

ASSESSMENT OF PATIENTS KNOWLEDGE OF RISK FACTORS OF POSTPARTUM DEPRESSION IN SELECTED HOSPITALS IN EDO STATE

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ABSTRACT

Depression is currently ranked second among the 10 leading causes of the global burden of disease and has a global prevalence high as 60% which is worrisome. Postpartum Depression (PPD) can cause long-term consequences in both mother and child like infanticide, dysfunctional maternal-infant relationship, oppositional defiant disorder and conduct disorder. This study is carried out to assess the knowledge of risk factors of PPD among women attending antenatal clinic in Central Hospital, Benin City, Edo State. A non-experimental research design was used and a sample size of 130 was selected from a total population using Taro Yamane's formulae. A self-developed structured questionnaire was given to experts for face validation, while the reliability was determined through internal consistency and reliable with a Cronbach's alpha value of 0.79. Data was retrieved and analysed using statistical package for social sciences programme (SPSS) and presented in tables, percentages and inferential statistics using the Chi square test at 95% confidence interval. Findings revealed that women attending antenatal Clinic have no knowledge about PPD risk factors and the screening tool. Further findings showed that the myth and beliefs identified by women towards PPD include "all new mothers are depressed and fatigue after childbirth so it is normal" (70.83%), women with PPD looked depressed, you will know when you see her (72.5%) and if you have never been depressed before, you won't experience PPD (72.5%). Hypothesis tested revealed the P-value of chi-square statistics to be 0.001 which is less than 0.05 (level of significance), hence this confirmed that there is a significant relationship between educational level of women and their knowledge on risk factors of PPD. Nurses should therefore be actively involved in educating women about the risk factors of PPD in the antenatal clinic and skills should be provided at all level of the health care system.

Keywords: Infanticide, Dysfunctional, Maternal-Infant relationship, Women of Child Bearing Age.

INTRODUCTION

The birth of a child represents a crucial event in a woman's life, bringing about substantial challenges to personal identity, daily activity organization and family structure (Bassi, Fave, Cetin, Melchiorri *et al.*, 2016). The World Health Organization (WHO) in its 2017 World Health Day news release estimated that more than 300 million people are now living with depression, an increase of more than 18% between 2005 and 2015. Depression which is currently ranked second among the 10 leading causes of the global burden of disease has a global prevalence as high as 60%. Postpartum depression (PPD) is a serious public concern that affects approximately 13% of women who give birth (Ferrari, Charlson, Norman, Paten, Freedman & Murray, 2013), with an estimated prevalence of 9.4%-12.7% during pregnancy and up to 21.9% during the first postpartum year (Miller, McGlynn, Suberlak, Rubin, Pirec *et al.*, 2012). The Diagnostic and Statistical Manual of Mental Disorders defines PPD as having five or more of the following symptoms for at least two weeks: insomnia/hypersomnia, psychomotor agitation or retardation, fatigue, appetite changes, feelings of hopelessness or guilt, decreased concentration, and suicidality. These episodes begin within 4 weeks postpartum and may last one year. (Asli, Goker, Yanikkerem, Demet, Dikayak, Yildirim *et al.*, 2012). One of the subtypes of MDD (major depressive disorder) recognized by the *Diagnostic and Statistical Manual of Mental Disorders IV* (DSM-IV-TR) is post-partum depression (PPD) (Ordonez & Collins, 2015). As routine screening for this condition has become very necessary in routine obstetric care, data are now more readily available to assist researchers in identifying patient characteristics that may be associated

with increased risk of PPD. (McCoy, Beal, Shipman, Payton & Watson, 2010).

Risk factors that have been identified are poor marital relationship, prenatal depression, illness of the child, low socioeconomic status, low educational level, unwanted pregnancy, obesity, previous history of postpartum depression, and physical symptoms, also some risk factors are merely seen in such as sex of the infant and grand multiparity (Asli *et al.*, 2012). In a study by Johnstone *et al* 2010 certain risk factors were not necessarily consistently identified across studies, for example, poor marital relationship has been consistently identified as a risk factor for PPD, while obstetric complications such as complications of pregnancy, labour and delivery were identified as a risk factor in four studies, but not in nine separate studies. Complicated labour resulting in an emergency procedure has been identified as a potential risk factor for PPD in some studies but there are conflicting results showing no association with mode of delivery and risk of PPD (Asli 2012). This in turn would reduce maternal and child health morbidity and mortality rate. **Ordonez & Collins** 2015 stated that despite its high prevalence, the risks of untreated symptoms, and opportunities for contact with healthcare providers, depression is grossly under detected during routine antenatal care. Screening women during antenatal care with a validated tool, such as the Edinburgh Postnatal Depression Scale (EPDS), substantially improves detection. For example, in a study of pregnant women, clinicians recognized depression in only 26% of women who screened positive on the EPDS, also postpartum, routine clinical evaluation identified 6.3% of a study population as having depressive symptoms, whereas 35.4% screened positive for depressive symptoms with the EPDS, a clinically and statistically significant difference. Studies such as these have led to widespread policy initiatives to promote universal antenatal depression screening (Miller *et al.*, 2012). Therefore, it is important to identify risk factors for PPD and to diagnose PPD in the early postpartum period to enable an immediate intervention (Asli

