

**EMOTIONAL, SPOUSAL AND FAMILY SUPPORTS AS PREDICTORS OF
MATERNAL DEPRESSION AMONG PREGNANT WOMEN ATTENDING
ANTENATAL CLINIC IN CIVIL SERVICE CLINIC, ILORIN, KWARA STATE**

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Abstract

Maternal depression is serious mental disorder predominant among pregnant women and new mothers. Unlike any other type of psychopathological issue, the repercussions of maternal depression are cancerous in nature as it affects a significant number of pregnant women, new mothers, spouses and the society at large. This study, therefore, examines the influence of emotional, spousal and family supports on maternal depression among pregnant women attending antenatal clinics in Civil Service Clinic, Ilorin. A descriptive cross-sectional survey was carried out using simple random sampling to select 200 pregnant women attending antenatal care in Civil Service Clinic, Ilorin, Nigeria. The study adopted Berlin Social Support Scale and Centre for Epidemiology Studies Depression Scale as its instrument. Results of the study indicates that spousal support significantly correlated with depression ($r=.165$; $P<.05$) and the relationship is weak and in positive direction. Family support significantly correlated with depression ($r=.180$; $P<.05$) and the relationship is weak and in positive direction. Also, prediction showed that emotional support, ($\beta = -.331$; $t = -3.567$; $P<.01$); spousal support ($\beta = .247$; $t = 2.738$; $P<.05$) and family support ($\beta = .236$; $t = 2.786$; $P<.01$) had significant independent prediction on depression among pregnant women. The third results indicated that participants with high level of spousal support scored significantly lower on depression than participants with low level of spousal support among pregnant women in Ilorin metropolis ($t(198) = -2.224$; $P<.05$). The last findings revealed that participants with high level of family support scored significantly lower on depression than participants with low level of family support among pregnant women in Ilorin metropolis ($t(198) = -3.516$; $P<.01$). This study was able to establish that when social support variables are adequately provided during pregnancy and after childbirth, maternal depression can be avoided from inception. Therefore, much support should be given to pregnant women and

nursing mothers by significant others to reduce the incidence of depression during pregnancy and after delivery.

Keywords: *Emotional Support, Spousal Support, Family Support Maternal depression, pregnant women*

Introduction

From time immemorial, pregnancy has been a period characterised by pains and joy. In many traditional societies, childbearing is often described as a responsibility of both man and woman to procreate. Many cultures around the globe frown at women who are infertile (Edge, 2015). Hence, women who have a high fecundity (number of times a woman can give birth throughout her lifecycle) are appreciated; especially in rural communities and culturally sensitive regions (Akujobi, 2011). Apparently, the values placed on procreation cannot be overemphasised in our society. Kotila and Mojinyinola (2015) found that over 200 million live births are recorded annually. However, it was discovered in their findings that problems associated with pregnancy from time of conception to delivery are enormous and unchecked.

Some of the symptoms associated with pregnancy are nausea, preeclampsia and high blood pressure. Apart from the physiological problems associated with pregnancy, emerging mental disorders such as anxiety, panic attacks, post-traumatic stress disorder and depression are creating serious concerns for health practitioners and care givers (Kelly, Russo and Katon, 2001). Consequently, research indicates that one of the major problems endangering the species of man is depression (WHO, 2012). This ubiquitous mental disorder is responsible for mood-swings, sadness, regrets and accounts for suicide. In fact, over 300 million people around the world are suffering from

depression (WHO, 2018). Notwithstanding, up to 10% of world female population have one or more depression (Albert, 2015). According to New York State Department of Health (2015), 1 in 7 pregnant women experience various forms of maternal depression in United States. While studies have been conducted on maternal depression in western world (Paulson, Bazemore, 2010; Grigoriadis, Vonder Porten, Mamisashvili, Tomlinson, Denis, Koren & Martinovic 2013), there is dearth of literature on maternal depression among women in Africa.

