



Research Paper

Enhancing Pregnant Women Knowledge on Minor Disorders of Pregnancy and Its Prevalence at a State Specialist Hospital, Southwest, Nigeria

¹AKINBOWALE, Busayo Temilola, ¹SOWUNMI, Christiana Olanrewaju,
²AKINBOWALE, Akinyele Akin, ²AKINWALE, OladayoDamilola,
²OLADOTUN, Oloruntosin Nike

¹(Babcock University Ilishan-Remo, Ogun State, Nigeria)

¹(Babcock University Ilishan-Remo, Ogun State, Nigeria)

²(State Specialist Hospital, Asubiaro, Osogbo, Osun State, Nigeria)

²(Babcock University, Ilishan-Remo, Ogun State, Nigeria)

³(Babcock University Ilishan-Remo, Ogun State, Nigeria)

Correspondence Author: AKINBOWALE, Busayo Temilola
(UNIOSUN Teaching Hospital, Osogbo, Osun State)

ABSTRACT

Pregnant women undergoes different form of physiological changes during pregnancy that cuts across every compartment of the body systems (endocrine, reproductive, gastrointestinal, respiratory, cardiovascular, urinary, musculoskeletal system and the skin) due to hormonal influence and the development of the foetus in utero. This study utilized one group pre-test and post-test quasi experimental research design. 100 pregnant women were recruited using total enumeration method but 95 completed the study. A self-developed structured questionnaire was used to collect data and an enhancing training package was used as an intervention to train the pregnant women on minor disorders of pregnancy. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 21. Descriptive statistics of tables and percentages were used to analyze data collected and hypothesis was tested using paired t-test and ANOVA at 0.05 level of significance. The finding showed high level knowledge of pregnant women on minor disorders of pregnancy after intervention with mean value of 19.25 compare with pre-intervention knowledge mean value of 14.86. The most commonly experienced minor disorder of pregnancy identified was back aches (70.5%). The result further revealed a significant difference between pre-intervention and post-intervention mean score knowledge of pregnant woman on minor disorders of pregnancy ($t=18.603$, $p=0.00$). The knowledge of pregnant women on minor disorders of pregnancy was found to be poor prior intervention but there was a tremendous improvement after intervention.

KEYWORDS: Enhancing Training Package, Minor Disorders of Pregnancy

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I. INTRODUCTION

Pregnancy is an important happening in the life of women which requires a standardised form care from the beginning of pregnancy to the end of puerperium, and the wish of every pregnant woman is to become a joyful mother with a complication free pregnancy [1]. [2]The body of a pregnant woman has a natural way of showing signs that its getting ready for the new phase of life she's about to enter into as a result of hormonal influence on the body which leads to some degrees of minor disorders such as varicosities, pica, oedema, back ache, leg cramp and insomnia. [3] Reported that 11% of pregnant women from Israel and 38% from England experience constipation during pregnancy. [4] Conducted a study on pregnant women which revealed that 54% of the women had suffered leg cramps after the 25th week of pregnancy. [5] further estimated that 48% of all pregnant women had backache; also a study conducted in selected hospitals in Oyo state Nigeria. [6] revealed that out of 300 pregnant woman who participated in the study, more than two thirds of them experienced nausea and vomiting,(79.9%) and 77.7% had back ache.

Complications that may result from improper identification and late presentation of these minor disorders are hyperemesis gravidarum, urinary tract infection, preterm contraction, faecal impaction, preeclampsia, anaemia which can result into hospitalisation of pregnant woman [7]. However, counselling and health education are very important in helping the woman to differentiate between minor discomfort and when major complication has set in, and also for the woman to overcome challenges of minor discomfort of pregnancy.[8] There are impediments to correct assessment of these minor disorders of pregnancy in developing countries due to lack of proper documentation that will serve as reference point for decision making, and thus causing hindrances to correct planning, control, preventive and evaluation programme [9]. On account of the above, it becomes necessary to assess and enhance knowledge of pregnant women on minor disorders of pregnancy. Therefore, this study was guided by the following research questions and hypothesis.

