Utilization of self-care practice guideline on relieving minor discomfort (ailments) among new pregnant woman.

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Abstract

Aim: The present study was aimed to evaluate the effect of utilizations measures by mothers on relieving their minor discomforts during the first trimester of pregnancy. Setting: the study was conducted at antenatal clinic at Benha university hospital. **Design:** AQuasi-experimental designwas used. **Sample**: Purposive sample included 280 prime para with normal pregnancy & single- intra uterine fetus in the first trimester of pregnancy. Free from medical and gynecological disease. **Data collection:** A structured interviewing questionnaire and likert scale. **Results:** the present study revealed that was a highly significant relation between pregnant mothers knowledge and their attitude toward utilization measures to relieve minor discomforts. Generally, 55% among the studied sample had correct knowledge about minor discomfort and utilization measures to relieve those, similarly 54% of mothers had positive attitude toward utilization measures. The utilization measures by studied sample have amoderate&mild& severe degree of relief (44.3%,42.2%,13.5%) respectively. Conclusion: More than half among the sample had correct knowledge about minor discomfortrs and measures to relieve minor discomforts. It was observed also that minor discomforts were relieved by utilizations measures among more than half of the study sample. **Recommendations:** Awareness raising program must be conducted regarding importance of antenatal care to improve mothers knowledge and awareness to avoid harmful utilizations measures considering medical consultations. Further researches to investigate the effect of utilization measures utilized during labor and postnatal period on mothers & fetus and neonatal health in all maternity health services.

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I. Introduction

Pregnancy is normal life event that involves many physiological changes that take place in all the pregnant women's body systems (endocrine, reproductive, gastrointestinal, respiratory, cardiovascular, urinary and musculoskeletal system) and the skin due to the effect of hormones and the growth of the fetus (Ricci,2013)

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 creative and productive period in the life of a woman. It is one of the vital events, which needs special care from conception to postnatal period. Every mother wants to enjoy nine month period with the baby inside her; the joyful experience of pregnancy is not always joyful. (5)

Those hormonal changes lead to minor discomforts in all the womens body systems like nausea, vomiting, constipation, excessive urination and fatigue. These minor discomforts are the signs that the body is naturally preparing itself for new life (Thomas, 2010).

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 reventsecondary adverse effects to the fetus or sometimes mothers (8)

Self-management is a processby which individuals and families useknowledge and beliefs, self-regulation skills and abilities, and social facilitation to achieve outcomes of health specially during pregnancy [

Mostof these discomforts don't require medical therapy . However, they are requiring explanation and reassurance because most women canot assess the seriousness of aparticular system. They can be avoided by preventive measures or healthful practices once they occur .there are many traditional practices to relieve the minor discomforts (Hayam, 2006)

Traditional medicine practices are the sum total of the Knowledge, Skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health.

The terms "complementary medicine" or "alternative medicine in some countries. Thy are refereed to abroad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system (WHO, 2013)

Traditional medicine practices cover a wide variety of therapies and practices which vary from region to region. There are many different traditional practices such as the use of (herbal medicine, acupressure, yoga, acupuncture, aromatherapy ,chiropractic medicine, homeopathic medicine, massage, hydrotherapy, nutritional therapy and osteopathy)(NCCAM,2009)

Many people believe that because medicines are herbal (natural) or traditional they are safe (or carry no risk for harm); however, traditional medicines and practices can cause harmful, adverse reactions if the product or therapy is of poor quality, or it is taken inappropriately or in conjunction with other medicines. Increased pregnant mothers' awareness about safe usage is important, as well as more training, collaboration and communication among providers of traditional and other medicines (WHO, 2013)

The ultimate goal of any pregnancy is the birth of a healthy newborn. Many pregnant women rely on nurses to provide accurate information and compassionate guidance throughout their pregnancy. To respond effectively; nurses must understand not only the minor discomforts but also the traditional practices to relieve them (Murray, McKinney, 2010).

Nurses can play a major role in providing anticipatory guidance and teaching to foster the woman's responsibility for traditional practices, helping to clarify misconceptions and correct any misinformation. Educating the pregnant mother to identify threats to safety posed by her lifestyle or environment and proposing ways to modify them to avoid a negative outcome are important (Ricci, 2009)

Nurses must be aware of the types of health related activities in which the pregnant mothers may be engaged. This awareness is important for the assessment of safety and the interaction of these activities with biomedical care. If the nurse is knowledgeable about traditional practices, appropriate referrals may be made that can help pregnant mothers augment their treatments, cope with symptoms and unpleased side effects from treatments, maintain and promote their health (Dochterman&Bulechek, 2006).