However, the available data indicate that maternal depression in developing countries remains undertreated with prevail encouraging between 15 to 57% (Madlala & Kassier, 2018), while in Africa, the range is between 7.1% to 34% (Agoub, Moussaoui and Battas, 2004; Pawlby & Pariante 2016; Hartley *et al.*, 2011; Gelaye, Rondon, Araya, & Williams, 2016; Wemakor & Mensah, 2016). In Nigeria, the prevalence rate is put at 24% and 22.9% in southwest and southeast respectively (Okechukwu & Ajayi 2016; Chinawaet *al.*, 2016). Maternal depression occurs during conception, delivery and after delivery which is characterized and heightened by stress, exhaustion, fear, sadness, insomnia and other stress related activities among pregnant women and new mothers. Some of the types of maternal depression include prenatal depression, baby blues, postpartum depression and postpartum psychosis (New

Yok State Department of Health, 2015). Comprehensively, Gelaye, Rondon, Araya and Williams (2016) indicated that, maternal depression can also be called perinatal depression. Maternal depression occurs during antepartum and postpartum periods. Antepartum period is the time of conception to the time of childbirth. On the other hand, postpartum period is the time after childbirth. Hence, pregnant women are required to go for antenatal check-ups periodically to know the state and status of their unborn child and in some cases, to get vaccinated; in order to avoid mother-to-child contagious diseases such as HIV/AIDS, Hepatitis, et ce tera (Mestad, Lane, Hall, Smith, Carter, Rubinstein, & Jones. 2016).

The process of regular check-ups in hospitals can be really scary and stressful to some pregnant women. When this occurs, pregnant women develop tokophobia (fear of pregnancy mostly leading to stillbirth or avoidance of birthing a child). This gradually graduates from being phobia to anxiety and in turn leads to maternal depression among pregnant women. In the light of this, proximity to health care facilities and health seeking behaviour can impede or facilitate a successful childbirth (Akowuah, Agyei-Baffour & Awunyo-Vitor, 2018). In addition, sex and gender preference among pregnant women regarding the desire to have a male child have continually resulted into mental health problems such as anxiety and depression (Loo, Alonzo, Martin, Mitchell, Galvez, & Sachdev 2012; Teichman, Rabinovitz & Rabinovitz, 1992).

According to Ertel, Rich-Edwards and Koenen (2011), maternal depression is increasing daily and it is becoming a great solitude in health sector. The prevalence of

maternal depression is detrimental to the health of mothers and babies around the globe. The severity of maternal depression varies from mild to major depressive episodes responsible for mortality and morbidity among pregnant women (Gelaye, Rondon, Araya and Williams, 2016). Globally, up to 13% of women that just delivered and 10% of pregnant women have depression (WHO, 2019). Furthermore (WHO, 2015; Biaggi, Pawlby & Pariante 2016) report the widespread of maternal depression among developing countries such as Guyana, Indonesia, Barbuda, Haiti, Angola, et ce tera in which 50% of pregnant women and 19.8% of new mothers in these regions experience maternal depression at one point of life. The problem of maternal depression takes physiological and psychological forms. According to Post (2019), the symptoms of maternal depression are restlessness, vomiting, consistence crying, sadness, hopelessness, loss of motivation, isolation and insomnia. These signs however, vary across pregnant women and new mothers depending on their physiological components. Consequently, the underlying triggers of maternal depression are widely enormous. However, these causes can be streamlined to trauma, stress, low marital satisfaction, unwanted pregnancy and hyper emesis gravidarum (Biaggi, Conroy, Pawlby, & Pariante, 2016).

Empirical studies and evidences have examined the relationship between social support variables and maternal depression. Notwithstanding, the variability of social support and maternal depression are yet to be fully explored and expatiated in developing countries especially, Nigeria. Perhaps, it could be due to the flexibility of socio-economic landscape present in low-income regions around the globe (Kotila &

Mojoyinola, 2015). However, recapping some distinctive studies around the globe will further buttress this discussion. In a cohort study carried out in Japan on “relationship between social support and during pregnancy and postpartum depressive state”, Morikawa, Okada, Ando, Aleksic, Kunimoto, Nakamura, and Furumura (2015) revealed that women with prepartum and postpartum depression have little or no social support from significant others during pregnancy and after birth. The study further shows that getting all the necessary supports can reduce the likelihood of women developing depression during and after pregnancy.

