قسمت استمارة الاستبيان الى اربعة اجزاء: الجزء الاول تتضمن الميزات السكانية الاجتماعية للنساء الحوامل ، الجزء الثانى يشمل تاريخ الحمل و الجزء الثالث تتضمن معلومات حول المضايقات البسيطة أما الجزء الرابع فقد تضمنت عشرة محاور للرعاية الصحية العملية تخص المضايقات البسيطة خلال الفترة الحمل. تحتوي استمارة الاستبيان على 53 سؤالاً باستعمال ثلاثة مقاييس . وان معامل الارتباط تم اقرارها من قبل 24 خبيراً والتي اجريت على عشرة نساء حوامل اظهرت نتائج الدراسة بان اكثرية النماذج المأخوذة من نساء حوامل تتراوح اعمارهن بين 18-25 عاماً ، موزعات بين خريجات الدراسة الثانوية وريبات البيوت . و أظهرت الدراسة أيضاً بان الرعاية الصحية العملية كانت ضعيفة وان النساء الحوامل يفتقرن للمعلومات و استنتجت الدراسة بانه هناك علاقة هامة بين معلومات الميزات السكانية الاجتماعية و العمر و مدة الحمل فيما يتعلق بالمضايقات البسيطة، و اظهرت الدراسة بان لا يوجد علاقة هامة بين الممارسات العملية للنساء الحوامل حول مدارات النفس و الفئات العمرية.

الكلمات المفتاحية: مدارات النفس، المرأة الحامل، المضايقات البسيطة .

Introduction

Pregnancy is the condition in which products of conception implanted normally or abnormally in the uterus. A myriad of physiologic changes may occur in a pregnant woman, so may affect every organ system in her body [1]. Pregnancy is the normal event in the life of a women body, usually is an exciting and joyous time for her and, it needs special care and medical care from the time of conception to the postnatal stage, every pregnancy is a unique experience for women and each pregnancy the women experience will be new and adequately different from the previous [2]. During the course of pregnancy time there are changes occurring in a woman's body as a result of hormonal effect and adaptation to the gestational process [3]. These changes are not comfortable as well as worrying but they are not due to alarm as most of these changes are usually normal, minor discomforts of pregnancy can be troublesome on a day to day basis and may affect the women's normal life. The anatomical, physiological and biochemical adaptations to pregnancy are profound. These changes occurring during pregnancy begin soon after fertilization and continue through gestation, occur in response to physiological stimuli provided by the fetus and placenta [4]. Minor discomforts are occurring in pregnant mothers like, nausea, vomiting, back ache, leg cramps and constipation and also the pregnancy is a period of drastic change in the women's body these minor discomforts are indicators and due to that the body is normally preparing itself for new life [5]. Women's experiences a different of physiological and psychological symptoms. The anatomical and physiological changes in pregnancy are associated with minor discomforts among women during pregnancy [6]. Self-management is a process by which individuals and families use knowledge and beliefs, self-regulation skills and abilities, and social facilitation to achieve outcomes of health especially during pregnancy [7]. Nevertheless these minor discomforts are considerably improved by offering a proper explanation and with simple treatments. Minor

discomforts are common during pregnancy and non-pharmacological therapies should be considered as the first-line treatment before going to pharmacological therapy. However, medication or drugs may be used to ensure, the well-being of the mother and prevent secondary adverse effects to the fetus or some times mothers [8]. National Institute for Care and Health Excellence (NICE) report in 2008 shows that minor discomforts are very common, and are reported by 50% - 80% of pregnant women. Nausea occurs in 80-85% of all pregnancies during the first trimester [9]. Clinical gastroenterology report in 2007 shows that heartburn occurs in 30% to 50% of pregnancies, with prevalence approaching 80% in some populations [10]. According to American Society for Nutrition, 2011, leg cramps have been reported in up to 30% of pregnant women, most commonly in the second and third trimester. They usually affect the calves and occur at night in 75% of cases [11]. Back pain may be experienced during any stage of pregnancy; it most commonly occurs later in the pregnancy as the weight of the baby increases and effect the body weight. American Pregnancy Association in March 2007 reports that 50% to 70% of all pregnant women may have back pain. The prevalence of constipation in pregnancy is reported to be between 11% and 38 %. Most diseases occur due to people's lifestyle which is influenced by their behavioral, cultural and social condition. These minor discomforts might affect the health of mother and fetus lifestyle is affected by physical and mental functions therefore, if pregnant women are helped to change behaviors related to lifestyle, it effectively restores their health. One of the objectives of the World Health Organization (WHO) by 2020 is to promote healthy lifestyle in all people and this is an effective factor in removing risk factors to prevent diseases and promote health [12]. Providing empathetic and sound advice about measure to elevate these discomforts helps promote the overall health and wellbeing of pregnant women. Pregnant women need knowledge to cope with the experience of pregnancy. Also needs knowledge when she present with discomforting or worrying symptoms [13].