Research questions

1. What is the pre intervention knowledge of pregnant women on minor disorders of pregnancy?
2. What is the post intervention knowledge of pregnant women on minor disorders of pregnancy?
3. What is the occurrence of minor disorders of pregnancy among pregnant women?

Hypotheses

There is a significant difference between pre and post interventions mean score of knowledge of pregnant women on minor disorders of pregnancy.

II. METHODOLOGY

Research design: One group pre-test and post-test quasi experimental design was adopted for this study.

Research setting: This study was carried out at the antenatal clinic of State Specialist Hospital, Asubiaro, Osogbo owned by Osun State Government.. The hospital provides different kinds of services such as inpatient and outpatient services, the obstetrics and gynaecology units consists of both clinics and wards (antenatal clinics/wards, labour room, postnatal clinics/ward, gynaecological clinics/ward), laboratory unit, physiotherapy department, ultrasound unit, hospital pharmacy, dental clinic and catering services. The hospital serves as referral centres for all privates' hospitals, primary health care centres and traditional birth attendants within the state. It has about one hundred and fifty nurses of different cadre, Doctors, other health care workers and non-medical personnel as part of its staff strength.

Population: The study population comprised of pregnant women that attends antenatal clinic of State Specialist, Hospital, Asubiaro, Osogbo with average attendance of 120 pregnant women per week.

Sampling technique: State Specialist Hospital Asubiaro, Osogbo was selected because of its high antenatal patient flow in the town and it is a secondary health institution in Osogbo local government.Total enumeration was adopted for this study with 100 pregnant women that attend antenatal clinic for two consecutive weeks were recruited, with 95 of the women completed the study.

Instrumentation: The two instruments used to collect data were: A pregnant women social demographic data (PWSDD) composed of six questions to measure the demographic data of pregnant woman; Test paper on knowledge of pregnant women on minor disorders of pregnancy (KPWMDP) to assess knowledge of pregnant women on minor disorders of pregnancy. It consists of 11 questions. The maximum scores for correct response were 11. The scores were grouped into three as follows: Scores between 1-4 were considered low knowledge, Scores between 5- 7 were considered moderate knowledge, Scores between 8 -11 were considered high knowledge.

Validity/Reliability of Instrument: The face and content validity of the instruments were assured by presenting the instruments to the expert in the field, corrections done before administration of the instruments to 20 pregnant women in another hospital where the pregnant women are not part of the study population.

Reliability: The reliability of the instruments was established through an internal consistency approach. The instruments were administered to 20 pregnant women that attended antenatal clinic at State Hospital Ede Cottage area Ede Osun State. The correlation coefficient of internal consistency of the test was computed and Cronbach's Alpha show coefficient of 0.814 at 5% level of significance.

Method of Data Collection: This involves three stages; pre-intervention, intervention and post-intervention

Pre-intervention Phase: The pregnant women at the antenatal clinic were recruited. The objectives, benefits and stages of the study was explained to them, the timing, venue and duration for each phase were discussed, principles guiding ethical conduct of the study was ensured (confidentiality, autonomy, beneficence, Non-maleficence and justice). All questions raised by the participants were answered.

Intervention phase: The participants were taken through the objective of this phase, lectures was given on how to differentiate between minor disorders of pregnancy and serious disorders and what to do next. This phase was divided into five sessions as follow:

Session one: Participants were reminded of the purpose of the study, informed consent was obtained and a pre-test paper was administered to them in order to evaluate their pre-intervention knowledge on selected minor disorders of pregnancy.

Session two: At the second week, some of the identified minor disorders of pregnancy were discussed. The objectives of the teaching session were as follows:

- i. Identify and define nausea and vomiting, backache and haemorrhoid.
- ii. List causes of nausea and vomiting, backache and haemorrhoid
- iii. Mention the signs and symptoms of nausea and vomiting, backache, haemorrhoid
- iv. List what can be done.

This session was held for one hour thirty minutes and participants were allowed to ask questions and all their questions were answered.

Session three: At the third week, participants were trained on steps by steps approach in the management of the identified minor disorders of pregnancy. Participants were allowed to ask questions and their questions were answered.