Harknet and Hartnnet (2011) are of the view that emotional support can come from various forms which range from family, friends, relatives and other reliable people that are available in the social system. Hence, it has been observed that lack of emotional support by people around pregnant women may predispose them to risk of depression (Grav, Hellzen, Romild and Stordal, 2011). Also, Mandes, Loureiro and Crippa (2011) reported that poor maternal health, especially, maternal depression has been found to be associated with poor perceived emotional support by the family and relative of the women during child birth and this increases the vulnerability of women who are in need of this support. In addition, Harknet and Hartnnet (2011) posited that mothers with multiple children or a child with physical and developmental challenges, mothers who are saddled with children responsibilities with low socio-economic status have the higher tendency of lack of emotional support from significant others. This situation or condition can predispose woman to develop maternal depression

since there are no people to rally round her in terms of needed support.

Promotion of comfort and security has been emphasized to be provided during the period of stress, and it will in turn make the woman think that she is being cared for and this will also facilitate the recovery process following the experience of maternal depression (Mental Health America, 2019). In most cases, women with maternal depression are not given adequate attention and support that can assist her recover quickly and as a matter of fact, this attitude can also complicate and increase the risk of maternal depression. In the same vein, spousal support is very key in reducing maternal depression. Whisman (2011) pointed out that hostile relationship between the spouses is the root cause of maternal depression. Many pregnant women are not receiving required support from their partners (husband) and this can predispose them to a lot of stress during pregnancy and child birth which may increase the risk of maternal depression. Similarly, if the husband is not ready to provide necessary support for his wife during pregnancy, this might lead to mother’s stress.

Biaggi, Pawlby & Pariante (2016) noted that mother’s stress, during pregnancy might eventually correlate with fetus stress and in turn lead to maternal depression if support is lacking. He further pointed out that a lot of women have been subjected to series of stress and hardship during pregnancy as a result of husbands’ lackadaisical attitude towards their wives. To him, husbands are not aware of their responsibilities, especially when their wives are pregnant. According to Senturk, Abas, Berksun and Stewart (2014) the occurrence of maternal depression is determined by the quality of family relationship. In their study,

it was found that woman intimate relationship has significant role to play in her prenatal mental health in low-income countries and low-middle income countries of the world, especially during crisis like maternal depression. A lot of maternal depression has root cause of lack of family support during the period of gestation, child birth and postpartum which has caused significant damage to women and have led to series of cases of maternal depression especially in Sub-Sahara Africa (Senturk, Abas, Berksun & Stewart, 2014).

Adewuya, Ola, Aloba, Dada and Fatoso (2007) conducted a research on the prevalence and correlates of depression in late pregnancy among Nigerian women. The result of the findings demonstrated that the factors associated with depression among Nigeria women are mainly divorce, separation, polygamous family pressure, history of still birth and most importantly, lack of social support from significant others. They further demonstrated that the most important factor of maternal depression among Nigerian women revolved around social and family factors. In a similar study conducted in Ilorin, Nigeria, on post-natal depression in Primary Health Care, the result revealed that 18.6% of pregnant women on antenatal clinic were confirmed to be suffering from postnatal depression. The study further revealed that women who lack social support (emotional support, family support and spousal support) are more prone to developing maternal depression. In this regard, women who did not receive support from their mother in-law are more susceptible to depression because support from mother in-laws determines whether a Nigerian woman has a peaceful and happy home or not (Abiodun, 2005).

While only several studies have been carried out on factors associated with maternal depression in Nigeria (Kotila & Mojinyinola, 2015; Abiodun, 2005; Adewuya, Ola, Aloba, Dada & Fatoso, 2007) little or no research has been carried out on emotional, spousal and family support in Africa and Nigeria to be precise. To the authors, knowledge, social support variables (emotional, spousal and family support) as correlates of maternal depression have not been looked into in Nigeria, especially in Ilorin, Kwara State, Nigeria. It is against this backdrop that this study seeks to look at social support variables associated with maternal depression among pregnant women.

Research Hypotheses

The following hypotheses were tested at 0.05 level of significant in the study:

- i. There is no inter-connected relationship between emotional, spousal and family supports on maternal depression among pregnant women attending ante-natal clinic in Civil Service Clinic, (CSC) Ilorin.
- ii. There is no significant difference in the level of spousal support on maternal depression among pregnant women in CSC.
- iii. There is no significant difference in the level of family support on maternal depression among pregnant women in CSC

Methodology

Research Design: The study was conducted using descriptive research design. This study was conducted among pregnant women attending ante-natal clinic in Civil Service Clinic, Ilorin, Kwara State, Nigeria.