Maternity nurses play an important role to improve the quality of antenatal care, which provide the pregnant women education & support.

At the same time the nurse can provide health promotion, medical & psychosocial services include health education, nutrition, education, counseling, social services assessment& appropriate referral. (pillitteri A., 2010).

Justification of the study:

In Egypt pregnant mothers consider nausea, vomiting and headache as normal phenomena associated with pregnancy that did not need any medical consultations. Nurses must revise mother self care practices and it is effect on their pregnancy. Nurses must initially ask each pregnant mother about concept and beliefs and utilization measures then given mothers appropriate advice to correct their miss concepts and beliefs (American college of obstetricians and gynecologists, 2006)

No previous studies were conducted at faculty of nursing at obstetrics and gynecological department investigating utilization measures and it is effect of pregnant mothers health so this study was conducted aimed to explore mothers self care measures and it is effect on reliving more discomfort during early pregnancy.

Aim of the study:

This study was 1 to evaluate the effect of self-care practice guideline on relieving minor discomfort among pregnant woman.

This aim achieved through: - Assessing the pregnant women knowledge, and self-care practice regarding management of minor discomfort to identify their needs. - Designing and implementing self-care practice guideline according to women' needs. - Evaluating the effect of self –care practice guideline on knowledge and self-care practice regarding management of minor discomfort.

Hypothesis:

The researchers hypothesized that self-care practice guideline will improve knowledge and self-care reported practice regarding relieving minor discomfort .

II. Subjects and Methods

Research design: a quasi-experimental design was utilized to fulfill the aim of this study .

Setting: The study was carried out at outpatient clinic affiliated at obstetric department at Benha University. Sample:

Type and technique

A purposive sample

Size

A total 280 pregnant women at first trimester were recruited in the study for a period of 6 months.

Tools of data collection: Three tools were used for data collection.

First tool: A self-administered questionnaire which was developed by the researchers in Arabic language after reviewing of related literature []. It encompassed three main parts:

Part I: pregnant women's socio -demographic characteristics, such as age, residence, educational qualification and occupation status.

Part II: obstetric history, which Included: gestational age, history of antenatal care, and incidence of minor discomfort.

Part III: Knowledge of the studied pregnant women regarding minor discomfort and its management. This part was used before and after utilization of self-care practice guideline (pre/posttest format), it included ten multiple choice questions which divided into three sections.

Section (1) it consisted of (3) questions as concepts of minor discomfort, types of minor discomfort, complication of minor discomfort.

Section (2) pertained to assess pregnant women's knowledge about the causes of minor discomfort, it consisted of (10) questions concerning causes of (nausea and vomiting, heart burn, headache, leg cramps, backache, vaginal discharge, haemorrhoids, constipation, respiratory distress, and Fatigue and insomnia).

Section (3) pertained to assess women's knowledge about the management of minor discomfort, it consisted of (10) questions as interventions management of different types of minor discomfort.

Scoring system of knowledge:

A correct answer was scored "one" and the incorrect "zero".

The total knowledge score was calculated by summation of the scores for the correct answers. The total possible score ranged from (0 to 61 marks) and means and standard deviations were calculated. The higher scores reflect higher levels of knowledge about minor discomfort.

The total knowledge score was indicated as the following :

Good : \geq 75% of total knowledge score

Fair :60-<75% of total knowledge score.

Poor :< 60% of total knowledge score.

Second tool: self-care reported practice assessment tool, it was developed by the researchers.it was pertained to assess self-care reported practice regarding each type of minor discomfort.it was consisted of (10) section, each section had a different practice toward management of different (10) types of minor discomfort. Each type of minor discomfort had a certain self-care reported practice.

Scoring system of self-care reported practice:

For answer of done, it was scored "one" and not done was scored as "zero". The total practice score was calculated by summation of the scores for the done items. The total possible score ranged from 0 to 56 and means and standard deviations were calculated. The higher scores reflect satisfactory level of practice regarding minor discomfort.

The total practice score was indicated as the following :

Satisfactory : $\geq 60\%$ of total practice score

Unsatisfactory<:60% of total practice score.