The objectives of the teaching session were as follows:

- i. Identify and define heart burn, constipation, varicosities
- ii. List the causes of heart burn, constipation, varicosities
- iii. Mention the signs and symptoms of heart burn, constipation, varicosities
- iv. List what can be done

Session four: At the fourth week, the participants were taken through step by step approach in management of some other identified minor disorders of pregnancy, it includes the review of what has been taught previously, and clarifications were made where necessary. Participants were allowed to ask questions and answers were provided. The objectives of the fourth teaching session were as follow:

- i. Identify and define oedema, leg cramp, vagina discharge.
- ii. List the causes of oedema, leg cramp, vagina discharge.
- iii. Mention the signs and symptoms of oedema, leg cramp, and vagina discharge.
- iv. List of what to do.

Evaluation /Post-intervention Phase

This is the last phase in which post-test was conducted in order to determine their knowledge on minor disorders of pregnancy. This was done at two weeks after the completion of the intervention.

Enhancing training package includes the following:

- (i) Definition of minor disorders of pregnancy
- (ii) Causes
- (iii) Complications
- (iv) What to do

Ethical consideration: An approval was obtained from the management of State Specialist Hospital Asubiaro, Osogbo following presentation of introductory and the approval letter from Health and Ethical Research Committee of Babcock University, Ilishan Remo. All respondents were informed of the purpose of the study, and they were assured of strict confidentiality and the opportunity of withdraw from the study when they desire.

Method of Data Analysis: The data were analysed using Statistical Package for Social Science Version (SPSS) 21.0. One hundred respondents started the study but only ninety five completed the study. The study was analysed using descriptive statistics (percentages and mean).Inferential statistics of paired t–test and ANOVA was utilized to test two hypotheses at 0.05 significant levels. The results were presented in tables.

III. RESULTS AND DISCUSSION

Table 1 Pregnant woman Social Demographic Data (PW-SDD)

Variables	Frequency (N= 95)	Percentage%
Age range		
Below 20 years	7	7.4
21 - 30 years	48	50.5
31 - 40 years	37	38.9
41 years and above	3	3.2
Total	95	100.0
Level of Education		
No formal education	2	2.1
Primary education	3	3.2

Secondary education	36	37.9
Tertiary education	54	56.8
Total	95	100.0
Occupation		
Self-employed	40	42.1
Professional	20	21.1
Civil Servant	30	31.6
Full housewife	5	5.3
Total	95	100.0
Number of Pregnancy		
1 - 2	49	51.6
3 - 4	36	37.9
5 - 6	9	9.5
6 and Above	1	1.1
Total	95	100.0
Number of Children		
0	32	33.7
1 - 2	53	55.8
3 - 4	8	8.4
5 - 6	2	2.1
Total	95	100.0

The findings of the study showed that majority of the respondents were between the ages of 21 to 30 years 48 (50.5%).The study also showed that 54 (56.8%) of them had tertiary level of education, and they represented the majority. Also 40 (42.1%) were self-employed, Larger percentage of the respondents 49 (51.6%) had been pregnant at least 1 or 2 times while Majority of them 53 (55.8%) had either 3 or 4 children.

Table 2 Summary of Pre and post intervention knowledge of pregnant women on minor disorders of pregnancy

Knowledge of pregnant women on minor disorders of pregnancy	Score category	Pre-intervention		Post intervention	
		Frequency	Percentage%	Frequency	Percentage%
Below average	1 – 4	67	70.5	2	2.1
Average	5 – 7	24	25.3	30	31.6
Above average	8 – 11	4	4.2	63	65.3
Total		95	100	95	100
Mean		14.86		19.25	
Mean gain		4.39			
Maximum		21		21	
Minimum		12		14	
Range		9		7	
Standard Deviation		1.742		1.502	