Population of the Study: The population of the study comprised all pregnant women attending ante-natal clinic in Civil Service Clinic, Ilorin, Kwara State.

Sample/Sampling Technique: The study adopted purposive sampling technique to select two hundred (200) pregnant women attending ante-natal clinics in Civil Service Clinic, Ilorin, Kwara State, because, the method allows the researchers to select research participants whose consent is suitable to be sought and included for the variables under investigation.

Research Setting: This study was conducted in Civil Service Clinic, Ilorin, Kwara State Nigeria. The clinic is one of the major secondary health facilities offering ante-natal services for pregnant women within Ilorin metropolis. The medical staff and others health officials there are well cultured and professional in discharging their services to people. This accounts for the reason why pregnant women choose the clinic for their antenatal.

Instrumentation: The main instrument for data collection was questionnaire titled “Social Support and Depression Questionnaire (SSADQ). It was divided into three sub-sections. Section A is on demographic information of the respondents which include age, religion, educational background, number of children and whether the pregnancy is planned or unplanned. Section B combines “The Berlin Social Support Scale (BSSS)” and “Ralf Schwarzer & Ute Schulz”“(2000) to ask questions on emotional support, spousal support and family support. Section C measured maternal depression using “The Center for Epidemiologic Studies Depression Scale (CES-D) 2000”.

Data Analysis: Descriptive statistics was used to analyse the demographic variables of the respondents. Inferential statistics was used to test the hypotheses. The first hypothesis was tested using correlation coefficient, the second and third hypotheses were tested using t-test analysis.

Results

Demographic Characteristics

Table 1

Variables	Frequency	Percent
Age		
14-35	163	81.5
36-55	38	18.5
Religion		
Christianity	83	41.5
Islam	117	58.5
Educational level		
Primary school certificate	10	5.0
Secondary school	43	21.5
Diploma/NCE	77	38.5
HND/Degree	62	31.0
Higher degree	8	0.4

Occupation		
Trading	59	29.5
Civil servant	77	38.5
Unemployed	39	19.5
Others	25	12.5
Number of Children		
1-3	135	67.5
4-6	39	24.5
7-9	16	8.0
Nature of Pregnancy		
Planned	162	81.0
Unplanned	30	15.0
Others	8	4.0

The majority (81.50%) of the respondents were between the age range of 14-35 years of age; more than half (58.50%) of the respondents were Muslims while only 41% were Christians; educational level of the respondents indicated that 5.0% had primary school education, 21.50% had secondary school education, 38.5% had Diploma/NCE certificate, 31.0% had HND/Degree with only 0.4% of the pregnant women having higher degree certificate. In addition to the above, the demographic variables also indicated that only 38.50% of the respondents were civil servants, 29.50 were traders, while 19.5.00% were unemployed and as such, we consider them as full house

wives along with 12.5% of the respondents who reported that they belong to other category. Many of the respondents (67.50%) have had between 1-3 children; while majority (81.00%) of them confessed that their pregnancy was planned.

Hypotheses

1: There is no inter-connected relationship between emotional support, spousal support, family support on maternal depression among pregnant women attending ante-natal clinic in Civil Service Clinic, Ilorin.

The results obtained from hypothesis one is presented in Table 1 below:

Table 2: Zero order correlation showing the relationship between emotional support, spousal support and family support on maternal depression

	1	2	3	4	$\bar{x}$	SD.
1 Maternal Depression	-				12.45	4.36
2 Emotional support	-.045	-			14.72	3.24
3 Spousal support	.165	.626			14.44	2.89
4 Family support	.180	.557	.520		11.87	3.12

**. Correlation is significant at the 0.05 level (2-tailed)

The result in Table 1 above shows that there is significant correlation between spousal support and family support on maternal depression while there is no correlation between emotional support and maternal depression.