et al., 2012). According to Miller *et al.*, (2013), the maternal and fetal risks of untreated depression during pregnancy can be substantial, including an increased risk of preterm labour and reduced birth weight, Miller further stated that offspring born to women with untreated antenatal depression may experience poorer growth, increased risk of infection, altered stress response, and more difficult temperaments the importance of PPD lies in the fact that it is associated with long-term effects on family and child. Marital relationships are frequently affected. According to the Kaitler (2015) the most common myths about PPD, are the facts behind the misconception. Which are that All new mothers are depressed and fatigued after childbirth, so it's normal: All new mothers do experience a variety of emotions, which can be fuelled by exhaustion and a feeling of overwhelm. When these symptoms are lasting longer than two weeks and are beginning to interfere with your functioning, you might be experiencing PPD. PPD only occurs immediately after your child is born and if it doesn't, you won't get it: Most women tend to recognize their symptoms within the first three to fourth months following childbirth. However, symptoms can develop any time within the first year of your child's life. PPD will go away on its own, especially if you are just more positive or get more sleep: Untreated PPD can continue into a more chronic form of depression if it is left untreated. This makes it important to seek help when you begin to notice significant symptoms and impairment in your abilities. Women who experience PPD hurt their baby: Some women who have the action of hurting themselves is typically only followed through on when the depression is severe. A number of moms experiencing PPD experience passive suicidal thoughts, but do not ever consider a plan or going through with the action. Women with PPD look depressed, you'll know her when you see her: Contrary to popular belief, just like any other mental health concern, presentation of PPD is very individualized and will look different across mothers. Most women who experience PPD are still able to function in their roles of

mother, wife, and/or employee, but suffer greatly on the inside. PPD is your fault, the result of something you did or did not do, or the environment you live in: Hormone shifts, such as estrogen and progesterone, are one of the primary reasons for PPD. You do not have control over these shifts. Do not dismiss the symptoms because they are real and can improve with professional help. Nursing mothers can't take antidepressants: Research shows that of the antidepressants, SSRIs, like Zoloft, are considered to be the safest for women who are breastfeeding. If you've never been depressed before, you won't experience PPD: However, that does not mean that if you have, you will, or if you've never experienced depression prior, you are immune to PPD. All new mothers run a potential risk.

WHO 2017 identified strong links between depression and other non-communicable disorders and diseases, depression increases the risk of substance use disorders and diseases such as diabetes and heart diseases; the opposite is also true, meaning that people with these conditions have a high risk of depression. According to Asli *et al.*, (2012), Women are usually supported by their families and friends during the puerperal period, during pregnancy and the puerperal period, women are followed up at primary health care centres on behalf of the Ministry of Health doctors, nurses, and midwives working at these centres are the primary health professionals to contact puerperal women and identify PPD. Standard treatments for PPD include psychotherapy and antidepressants. However, treatment of a thyroid condition or insomnia, or even regular exercise or massage may also be beneficial (Ordonez & Collins, 2015).

The increase in the rate of depression in our society is obviously alarming as it has become the second of the global burden diseases, this has led to a hike in suicide rates. The case is no different in PPD which causes dysfunctional maternal-infant relationship, oppositional

defiant disorder, conduct disorder, infanticide, altered child development and concurrently other psychiatric disorders as well as increase in maternal and child health morbidity and mortality rate. The aim of this research is to determine knowledge on the risk factors and screening of PPD to inadvertently inform our mothers about this creeping disease and equip them with knowledge to seek medical help immediately and join forces to tackle this global problem as it is obvious in the WHO theme of its 2017 world health day as 'depression let's talk', the problem of the society not talking and not being mentally aware should be curbed. This research will participate in the global trend of creating awareness on the risk factors and screening of depression, this would create a pathway for making mothers and the society mentally aware and as such make it easy for them to know when and where to seek help. This study may also secure a safe spot for screening during antenatal care by health care providers.