Source: Researcher's Report 2019

The findings from Table 2 reveal that the pre intervention knowledge of pregnant women on minor disorders of pregnancy was low with majority 67(70.5%) were below average grade 1-4in an obtainable 11 marks, there was improvement in the post-intervention knowledge of pregnant woman as the pre-intervention mean score was 14.86 ± 1.742 as against a higher post-intervention mean score which was 19.25 ± 1.502 and with mean gain of 4.39. Therefore, the findings from the table shows that pre-intervention knowledge of pregnant woman on minor disorders of pregnancy was low. This confirms the report of [7] which reveals that 59% Of pregnant women had poor knowledge regarding minor disorders of pregnancy with deficits in most of the areas and mean score knowledge was 28.25 with standard deviation of 1.74. The result agreed with others that there was a need to train pregnant women on minor disorders of pregnancy so as to make antenatal period uneventful.

Table 3 Occurrence of minor disorders of pregnancy among pregnant women

Variables	Frequency(N=95)	Percentage %
Backache	67	70.5
Nausea and Vomiting	50	52.6
Oedema	45	47.4
Heart burn	42	44.2
Constipation	41	43.2
Leg cramp	30	31.6
Vaginal discharge	18	18.9
Haemorrhoids	13	13.7
Varicosities	5	5.3

Source: Researcher's Report 2019

Table 3 reveals that backache 67 (70.5%) is the most prevalent minor disorder among the respondents, followed by nausea and vomiting 45(52.6%) while oedema was 45 (47.2%), 42 (44.2%) experienced heart burn in pregnancy and 41 (43.2%) had constipation. Also, leg cramp had 30 (31.6%), 18(18.9%) of the respondents experienced increased vaginal discharge, 13(13.7%) had haemorrhoids and 5(5.3%) had varicose veins. This was in line with the study conducted by [6] that majority of the pregnant woman (79.9%) of the pregnant women experiences minor disorders of pregnancy. Also the study conducted by [4] confirmed that the selected minor disorders were common among pregnant woman.

Hypothesis : There is a significant difference between pre-intervention and post-intervention mean score knowledge of pregnant woman on minor disorders of pregnancy.

Table4: Paired t-test to compare pre-intervention and post-intervention mean score knowledge of pregnant women on minor disorders of pregnancy

Knowledge of pregnant woman on minor disorders of pregnancy	Mean	N	Standard deviation	Std. error. Mean	Df	T	p value
Pre intervention scores	14.86	95	1.742	0.179	94	18.603	0.000
Post-intervention scores	19.25	95	1.502	0.154			

The mean are significant at the 0.05 level

Table 4: It was observed that there was a significant difference between pre-intervention and post-intervention mean score knowledge of pregnant woman on minor disorders of pregnancy ($t=18.603$, $p= 0.00$). Hence the alternate hypothesis which stated that there is a significant difference between pre-intervention and post-interventions mean scores knowledge of pregnant woman on minor disorders of pregnancy was accepted. The findings of this study was similar to that of [7] that shows a significant difference between pre-test mean scores 19.56 ± 6.68 and post-test knowledge of pregnant women 37.58 ± 2.93 at the level of $p \leq 0.05$ which implies the effectiveness of the enhancing training package. Findings of [4] confirmed that a planned teaching programmed significantly improve knowledge of pregnant women on minor disorders of pregnancy. Outcome of this study is contrary to the study conducted by [8] who reported in her study that 49% of pregnant woman possessed inadequate knowledge on minor disorders of pregnancy while 30% revealed moderate knowledge and 10% possessed adequate knowledge.

IV. CONCLUSION

Knowledge of pregnant women on minor disorders of pregnancy was found to be poor before intervention but there was a tremendous improvement after intervention. This shows that the enhanced training that was giving to pregnant women helps to improve their knowledge on what minor disorders of pregnancy are what to do in order to reduce the rate of hospitalization, maternal and fetal morbidity and mortality among pregnant women. It is therefore very crucial to health educate pregnant women regularly on minor disorders of pregnancy.

V. RECOMMENDATION

1. Studies can be conducted on midwives view on attitudes of pregnant women to training session on minor disorders of pregnancy.
2. Studies can be conducted on prevalence of hospital admission as a result of minor disorders of pregnancy.

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