Pilot study

A pilot study was carried out on 10% from the total number of sample (28) women to evaluate the tools clarity, objectivity and feasibility. As well to estimate the time needed for data collection. Those women in the pilot study were excluded from study sample, and certain modifications were done.

Tools validity and reliability:

The tools were reviewed for comprehensiveness, appropriateness, and legibility by an expert panel consisting of five obstetrics and woman health nursing experts.

The panel ascertained the face and content validity of the tools.

The reliability was done by Cronbach's Alpha coefficient test which revealed that each of the three tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool. The internal consistency of knowledge was 0.89; and The internal consistency of practice was 0.91.

Self-care practice guideline (SCPG):

SCPG was designed by the researcher after reviewing related guidelines and literatures including (RCOG Green-top Guideline No. 69, 2016), clinical practice guideline for woman at pregnancy and postpartum (Andalusia agency, 2014). The Self-care practice guideline provided by the researchers for each woman in

individual basis. An educational booklet was prepared by the researches using simple Arabic language, it was concerned with basic knowledge regarding minor discomfort and related physiological in addition related self-practice management measures of different minor discomfort.

Ethical considerations:

Each woman was informed about the purpose and benefits of the study then oral consent was obtained before data collection. Women were assured that all data was used only for research purpose and each woman was informed of the rights to refuse or withdraw at any time with no consequences.

Field work:

A written official letter was obtained from the Dean of the Faculty of Nursing, Benha University and delivered to the director of Benha university hospital. During process of data collection an oral consent was taken from each after clear and proper explanation of the aim of the study. The study was carried out through four phases: assessment, planning, implementation, and evaluation. These phases were carried out from beginning of January 2015 to the end of June 2015, covering along a period of six months. The previous mentioned settings were visited by the researchers 3 days/week (Sunday, Monday and Wednesday) from 9.00 am to 12.00 pm (according to the time schedule of outpatient clinic).

Assessment phase: Upon securing official permissions to conduct the present study, each woman was interviewed explained the purpose and procedures of the study, and asked for her participation.

Statistical Design:

Data analysis and presentation:

A personal computer was used to store and analyze the data an produce some graphic presentations for some important results. Calculations were done by means of statistical software package. Data were presented in table and graphs using numbers, percentages and correlations were done.

Data was categorized coded, and was entered using Excel sheet while statistical analysis was done using statistical package for social science (SPSS) version 16.A property statistical methods and tests were used for analysis of results.

Description of qualitative items as a mean and SD. Description of qualitative items as number and percentage were used. The statistically tests used in this thesis are: - Chi- square- test.

Significance of results:

P value< 0.01 highly significant differences

P value< 0.05 significant difference.

The results

Part 1: General characteristics of pregnant mothers.

 Table 1: General characteristics of the studied sample (n=480)

	Frequency	%			
Age in years					
20	78	32.5			
25	109	45.4			
30-35	53	22.1			
Mean ±SD	26.34±7.09				
Educational qualification					
Read and write	40	16.7			
Secondary education	96	40.0			
University education	104	43.3			
Occupation					
House wives	138	57.5			
Working	102	42.5			
Residence					
Urban	37	15.4			
Age in years 20 25 30-35 Mean ±SD Educational qualification Read and write Secondary education University education Occupation House wives Working Residence Urban Rural	203	84.6			

Table 1:- shows that the majority (45.4%) of the mothers wasaged 25 years Only 16.7% of the studyparticipants possessed no formal education, while (43.3%) of them were been graduated and above . (84.6%) of the mothers was residing in the rural area . that more than of the studied sample were during 3^{rd} month of pregnancy compared to few were in the first month

Anthropometric measures	Mean ±SD	Minimum	Maximum
Weight	75.0167±14.79199	45.00	120.00
Length	162.7833±8.25299	150.00	185.00
Body mass index	28.2725±5.63410	17.50	44.90

Distribution of obstetric history of studied women (n=240).

frequency	%
59	24.6
85	35.4
96	40
154	64.2
86	35.8
	85 96 154

Mean score of minor discomfort general knowledge of the studied women

Knowledge items	score	Pre-intervention Post -intervention			P value
		Mean ±SD	Mean ±SD	Paired t test	
The concept of minor discomforts	3	1.1417±.80579	2.7542±.43148	-47.915	<0.001**
Types of discomforts	10	2.3417±1.92537	8.9125±1.54590	-32.239	<0.001**
Complication of minor discomfort	8	1.7000±1.30079	5.8917±3.19465	-21.974	<0.001**

Shows that There was ahighly significant statistical difference between all items of minor discomfort general knowledge at the pre and post intervention.