Materials and Methods

Design of the Study A descriptive design has been carried out to achieve objectives of the study.

Setting of the study

The study was conducted in Four Primary Health Care Centers which are Nazdar Bamarni (North), Kurdistan (South), Brayati (East) and Nawroz (West) in the Erbil City, Kurdistan Region / Iraq

Time of conducting the study

The study was conducted during period October / 2014 to November / 2015. Which data collection, analysis, and interpretation were have been done. Data were collected about three months from 16 /3 /2015 to 24 /6 /2015.

Sampling of the study

Convenient sampling was used in this study to select 370 participants from four Primary Health Care Centers according to geographical area out of nineteen PHCCs in Erbil City whom were attending for

antenatal care or medical checkup, during pregnancy. Sample was selected according to the following inclusion and exclusion criteria.

Inclusion criteria

1. Healthy pregnant women who attended Primary Health Care Centers/ Erbil City within each trimester.
2. Age between 18-40 years old.

Exclusion criteria

Pregnant women who had the following criteria were excluded from the study sample:

1-Pregnant women who had chronic disease:

- I. Cardiovascular disease.
- II. Diabetes Mellitus.
- III. Psychiatric disease.

2- Complication during pregnancy such us Gestational Diabetes Mellitus (GDM), Urinary tract infection (UTI), Hypertension during pregnancy, placenta previa, Sever anemia, oligohydramnios, Polyhydramnios.

Table 2.1: Distribution of the sample size according to catchments area of PHCCs in Erbil City

No	Name of PHCCs	Total No. of pregnant women for visit in four PHCCs six months in 2014	Sample size for each PHCCs
1	Kurdistan	706	123
2	Nawroz	611	106
3	Brayati	454	79
4	Nazdar bamarni	358	62
	Total	2129	370

Tools for Data Collection

A **questionnaire** was designed and constructed by the investigator through extensive review of relevant literature to collect the data. It consisted four parts and included the following information, and include the following parts:

Part I- Demographic data: this part comprised of participants personal characteristic such as pregnant women age, level of education, employment status, and type of family.

Part II- Obstetrical History: This was included the number of gravida, Para, abortion, trimester, type of pregnancy and minor discomforts.

Part III- Knowledge of pregnant women regarding minor discomforts:

Part IIII- Practices of pregnant women regarding these minor discomforts items during pregnancy which were nausea, vomiting, heartburn, constipation, varicose vein, hemorrhoids, backache, frequency of urination, fatigue, leg cramps and insomnia.

Validity of the questionnaire Form The questionnaire was viewed to panel of 24 experts in nursing field. All experts agreed upon the items of the questionnaire except few changes and the investigator took into consideration their responses and suggestions, which have been done in the tool.

Administrative Arrangements/ The approval from College of Nursing/ Directorate of Health / Directorate of preventive Health Affairs /Antenatal Department/Kurdistan Region/ Iraq were secured.

Ethical Approval

1. The study proposal formally was approved by scientific and ethical committees in the College of Nursing/ Hawler Medical University.

Method of Data Collection

The investigator attended each Primary Health Care Centers for 6 days per week from 8:30 am – 12:30 pm. The investigator introduced her to the pregnant women and briefly the nature of the study to the approached ones who met the inclusion criteria and agreed to participate in the

study, and then started interviewing with the participant. Each interview session took approximately 15 -20 minutes.

Pilot study

A pilot study was conducted on four primary health care centers for twenty pregnant women. It was conducted during 10-2-2015/ 25-2-2015.

Reliability of the Questionnaire

Split-Half reliability was determined and measured through computation of Pearson product moment correlation. Correlation coefficient of the study instrument [14]

Statistical Procedures

Data were prepared, organized and entered into the computer file; statistical package for social science (SPSS, version 20) was used for data analysis.