From Table one above, spousal support significantly correlated with depression ($r=.165$; $P<.05$) and the relationship is weak in positive direction. Family support significantly correlated with depression ($r=.180$; $P<.05$) and the relationship is weak and in positive direction. In addition, emotional support significantly correlated with spousal support among pregnant women in Ilorin metropolis ($r=.626$; $P<.05$) and the relationship is very

strong in positive direction. There is no significant correlation with maternal depression Spousal support $r= (-0$; $p 45 < 05)$. Emotional support significantly correlated with family support ($r=.557$; $P<.05$) and the relationship is very strong in positive direction. Also, spousal support significantly correlated with family support among pregnant women in Ilorin metropolis ($r=.520$; $P<.01$) and the relationship is very strong and in positive direction This result implies that depression among pregnant women in Ilorin, reduces in spousal support and family support. Therefore, the null hypothesis is rejected while alternative hypothesis is accepted.

Hypothesis 2: There is no significant difference in the level of spousal support on maternal depression among pregnant women

Table 3: Summary of t-test for the independent samples showing the influence of spousal support on depression

	Spousal support	N	Mean	S. D	Df	T	P
Maternal Depression	Low	30	10.83	3.70	198		
	High	170	12.73	4.41			

Table 2, result indicate that participants with high level of spousal support scored significantly lower on depression than participants with low level of spousal support among pregnant women in Ilorin metropolis $t(198) = -2.224$; $P<.05$). However, participants with high level of spousal support recorded a mean score of 12.73 and participants with low level of spousal support recorded a mean score of 10.83. This result implies that there is significant difference in the level of maternal depression based on spousal support among pregnant women in Ilorin metropolis. Hence,

the result did not confirm the stated hypothesis and it is rejected. Therefore, there is significant difference in the maternal depression based on the level of spousal support.

Hypothesis 3: There is no significant difference in the level of family support on maternal depression among pregnant women.

The hypothesis was tested with t-test for the independent samples and result is presented in table below.

Table 4: Summary of t-test for the independent samples showing the different level of family support on depression

	Family support	N	Mean	S.D	Df	T	P
Maternal Depression	Low	30	10.30	3.40	198	-3	
	High	161	12.96	4.41			

Table 3, result indicated that participants with high level of family support scored significantly lower on depression than participants with low level of family support among pregnant women in Ilorin metropolis $t(198) = -3.516; P < .05$. However, participants with high level of family support recorded a mean score of 12.96 and participants with low level of family support recorded a mean score of 10.30. This result implies that there is significant difference in the level of maternal depression based on family support among pregnant women in Ilorin metropolis. Hence, the result did not confirm the stated hypothesis and is rejected.

Discussion of Findings

The major objective of this study was to examine how emotional, spousal and family supports predict maternal depression among pregnant women attending antenatal clinic given the fact that many of the pregnant women are always engrossed with one psychological problem or the other during pregnancy. The study is important due to the fact that many pregnant women and nursing mothers in African setting often face different challenges from in-laws, husband and other close relatives. The first hypothesis, therefore, indicated that the more the support pregnant women receive from their husbands and family members, the lesser the incidence of depression during pregnancy. The result aligns with the

findings of Cankorur et al (2015) that there is significant relationship between family support and spousal support on maternal depression among pregnant women. The above finding is also supported by the findings of Orr (2004) which reported that social support from friends, family and spouse has significant relationship with pregnancy outcome among women. In light of this finding, it is important for couples, especially husband and mother in-laws, to always provide the needed support required by pregnant women to avoid possible complications during pregnancy and after delivery which could go on to affect the baby they are carrying. Furthermore, the result is supported by the findings of Mustaffa, Marappan, Abu, Khan and Ahmad (2014) which indicated that inadequate social support such as spousal support, financial support, family support, and other social supports during ante-natal period and postpartum period have significant influence and relationship on maternal depression in their lives.

The second hypothesis examines the difference in the level of spousal support on maternal depression. The results indicated that participants with high level of spousal support scored significantly lower on maternal depression than participants with low level of spousal support among pregnant women. This implies that pregnant women

who receive more support specifically from their spouse (husbands) are less likely to develop depression during pregnancy. This result corroborates with the findings of Gebuza et al. (2014) which reported that spousal emotional support was a stronger factor of ante-natal depression. It is worth noting that many women are often treated badly by their husbands, especially when it comes to the issue of sex preference during pregnancy and this could result in emotional trauma. In other words, women who received adequate spousal support and less pressure from their husbands are less likely to develop maternal depression. This finding is also supported by the study of Kazmi et al. (2013) which shows that the higher the social support women received from their husbands, the lower the incidence of postpartum depression.