OBJECTIVES OF THE STUDY

1. To determine women's knowledge on the risk factors of PPD.
2. To identify myths and beliefs women have towards PPD.

RESEARCH QUESTIONS

1. What is women knowledge about the risk factors of PPD?
2. What is their knowledge about myths and beliefs of PPD?

HYPOTHESIS

H₀: There is no association between educational level of participants and their knowledge of risk factors of PPD.

METHODOLOGY

Descriptive research design was adopted in this study. Non-experimental survey research design was selected for the research. It is a quantitative research. This research was carried out in Central hospital Benin City, which is a government hospital located along Sapele road in Oredo Local government area. The hospital was created in 1902 by the British government before independence with the headquarters at Ibadan. In 1963, Midwest region was created with the headquarter in Benin City and Central hospital under the Ministry of Health. In 1970, Hospitals management board was established by an edit by the then Military government under late Brigadier S.O. Ogbemudia's regime. Edo State hospital's management board was the first to be established in Nigeria. Central hospital started with name General hospital in the early seventies and was changed to Specialist hospital which now metamorphosed to Central hospital in the eighties. It is made up of various departments that render specialized care to patients with varied problems. It is in charge of curative health care and training of personnel. It has a staff strength of seven hundred and twenty working in twenty-six departments. There are thirty-two units with four hundred and twenty bed spaces.

The population of the study constitute 773 women of child bearing age according to the data (from the ANC health information unit of the hospital) who attend antenatal clinic from 1st of February to 30th of February 2018, in Central hospital, Benin City. Inclusion criteria: All pregnant women of childbearing age (15-45) and above attending the Antenatal clinic of the Central hospital for the month of February. All pregnant women of childbearing age below the age of 15 years attending the Antenatal clinic of the Central hospital for the month of February were excluded from the study. A sample of 130 respondents attending the clinic for a whole week was used for the study using the Taro Yamane, (1967) formula and the respondents were selected as they visited the clinic. Non-

probability convenient sampling technique was used to select the respondents that took part in the study.

A self-developed structured questionnaire which consists: section A, demographic data of the respondents. Section B assessed the knowledge on PPD risk factor, Questions in section C relates to the myths and belief associated with PPD, as perceived by the participants.

Scoring of knowledge: Questions were used to assess the respondents' knowledge. Minimum and maximum scores were calculated as 0 and 20. The scores were converted to percentages and graded as follows: scores below 50% were graded as having poor knowledge while those with 50% and above were graded as having good knowledge.

Scoring of myths and belief: Any question above 50% is score as positive.

The reliability was established using 20 women attending antenatal clinic in the university of Benin Teaching Hospital, Benin City, Edo State that possessed similar characteristics with the population of interest and yielded Cronbach's Alpha reliability coefficient of 0.799.

RESULTS

As presented in table 1, the demographic characteristics of the respondents are as follows; majority of the respondents are between 20-35 years 53 (44.200 %), 13 (10.84%) of the respondents are between the ages 14-19 years, 21(17.5%) of the respondents are between 15 and 19, and 33 (27.50) are above 35 years. From the table, 40 (33.3%) of the respondents have tertiary education, 56(46.70%) of the respondents have secondary education, 12(10%) of the respondents have primary education, 12(10%) have no education. The Marital Status from the table 1 shows that, 95(79.17%) of the respondents are married, while 25(20.83%) of the respondents are single.

TABLE 1:

Socio- demographic characteristics of respondents			
Variable	Category	Frequency (n= 120)	Percentage (%)
Age	10-14	13	10.80
	15-19	21	17.50
	20-35	53	44.20
	Above 35	33	27.50
	Total	110	100
Education	Tertiary	40	33.30
	Secondary	56	46.70
	Primary	12	10.00
	None	12	10.00
	Total	110	100
Marital status	Married	95	79.2
	Single	25	20.8
	Total	110	100