Mean score of minor discomfort management's knowledge of the studied women

knowledge items	score	Pre-intervention	Post -intervention	Paired t	P value
		Mean ±SD	Mean ±SD	test	
Causes of nausea and vomiting	4	.6083±.65706	3.7125±.45354	-54.749	<0.001**
Causes of heart burn	4	.4542±.53142	3.7375±.44091	-69.851	<0.001**
Causes of headache	4	.5375±.55517	3.6917±.46277	-63.551	<0.001**
Causes of Leg cramp	4	.4958±.55642	3.7208±.44953	-66.761	<0.001**
Causes of backache	4	.5625±.57516	3.6625±.47385	-59.141	<0.001**
Causes of vaginal discharge	4	.4875±.57114	3.7333±.4314	-63.368	<0.001**
Causes of hemorrhoids	4	.4333±.54479	3.7250±.44745	-66.727	<0.001**
Causes of constipation	4	.5500±.56908	3.8042±.39767	-66.955	<0.001**
Causes of respiratory distress	4	.8208±.76343	3.6750±.46935	-43.592	<0.001**
Causes of fatigue and insomnia	4	1.0250±.81269	3.5708±.49599	-34.658	<0.001**

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Figure (1): percentage distribution of the total knowledge score regarding mangemnt of minor discofort of the studied women at pre and post intervement .

Mean score of minor di	iscomfort management's se	elf care reported practice	of the studied women.

Self-care reported practice	Score	Pre-intervention Post -interven		Paired t test	P value
		Mean ±SD	Mean ±SD	Paired t test	P value
Self-care practice for management of nausea and vomiting	6	.9583±.78581	5.6708±.47089	-160.968	<0.001**
Self-care practice for management of heart burn	6	.8125±.78309	5.5833±.49404	-175.484	<0.001**
Self-care practice for management of headache	5	.7042±.70264	4.1250±.99423	-107.121	<0.001**
Self-care practice for management of Leg cramp	5	.6000±.67098	5.0000±.00000	-101.590	<0.001**
Self-care practice for management of backache	6	.7125±.70611	5.5667±.49657	-212.625	<0.001**
Self-care practice for management of vaginal discharge	5	.7042±.74316	4.0667±.99986	-108.135	<0.001**
Self-care practice for management of hemorrhoids	5	.5625±.69385	5.0000±.00000	-99.078	<0.001**
Self-care practice for management of constipation	6	.7292±.71854	5.0000±.00000	-92.080	<0.001**
Self-care practice for management of respiratory distress	6	.9208±.81177	5.6292±.48404	-160.142	<0.001**
Self-care practice for management of fatigue and insomnia	6	1.1417±.83135	5.7167±.45156	-143.074	<0.001**



Figure (2): percentage distribution of the total self care reported practice score regarding mangemnt of minor discofort of the studied women at pre and post intervement .

Correlation between total knowledge and practice score of the studied women at pre and post intervention

	Knowledge pre		Practice pre		Knowledge post		Practice post	
	r	P value	r	P value	r	P value	r	P value
Knowledge pre	1		.083	0.200				
Practice pre	.083	.200	1				.056	.390
Knowledge post					1		.309**	.000
Practice post					.309**	.000	1	

**. Correlation is significant at the 0.01 level (2-tailed).

II. Discussion

The aim of the present study was to evaluate the effect of self-care practice guidelineon relieving minor discomfort (ailments) among new pregnant woman.

This aim was significantly approved research's hypothesis that self-care practice guideline highly significantly improved knowledge and self-care reported among new pregnant women practice regarding relieving minor discomfort.

Pregnant women have need for explanation of the causes of the discomforts and for advice on ways to relieve the discomforts. Information about the physiology and self-care for discomforts experienced during the three trimesters.

Maintaining the health of mother and fetus is the primary goal of nursing care during the antenatal period by acquiring knowledge managing the symptoms and discomforts associated with pregnancy (*Kollessener and Hatifield, 2006*).