Furthermore, the results support our third hypothesis which indicated that participants with high level of family support scored significantly lower on depression than participants with low level of family support among pregnant women. In essence, pregnant women who receive a high level of support from family members, especially extended family of the husbands are likely to be more happier and hence, less likely to develop depression during pregnancy and after delivery. Sometimes, pregnant women who live in their husbands' parent residence (patrilocal) may not receive required support from the husbands' families; hence they could develop emotional problems. This result is consistent with the study conducted by Kazmi et al. (2013) which reported that the women living in joint setup receive more social support from their families experience lower maternal depression.

Recommendations

This study reveals some loopholes and gaps that calls for pivotal remedies. Firstly, there is need for husbands and family members to develop a good rapport and provided necessary support needed by women when they are pregnant. Maternal depression is a gradual and progressive mental illness that could develop when women do not find peace and happiness in their matrimonial homes. Also, there is the need for maternal depression to be diagnosed early during ante-natal periods and prevented on time before progressing to postpartum periods. This can only be done when professionals such as social workers, counsellors, psychologists and psychiatrists are employed by government to provide biopsychosocial intervention for pregnant women during ante-natal. More so, the government should include mental health care evaluation in ante-natal services provided by public and private health agencies. This is to say that therapeutic services such as talk therapy, behavioural therapy and group therapy should be a necessity; all pregnant women must be subjected to mental health screening during their periodic visit to health care facilities at different stages of pregnancy.

In addition, family members, friends, spouses, relatives and other significant others should give attention, care and support to pregnant women and nursing mothers. On a long run, people should know that pregnant women require friendly, hospitable and comfortable environment that will always make them feel loved and valued to ensure a good pregnancy outcome.

Conclusion

This study reports that social support variables have a huge influence on maternal depression among women in ante-natal

periods and postpartum periods in Ilorin, Kwara State. Also, this research reveals joint and separate relationships that exist between social support variables and maternal depression. This study is able to establish that family support, emotional support and spousal support are integral during pregnancy and after childbirth. Therefore, while administering one social support to a pregnant woman, other forms of social support variables may also be provided consciously or unconsciously. For instance, as revealed in this study, social support from friends, families and spouses are interconnected and play significant roles in ensuring good pregnancy outcomes.

Furthermore, this study reveals that pregnant women who are supported by their spouses are less prone to maternal depression in Ilorin metropolis. This denotes that care, affection and attention given by spouses during pregnancy and after childbirth significantly influence the mental health condition of pregnant women and nursing mothers. Alternatively, this research also portrays that the family has a multi-dimensional impact on maternal depression. Hence, it can be affirmed that maternal depression is prevalent among pregnant women and nursing mothers in Ilorin metropolis. However, women and mothers who have access to family social support, emotional social support, financial social support and spousal support are less vulnerable to maternal depression in Ilorin metropolis.

Implications of the study to Social Work Practice

From previous studies, maternal depression is a key factor influencing the hike of maternal mortality in Nigeria. Therefore, it is deducible from this particular study that

maternal depression needs to be checkmated with problem-focused interventions and preventive-focused interventions. It is, therefore, the responsibility of care givers, health practitioners and other stakeholders to manage maternal depression among pregnant women.

Consequently, swift and deliberate actions need to be taken earnestly by social workers to drive out this psychopathological issue among pregnant women in order to ensure good pregnancy outcome. To reduce the menace of this mental health problem, social workers should provide a wide range of therapeutic services involving preventive and problem-solving interventions. Social workers working in the health settings can imbibe services and therapies such as counselling (talk therapy), advocacy, individual therapy, nutritional and diet advice, psycho-education, psychotherapy, resource mobilization etc. When these methods are effectively imbibed, the perinatal periods of women become comfortable and health-friendly.