The Table 2 above reveals that 74(61.67%) of the respondents have never heard of PPD and, 46(38.33%) of the respondents have heard of PPD, 45(37.50%) of the respondents say discontinuation of breastfeeding can cause PPD, while 75(62.50%) say it cannot cause it. 78 (65%) of the respondents say that low birth weight of a baby can cause PPD, while 42(35%) of the respondents do not agree. 53(41.17%) claimed financial status is a contributing factor to PPD, while 67(55.83%) say it is not. 73(60.83%) of the respondents claimed cultural factors lead to PPD, while 47(39.17%) say it cannot. 69(57.5%) of the respondents say poor marital relationship leads to PPD, while 51(42.5%) of the respondents say it cannot. 54(45%) of the respondents say that the level of educational qualification can lead to the development of PPD, while 66(55%) say it cannot. 56(46.67%) of the respondents say sleep dysregulation is a risk factor for PPD, while 64(53.33%) say it cannot. 67(55.83%) of the respondents say antenatal stress can lead to PDD, 53(44.17%) say it cannot. 44(36.67%) say that psychological distress predisposes to PPD, 76(63.33%) say it cannot. 73(60.83%) of the respondents say that lack of parental competence can lead to PPD, 47 (39.17%) do not agree. 73 (60.83%) of the respondents say partner

violence can result in PPD, 47 (39.17%) say it cannot. The table above reveals that 71(59.17%) of the respondents say that endometriosis can lead to PPD, 49 (40.83%) say it cannot. 53(41.17%) of the respondents say that urinary tract infection can result in the development of PPD, 67 (55.83%) do not agree. 48 (60%) of the respondents say that unwanted pregnancy is a risk factor of PDD, but 72 (60%) say it is not a risk factor. 54 (45%) of the respondents say previous history of psychiatric disorder can predispose to PPD, 66 (55%) of the respondents say it cannot. 57 (947.5%) diabetes mellitus can contribute to the development of PPD, 63 (52.5%) of the respondents do not agree.

From the table above, 73 (60.83%) of the respondents say that age of the mother is a risk factor to PPD, 47 (39.17%) say it is not a risk factor. From the table above, 86 (71.67%) of the respondents say that the mother can lead to PPD, 34 (28.33%) of the respondents say it cannot. 76 (63.33%) of the respondents say that blood levels of certain hormones are a risk factor for PPD, 44(36.67%) say it is not a risk factor. 72(60%) of the respondents say the level of vitamin D in the blood can lead to PPD, 48(40%) say it cannot lead to PPD.

This study conclude that the level of knowledge about PPD risk factor is low.

Table 2:
Knowledge about risk factors of postpartum depression (PPD)

RESPONSE	YES	NO
Have you ever heard of postpartum depression?	74(61.67%)	46(38.33%)
Can discontinuation of breastfeeding predispose to postpartum depression?	75(62.50%)	45(37.50%)
Can low birth weight of a baby result in PPD?	42(35%)	78(65%)
Is financial status a contributing factor to PPD?	67(55.83%)	53(41.17%)
Can poor marital relationship lead to PPD?	47(39.17%)	73(60.83%)
Can level of educational qualification lead to the development of PPD?	51(42.5%)	69(57.5%)
Is circadian rhythm/sleep dysregulation a risk factor for PPD?	66(55%)	54(45%)
Can antenatal stress lead to PPD?	64(53.33%)	56(46.7%)
Can psychological Distress predispose to PPD?	53(44.17%)	67(55.83%)
Can Lack of parental competence lead to PPD.	76(63.33%)	44(36.67%)
Partner violence can result in PPD.	47(39.17%)	73(60.83%)
Endometriosis can lead to PPD.	49(40.83%)	71(59.17%)
Unwanted pregnancy can lead to PPD?	67(55.83%)	53(41.17%)
Previous history of psychiatric disorder can predispose to PPD?	72(60%)	48(40%)
Diabetes mellitus can contribute to the development of PPD?	66(55%)	54(45%)
Age of the mother is a risk factor for PPD?	63(52.5%)	57(47.5%)
Parity of the mother can lead to PPD?	47(39.17%)	73(60.83%)
Blood levels of certain hormones (oxytocin, estradiol, progesterone) is a risk factor for PPD.	34(28.33%)	86(71.67%)
Can the level of blood vitamin D lead to PPD?	44(36.67%)	76(63.33%)

Figure 1 shows the level of knowledge of Screening tool. This study shows that 63.3% has poor knowledge about the screening tool while

36.7% has good knowledge. This study observe that majority of respondent has poor knowledge about screening tool.