Results

Table 1: Socio-demographic characteristics of the study sample

Socio demographic characteristics		F	%
Age Group (years)	18-25	190	51.4
	26-33	141	38.1
	34-41	39	10.5
		370	100
Level of education	Illiterate	36	9.8
	Can read and write	23	6.2
	Primary	86	23.2
	Secondary	92	24.9
	Institute	46	12.4
	College	87	23.5
		370	100
Occupation	High professional job	12	3.29
	Low professional job	82	22.2
	Housewife	244	65.9
	Student	32	8.61
		370	100
Type of family	Nuclear family	207	55.9
	Extended	163	44.1
Total		370	100

Table 2: Pregnant women reproductive variable

Variables		F	%
Gravida	1	140	37.7
	2-4	206	55.8
	=>5	24	6.5
		370	100
Para	Nullipara	172	46.5
	Primiparous	109	29.5
	Multiparous	85	23
	Grand multipara	4	1
		370	100
Abortion	None	286	77.3
	1-2	79	21.3
	>2	5	1.4
		370	100
Trimester	1st trimester	29	7.8
	2nd trimester	208	56.3
	3rd trimester	133	35.9
		370	100
Type of pregnancy	Planned	312	84.3
	Unplanned	58	15.7
		370	100
Total		370	100

Table 3: Minor discomforts during pregnancy among study sample

Minor discomforts (N=370)	Yes		No		Total	
	F	%	F	%	F	%
Nausea and Vomiting	16	4.3	354	95.7	370	100
Heartburn	128	34.6	242	65.4	370	100
Constipation	19	5.1	351	94.9	370	100
Varicose vein	1	0.3	369	99.7	370	100
Hemorrhoids (piles)	1	0.3	369	99.7	370	100
Backache	259	70	111	30	370	100
Frequency urination	93	25.1	277	74.9	370	100
Fatigue	11	3	359	97	370	100
Leg cramps	113	30.5	257	69.5	370	100
Insomnia	8	2.2	362	97.8	370	100

Table 4: Knowledge of pregnant women regarding minor discomforts

Overall Knowledge of pregnant women regarding minor discomforts	F	%
Good	30	8.1
Fair	248	67
Poor	92	24.9
Total	370	100

Table 5: Association between age and level of education with overall knowledge of pregnant women regarding minor discomforts

Knowledge		Good	Fair	Poor	P-value
		F (%)	F (%)	F (%)	
Socio-demographic data					
Age group (years)	18-25	14(3.8)	122(33)	54(14.6)	0.012
	26-33	16(4.3)	91(24.6)	34(9.2)	
	34-41	0 (0)	35(9.5)	4(1)	
Level of education	Illiterate	1(0.3)	26(7)	9(2.4)	0.000
	Can read and write	0(0)	9(2.4)	14(3.8)	
	Primary	0(0)	66(17.8)	20(5.4)	
	Secondary	6(1.6)	63(17)	23(6.3)	
	Institute	6(1.6)	29(7.8)	11(3)	
	College	17(4.6)	55(14.9)	15(4.1)	

Table 6: Association between gestational ages with overall knowledge of pregnant women regarding minor discomforts

Knowledge		Good	Fair	Poor	P-value
		F (%)	F (%)	F (%)	
Obstetrical history					
Trimester	1st trimester	0(0)	17(4.6)	12(3.3)	0.001
	2nd trimester	17(4.6)	155(41.9)	36(9.7)	
	3rd trimester	13(3.5)	76(20.5)	44(11.9)	

Table 7: Association between age and practices of self-management of pregnant women regarding minor discomforts

		18-25	26-33	34-41	P-value
		F (%)	F (%)	F (%)	
Minor discomforts	Age Group (years)				
Nausea and Vomiting	Always	0(0)	0(0)	0(0)	0.024
	Sometimes	0(0)	0(0)	1(6.2)	
	Never	8(50)	6(37.6)	1(6.2)	
Heartburn	Always	0(0)	0(0)	0(0)	0.211
	Sometimes	12(9.4)	15(11.7)	4(3.1)	
	Never	55(43)	32(25)	10(7.8)	
Constipation	Always	0(0)	0(0)	0(0)	0.646
	Sometimes	3(15.8)	2(10.5)	1(5.3)	
	Never	9(47.4)	2(10.5)	2(10.5)	
Backache	Always	0(0)	0(0)	0(0)	0.651
	Sometimes	11(4.2)	9(3.5)	3(1.2)	
	Never	133(51.4)	83(32)	20(7.7)	
Frequency of urination	Always	1(1.1)	1(1.1)	0(0)	0.925
	Sometimes	30(32.3)	28(30)	9(9.7)	
	Never	12(12.9)	8(8.6)	4(4.3)	
Fatigue	Always	0(0)	1(9.1)	0(0)	0.044
	Sometimes	4(36.4)	2(18.2)	0(0)	
	Never	1(9.1)	0(0)	3(27.2)	
Leg cramps	Always	1(0.9)	1(0.9)	0(0)	0.593
	Sometimes	1(0.9)	3(2.7)	0(0)	
	Never	57(50.4)	39(34.5)	11(9.7)	