References

- Abiodun, O. A. (2006). Postnatal depression in primary care populations in Nigeria. *General hospital psychiatry*, 28(2), 133-136.
- Adewuya, A. O., Ola, B. A., Aloba, O. O., Dada, A. O., & Fasoto, O. O. (2007). Prevalence and correlates of depression in late pregnancy among Nigerian women. *Depression and anxiety*, 24(1), 15-21.
- Akowuah, J. A., Agyei-Baffour, P., & Awunyo-Vitor, D. (2018). Determinants of antenatal healthcare utilisation by pregnant women in third trimester in peri-

urban Ghana. *Journal of tropical medicine*, 2018.

Akujobi, R. (2011). Motherhood in African literature and culture. *CLCWeb: Comparative Literature and Culture*, 13(1), 2.

Albert, P. R. (2015). Why is depression more prevalent in women? *Journal of psychiatry & neuroscience: JPN*, 40(4), 219

Biaggi, A., Conroy, S., Pawlby, S., & Pariante, C. M. (2016). Identifying the women at risk of antenatal anxiety and depression: a systematic review. *Journal of affective disorders*, 191, 62-77.

Cankorur, V. S., Abas, M., Berksun, O., & Stewart, R. (2015). Social support and the incidence and persistence of depression between antenatal and postnatal examinations in Turkey: a cohort study. *BMJ open*, 5(4), e006456.

Chinawa, J. M., Odetunde, O. I., Ndu, I. K., Ezugwu, E. C., Aniwada, E. C., Chinawa, A. T., & Ezenyirioha, U. (2016). Postpartum depression among mothers as seen in hospitals in Enugu, South-East Nigeria: an undocumented issue. *Pan African Medical Journal*, 23(1).

Conlon, O., & Lynch, J. (2008). Maternal depression: risk factors and treatment options during pregnancy. *The Obstetrician & Gynaecologist*, 10(3), 151-155.

Cutrona, C. E. & Russell, D. W. (1990). Type of social support and specific stress: Toward theory of optimal matching. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.) 319-367). New York: Wiley.

Edge, B. W. (2015). Barren or Bountiful? Analysis of Cultural Values in Popular Media Representations of Infertility.

Ertel, K. A., Rich-Edwards, J. W., & Koenen, K. C. (2011). Maternal depression in the United States: Nationally representative rates and risks. *Journal of Women's Health*, 20(11), 1609-1617.

Gebuza, G., Kaźmierczak, M., Mieczkowska, E., Gierszewska, M., & Kotzbach, R. (2014). Life satisfaction and social support received by women in the perinatal period. *Advances in clinical and experimental medicine: official organ Wroclaw Medical University*, 23(4), 611-619.

Gelaye, B., Rondon, M. B., Araya, R., & Williams, M. A. (2016). Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *The Lancet Psychiatry*, 3(10), 973-982.

Gelaye, B., Rondon, M. B., Araya, R., & Williams, M. A. (2016). Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *The Lancet Psychiatry*, 3(10), 973-982.

Grav, S., Hellzen, O., Romild, U., & Stordal, E. (2011). Association between social support and depression in the general population: The HUNT study, a cross sectional survey. doi:10.1111/j.13652702.2011.03868.x

Grigoriadis, S., VonderPorten, E. H., Mamisashvili, L., Tomlinson, G., Dennis, C. L., Koren, G. & Martinovic, J. (2013). The impact of maternal depression during pregnancy on perinatal outcomes: a systematic review and meta-analysis.

Harknett, K. S., & Hartnett, C. S. (2011). Who lacks support and why? An examination of mother's personal safety nets. *Journal of Marriage and Family*, 73, 861-875. doi:10.1111/j.1741-3737.2011.00852.x

Hartley, M., Tomlinson, M., Greco, E., Comulada, W. S., Stewart, J., Le Roux, & Rotheram-Borus, M. J. (2011). Depressed mood in pregnancy: prevalence and correlates in two Cape Town peri-urban settlements. *Reproductive health*, 8(1), 9. <https://www.mentalhealthamerica.net/conditions/depression-women> on 28/02/2019

Kazmi, S. F., Khan, M., Tahir, R., Dil, S., & Khan, A. M. (2013). Relationship between social support and postpartum depression. *Ann. Pak. Inst. Med. Sci*, 9(4), 191-194.