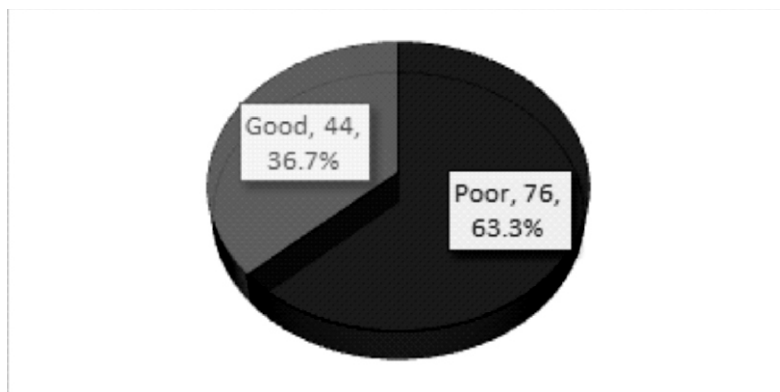


Figure 1: Level of Knowledge of Screening tool

Also Table 3 shows that, 85(70.83%) of the respondents agree with the myth that all new mothers are depressed and fatigued after childbirth, so it is normal, 35(29.17%) say it does not. 35(29.17%) of the respondents agree with the myth that PPD only occurs immediately after your child is born and if not, you won't get it, 85(70.83%) do not agree with the myth. 47(39.17%) of the respondents show that PPD will go away on its own, especially if you are just more positive or get more sleep, 73(60.83%) do not believe it. 87(72.5%) of the respondents believe that Woman who experience PPD hurt their baby while 33(37.5%) of the respondents do not believe it. 78(65%) of the respondents believe that Women with PPD look depressed, you'll know her when you see her, 42(35%) do not believe so. 47(39.17%) of the respondents believe that

PPD is your fault, the result of something you did or did not do, or the environment you live, 73(60.83%) of the respondents do not believe it. 38(31.67%) of the respondents believe that nursing mothers can't take antidepressants, 82(68.33%) do not believe so. 87(72.5%) believe that If you've never been depressed before, you won't experience PPD, 33(37.5%) do not believe it.

This study show the Myths and beliefs associated with postpartum depression in clude the following:

All new mothers are depressed and fatigued after childbirth, so its normal 85(70.83%), Women with PPD look depressed, you'll know when you see her 87(72.5%) and If you've never been depressed before, you won't experience PPD 87(72.5%).

Table 3:
Myths and beliefs associated with postpartum depression

MYTHS/BELIEFS	YES	NO
All new mothers are depressed and fatigued after childbirth, so its normal	85(70.83%)	35(29.17%)
PPD only occurs immediately after your child is born and if not, you won't get it.	35(29.17%)	85(70.83%)
PPD will go away on its own, especially if you are just more positive or get more sleep	47(39.17%)	73(60.83%)
Woman who experience PPD hurt their baby	87(72.5%)	33(37.5%)
Women with PPD look depressed, you'll know when you see her.	47(39.17%)	73(60.83%)
PPD is your fault, the result of something you did or did not do, or the environment you live	38(31.67%)	82(68.33%)
Nursing mothers can't take antidepressants	87(72.5%)	33(37.5%)
If you've never been depressed before, you won't experience PPD		

HYPOTHESIS

There is no relationship between educational level of participants and their knowledge of risk factors of PPD. As presented in Table 4, respondents with no formal education have the least proportion with good knowledge 2(16.7%) while those with tertiary education have the highest proportion with good knowledge. This association is statistically significant (p<0.001). We therefore reject the null hypothesis which states that there is no significant association

between educational level of participants and their knowledge of risk factors of PPD. The researcher used chi-square statistics to test stated hypothesis at a significance level of 0.05. The decision rule is based on the p-value that is associated with the chi-square test. Thus, if the p-value that is associated with the chi-square test is less than 0.05 (significance level), reject the null hypothesis (H₀) but if the p-value is greater than 0.05, accept H₀.

Table 4:
Association of level of education with knowledge of PPD

	Poor	Good	Total
None	10(83.3)	2(16.7)	12(100.0)
Primary	9(75.0)	3(25.0)	12(100.0)
Secondary	44(78.6)	12(21.4)	56(100.0)
Tertiary	13(32.5)	27(67.5)	40(100.0)
Total	76(63.3)	44(36.7)	120(100.0)

$\chi^2 = 24.745; p < 0.001$

DISCUSSION

This study was to assess the knowledge of risk factors of PPD among childbearing age women attending antenatal clinic in Central Hospital, Benin City. Demographic characteristics of this study showed that majority of the respondents are within 20-35 years, majority of the respondents have secondary education and are Christians, majority of the respondent are married and majority of the respondents are Esan by tribe.