As regarding personnel characteristics of the studied women the present study finding represented that mean age of studied women was 28.34, near than half of them had secondary education, more than half were a house wives and the majority of them were from rural residence these findings. Are agreed with a study conducted in Kinaye to assess the knowledge regarding minor ailments of pregnancy in antenatal mothers. The study revealed that (68%) of antenatal mothers were in the age group of 21 to 25 years.58% had up to primary school (.69%) of them house wives.(32%) were from nuclear family.(62%) had income of 4000-5000 and (79%) of them had no previous knowledge.In addition the present study finding was agreed TAziz&Maqsoodin the study to Self-Management among Pregnant Women toward Minor Discomforts in health Care Centers at Erbil City 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 pregnantwomen had fair knowledge. Finding of the study revealed that self-management practices of pregnant womenregarding minor discomforts were very poor also.

This study revealed that less than one quarter of study sample had not follow up at past pregnancy and mentioned the causes as there were not complain and this was not important (table 3).

These findings disagree with (*Shaffer, 2002*) who illustrated that women don't participate in prenatal care due to lack of money, lack of transportation or language barriers.

This result is supported by (*Azzam, 2004*) who illustrated that the majority of subjects were housewives and had secondary level of education experienced minor discomforts during three trimesters of pregnancy

In relation to anthropometric measures the present study results pointed out that studied women weight ranged from (45-80Kgs) with body mass index ranged from (17.50-23.90) these findings were agreed with

Concerning studied women knowledge regarding concept, types and complication the present study results illustrated that there was a highly significant improve mean score of them , at the post intervention phase as compared with their mean score at pre intervention phase especially their knowledge regarding concept of minor discomfort+= 47.91)

Asregarding studied women knowledge about causes of different minor discomfort, the present study results indicated that there was a highly significant improve at the post intervention phase as compared with their mean score at pre intervention phase, especially regarding causes of causes of heart burn (+=96.85).these findings were agreed with This finding is supported by (*Lu and Hobel, 2004*) who illustrated that heart burn is an a cute burning sensation in epigastric and sternal regions occurs in two thirds of pregnant women. *Green & Wilkinson, 2004*) who illustrated that to relief heart burn the mothers should eat small frequent meals, to avoiding overloading stomach, avoiding fats with meals, fat depresses both motility of the stomach and the secretion of gastric juice, needed for digestion, avoid very cold foods with meals, avoiding spicy foods, drinking cultured milk or eat low-fat ice cream avoiding heavy meals before bedtime use anti-acid.

In relation to the studied women knowledge regarding minor discomfort at pre intervention phase, the present study finding showed that the majority of women had a poor knowledge ,this was supported by the study conducted to assess by Sreelekha that the majority of antenatal mothers showed a good knowledge and none of them revealed poor knowledge were found to be more than the values obtained in this study at 5% level of significance, which implies the effectiveness of teaching program.[5]

It is contradictory to the study conducted by Brucker[6], who reported in her study that 49% of mothers possessed inadequate knowledge on self-care management of minor disorders in pregnancy, 31% revealed moderate knowledge, and 10% possessed adequate knowledge.

More over the present study results pointed that there was a highlyconcerning total improved of total knowledge score of the studied women at post intervention phase as the majority them had a good level of knowledge

Self care practice

In relation to the self care reported practice of the studied women, the present study reported that there were ahighly satisfaction level of practice regarding different minor discomfort .especifically their practice toward mangment of backache (+=212.62) these findings were agreed with This result is supported by (*Emamhadi, 2002*) who illustrated that 50 to 90% of pregnant women suffer from backache. This was more during the last pregnancyThis result is supported by (*Azzam, 2004*) who illustrated back pain in pregnancy caused by strain on the back muscles in mid pregnancy. When uterus becomes heavier it changes the center of gravity..

and always practicing to relieve backache during 3rd trimester of pregnancy by wearing low heeled shoes and using body mechanics, avoiding uncomfortable working sleeping in left side

As regarding the correlation between total knowledge and practice total score, the present study showed that there was a highly positive association between them that indicated knowledge improvement subsequently improves practice.

III. Conclusion

- More than half among the sample had correct knowledge about minor discomforts and measures to relieve minor discomforts.

It was observed also that minor discomforts were relived by utilization measures among more than half of the study sample.

More than half of the studied sample had positive attitude regarding utilization measures to relieve minor discomforts and the rest had negative attitude.

IV. Recommendations

Awareness raising programs & design and implementing in obstetrics & gynecological department to enhance pregnant woman to relieve minor discomfort during labor.

- Counseling and health education must be provided to all pregnant woman to enhance them to avoid harmfull practice during pregnancy

- Dissemination of the present study findings to all maternity health services in benha city.

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