Table 8: Practices of Self-management for pregnant women regarding minor discomforts

Minor discomforts	Always		Sometimes		Never		*MS
	F	%	F	%	F	%	
Nausea and Vomiting	0	0	1	6.2	15	93.8	2.94
Heartburn	0	0	31	24.2	97	75.8	2.76
Constipation	0	0	6	31.6	13	68.4	2.68
Varicose vein	0	0	0	0	1	100	3
Hemorrhoids	0	0	1	100	0	0	2
Backache	0	0	23	8.9	236	91.1	2.91
Frequency urination	2	2.2	67	72	24	25.8	2.24
Fatigue	1	9.1	6	54.5	4	36.4	2.27
Leg cramps	2	1.8	4	3.5	107	94.7	2.93
Insomnia	0	0	0	0	8	100	3

Mean of square (MS)

Discussion

Result of the present study showed that most of the study participant their age group ranged between 18-25 years. This age is considered low risk for pregnancy, and healthy outcome is expected. Result of the present study showed that most of the study participants were graduates of secondary school. The present study agreed with findings with result Al- Khafaji *et al*, in Erbil city, who reported that most of pregnant women graduated from secondary school. [15].

Finding of this study showed that majority of the participants were housewives that due to fact that they had low level of education and cultural affect because after marriage they cannot continue of education. Findings of the present study revealed that more than half of the study sample was in their nuclear family due to women want live alone rather than extended family. Results of present study agreed with results of Kumar [16]. Regarding the overall knowledge of pregnant women regarding minor discomforts shows that the majority of sample study had fair knowledge The result of present study agree with the finding of Sangheetha [17] in Tamil, India convenience sampling found that majority of study had fair knowledge of pregnant women regarding minor discomforts. Finding of

present study the self management practices of pregnant women regarding nausea and vomiting were poor which they include the following open a window to inhale fresh air ,wearing loosen clothes ,avoid fried food with avoid strong smell, get out of bed in the morning very slowly, minimize stress with after eating, do not brush teeth immediately, avoid an empty stomach at all time, take in more liquid than solid,drink fluids between meals rather with meal and eat high protein snack before retiring at night such as beans nuts,eating toast in bed before arising ,eat several small meals throughout the day. These results are in contrast to the result which was mentioned by Herrell [18] in Johnson City, Tennessee who reported that avoidance of foods with strong smells dietary modifications such as avoidance of large meals and consumption of low-fat. Regarding the self management of pregnant women regarding minor discomforts, finding of the present study shows that most of participant able to do self management for fatigue, frequency of urination and leg cramps due to some information about it. Mother the basic of society and wealth very important to take care during pregnancy is crucial period to safe and healthy baby. The present study in contrast to finding of Amasha and Heeba [19] who reported that the highest percentage able to do self management for low back pain, nausea and

vomiting. In general, the results of the study showed that there was a highly significant association between level of education with self management of pregnant women regarding minor discomforts. There was a non-significant association between level of education and self management for heartburn, constipation, backache, frequency of urination, fatigue and leg cramps. Majority of participants were housewife and not wise to use mass media to caught enough information even graduate from secondary school. The present study agree with the study done by Kumari and Karant [20] who found that there was significant association between level of education and care for minor discomforts during pregnancy.

Conclusion

Results of the present study indicated that the majority of the study sample their age ranged from 18-25 years old, graduating from secondary school, housewives, most of the participant in second trimester and had nuclear family. Regarding knowledge of the participant majority of the pregnant women had known about minor discomforts occur during pregnancy and were normal but most of them didn't know about cause of these minor discomforts, more than half of study sample getting knowledge regarding minor discomforts by her relatives. Regarding self-management of pregnant women a minor discomforts were poor. Regarding the association between demographic characteristics participant and overall knowledge of pregnant women regarding minor discomforts there was a very highly significant association between overall knowledge and level of education and significant association with age group, while it had very highly significant association with trimester .

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