Finding from our study revealed women attending antenatal clinic in Central Hospital Benin has a poor knowledge of the risk factors of PPD and screening tool. This study support the study of Afolayan Onasoga Rejuaro, Yusuf, Gambari & Onuabueke (2016) who reported that there is knowledge deficit among nurse midwives in a Nigerian Tertiary Hospitals. and Jones (2011) and who reported same.

Our results revealed that Myths and beliefs associated with postpartum depression about women attending Central Hospital antenatal clinic include: All new mothers are depressed and fatigued after childbirth, so its normal 85(70.83%), Women with PPD look depressed, you'll know when you see her 87(72.5%) and If you've never been depressed before, you won't experience PPD 87(72.5%). This is inconsistent with Kaitlan (2015) who presented facts behind this misconception, stating that all new mothers do experience a variety of emotions, which can be fuelled by exhaustion and a feeling of overwhelm. "When these symptoms are lasting

longer than two weeks and are beginning to interfere with your functioning, you might be experiencing PPD". The writer further said that when a mother does hurt or kill her child, what is likely occurring is postpartum psychosis. Mani *et al.*, (2012) reported that women who have thoughts of hurting their child; although they may have these thoughts that does not mean they will be followed through on. Results from the study also shows that 87 (72.5%) of the respondents believe that if you have never been depressed before, you won't experience PPD which is not in consistent with the findings of Fatameh, (2015) who stated that this is in fact untrue as if one has previously suffered from depression there is a higher chance that you might experience PPD, when compared to the average person. This is likely because of the associated hormone fluctuations. If your body has already experienced those types of fluctuations in the past, it possibly will again. However, that does not mean that if you have, you will, or if you've never experienced depression prior, you are immune to PPD. All new mothers run a potential risk (Kaitlan, 2015).

Lastly, this study showed that there is a relationship between educational level of participants and their knowledge of risk factors of PPD which is at less than 0.05(level of significance) This is also consistent with Mani *et al.*, (2012) who revealed that in previous studies of adults in developing countries, female gender, low level of education and poverty were strongly associated with common mental disorders.

NURSING IMPLICATION

It has been shown from this study that women attending antenatal clinic in Central Hospital, Benin City do not have sufficient knowledge about the risk factors of PPD, this has an implication for nursing practice in the area of health education, creating awareness on PPD risk factors will help in early detection and prevention of PPD and its complications. According to Miller *et al.*, (2013), the maternal and fetal risks of untreated depression during pregnancy can be substantial, including an increased risk of preterm labour and reduced birth weight, Miller further stated that offspring born to women with untreated antenatal depression may experience poorer growth, increased risk of infection, altered stress response, and more difficult temperaments. Hence the importance of PPD lies in the fact that it is associated with long-term effects on family and child. Provision of effective treatment for PPD is not enough, resources invested in providing curative treatment should also be invested in preventive measures such as educating mothers on the risk factors of PPD, so as to enable them report promptly on identification of any predisposing factor, dispelling misconceptions, myths/beliefs perceived about PPD that would have prevented women from accessing medical treatment, also early detection and screening of PPD which would prevent complications affecting mother and child that would have been caused by PPD.

CONCLUSION AND RECOMMENDATIONS

The importance of the knowledge of PPD cannot be over-emphasized among women of child bearing age as this condition can be detected easily and treated if detected early, thereby preventing its grave complications which is detrimental to both mother and child. Depression and in fact postpartum depression is a major health problem for Nigeria and other

countries of the developing world. Development of effective government sponsored mental health education programs in both rural and urban areas is essential for the women at every stage of life, mandatory inclusion of PPD into routine antenatal teaching can create awareness sufficient to facilitate prompt identification and prompt report to the hospital. PPD is a preventable disease and a key aspect of its prevention is early the knowledge of the risk factors by women of child bearing age.

There is need for creation of more awareness on the import its associated complications as a preventive measure to it. On the basis of analysis, it is recommended that government should create a medium whereby the members of the society not women alone will be enlightened about PPD risk factors and screening through antenatal health education seminars, drama, workshops, mass media and lectures in their own native languages. Public enlightenment campaign should be done in various places like antenatal clinics, public health centres, market places and even homes to reach low income, poorly educated women of child bearing age in order to present them with accurate facts about myths of PPD and to inform them about the importance PPD screening, men are not excluded. Health Care Providers especially nurses, should take a lead in the prevention of PPD. They should make use of every opportunity to educate women on PPD risk factors and services at every gathering.

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