Kim, T. H., Connolly, J. A., & Tamim, H. (2014). The effect of social support around pregnancy on postpartum depression among Canadian teen mothers and adult mothers in the maternity experiences survey. *BMC pregnancy and childbirth*, 14(1), 162.

Kotila, P.T, & Mojinyinola, J.K., (2015). Psycho-Social Correlates of Antepartum Depression Among Women Attending Antenatal Clinic in Odeda Local Government Area of Ogun State, Nigeria. *Nigerian Journal of Social Work Education*. Vol.14, P 1-9.

Lobel, M.,. (2008). Pregnancy-specific stress, prenatal health behaviors, and birth outcomes. *Health Psychology*, 27(5), 604-615. doi: 10.1037/a0013242

Loo, C. K., Alonzo, A., Martin, D., Mitchell, P. B., Galvez, V., & Sachdev, P. (2012). Transcranial direct current stimulation for depression: 3-week, randomised, sham-controlled trial. *The British Journal of Psychiatry*, 200(1), 52-59.

Madlala, S. S., & Kassier, S. M. (2018). Antenatal and postpartum depression: effects on infant and young child health and feeding practices. *South African Journal of Clinical Nutrition*, 31(1), 1-7.

Mendes, A. V., Loureiro, S. R., Crippa, J. A., Gaya, C. M., Garcia-Esteva, L., & Martin- Santos, R. (2011). Mothers with depression, school-age children with depression? A systematic review. *Perspectives in Psychiatric Care*, 48, 138-148. doi:10.1111/j1744-6163.2011.00318.x

Mental health America (2008). Depression in Women. Retrieved 09/06/2019 from Mental Health America (2019) Pregnancy and Postpartum Disorders. Retrieved at on/09/06/2019 <https://www.mentalhealthamerica.net/conditions/pregnancy-and-postpartum-disorders>

Mestad, R., Lane, S. D., Hall, M., Smith, C. J., Carter, D. B., Rubinstein, R. A & Jones-Moore, C. (2016). Prenatal depression: screening and referral for women who are low income during antenatal care. *Social work in public health*, 31(6), 557-564.

Morikawa, M., Okada, T., Ando, M., Aleksic, B., Kunimoto, S., Nakamura, Y., & Furumura, K. (2015). Relationship between social support during pregnancy and postpartum depressive state: a prospective cohort study. *Scientific reports*, 5, 10520.

Mustaffa, M. S., Abu, M. S., Khan, A., & Ahmad, R. (2014). Social Support during

Pre-Natal and Post-Natal Stage: Influence on maternal depression and mental well-being. *Procedia-Social and Behavioral Sciences*, 143, 417-422

New York State Department of Health, (2015). Maternal Depression. Retrieved on 16/06/2019

from http://www.health.ny.gov/community/pregnancy/health_care/perinatal/perinatal_depression.htm on 28/02/2019

Orr, S. T. (2004). Social support and pregnancy outcome: a review of the literature. *Clinical obstetrics and gynecology*, 47(4), 842-855.

Paulson, J. F., & Bazemore, S. D. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: a meta-analysis. *Jama*, 303(19), 1961-1969.

Post, K., (2019) Postpartum Depression and Anxiety. Retrieved at on 09/06/2019
<https://www.phawellness.com/category/postpartum-depressionanxiety/>

Thompson, O., & Ajayi, I. (2016). Prevalence of antenatal depression and associated risk factors among pregnant women attending antenatal clinics in

Abeokuta north local government area, Nigeria. *Depression research and treatment*, 2016.

Wemakor, A., & Mensah, K. A. (2016). Association between maternal depression and child stunting in Northern Ghana: a cross-sectional study. *BMC public health*, 16(1), 869.

Whisman, M. A., Davila, J., & Goodman, S. H. (2011). Relationship adjustment, depression, and anxiety during pregnancy and the postpartum period. *Journal of Family Psychology*, 25(3), 375-383.doi: 10.1037/a0023790

World Health Organisation, (2018). Depression factsheets. Retrieved 20th March, 2019 <https://www.who.int/news-room/fact-sheets/detail/depression>

World Health Organisation., (2015). Maternal and Child Mental Health. Retrieved 31st May, 2019 from www.who.int/mental_health/maternal_child/en?