DEMOGRAPHIC FACTORS PREDICTING PSYCHOLOGICAL DISTRESS AMONG PREGNANT WOMEN IN A SELECTED TEACHING HOSPITAL IN LAGOS NIGERIA

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ABSTRACT

The study investigated Demographic factors predicting psychological distress among pregnant women in a selected General Hospital. A cross-sectional survey design was adopted. Participants consisted of one -hundred and eighty-four pregnant women using a convenient sampling technique to select the participants. The results showed a 16.2% prevalence of depression and 17.5% for anxiety among pregnant women. The age ranges from 23-39 years with a mean of 29.87, SD 2.48. The revealed that age, duration of marriage, duration of waiting jointly predicted anxiety (F (3,183) = 11.788; p<.01). There was significant independent prediction of age (β= .245 p<.01) and duration of marriage (β=.172 p<.05) on anxiety while duration of waiting (β= .123 p>.05) had no significant independent influence on anxiety. Also, age, duration of marriage, duration of waiting jointly predicted depression [F (3,183) = 21.562; p<.01]. Age (β= -.158 p<.05) and duration of marriage (β= -.393 p<.01) had significant independent influence on depression while duration of waiting (β= -.072 p>.05) had no significant independent influence on anxiety. Individual with positive history of abortion experiences increased level of depression compared to those that did not have any positive history of abortion [t (182) = -3.989 p<.05]. Pregnant women who plan their pregnancy experiences reduced level of depression compared to those who did not plan their pregnancy [t (182) = 2.687 p<.01]. It is, therefore, recommending that there is need to incorporate mental health components in RCH (Reproductive & Child Health) program for pregnant women.

INTRODUCTION

Pregnancy is supposed to be a time of emotional well-being in a woman's life, but for many women, this is a time of confusion, fear, sadness, anxiety, stress, and even depression. Mental health, in spite of being an important component of reproductive health, is often neglected. Moreover, in the absence of systematic screening, most antenatal mental disorders are not detected. According to the American College of Obstetricians and Gynaecologists, between 14% and 23% of women will struggle with some symptoms of depression during pregnancy. Depression in pregnancy may diminish one's capacity for self-care, precipitating inadequate nutrition, drug or alcohol abuse, and poor antenatal clinic attendance, all of which may compromise a woman's physical and mental health, may reduce optimal foetal monitoring, and might restrict the growth and development of the fetus. Performing antenatal screening is justified and seems reasonable since most postnatal depressive disorders begin during or before pregnancy. Anxiety during pregnancy has been found to be associated with depression as well as adverse pregnancy outcomes. Various studies have shown a link between antenatal maternal stress and cognitive, behavioural, and emotional problem in a child.

Leight, Fitelson, Weston, and Wisner (2010) revealed a gauge of the pervasiveness of depression during pregnancy differ contingent upon the criteria utilized yet can be as high as 16% or more women symptomatic and 5% with significant depression. Firm gauges for pre-birth anxiety don't exist, nor is there understanding about suitable screening devices, yet past investigations recommend that a huge segment of women experience pre-birth anxiety both by and large and about their pregnancy (Dunkel, 2010). Proof of high introduction to stress in pregnancy is all the more broadly accessible, in any event for specific subgroups of ladies. For instance, an ongoing investigation of a differing urban example Grote, Bridge, Gavin, Melville, Iyengar, (2010) found that 78% experienced low-to-direct antenatal psychosocial stress and 6% experienced elevated levels. They set that a portion of the stressors that ordinarily influence women in pregnancy around the world are low material assets, negative business conditions,

overwhelming family and family obligations, strain in close connections, and pregnancy confusions. Herrero, Saldaña, Rodriguez, and Ritzel, (2012) opined that stress is extremely regular among ladies during pregnancy, and it can cause unfriendly birth results, for example, low birth weight. As per Loomans, and van Dijk, (2013) a few examinations revealed the paces of psychosocial side effects during pregnancy for the created world as somewhere in the range of 10 and 15%, while in creating nations, the rate was seen as 33% Meijer, Beijers, and van Pampus, 2014 saw that there is a relationship between mental side effects and oral wellbeing related issues. Mental manifestations during pregnancy do exist, are common, and are known to have a scope of genuine consequences for ladies' wellbeing and their conceived children. Peruzzo, Benatti, and Ambrosano, (2007) out of one their investigation announced that pregnant women unfavourably influenced by psychological symptoms are at high risk for oral diseases.

In another investigation by Silveira, Whitcomb, Pekow, Carbone, and Chasan-Taber, (2016) announced that up to 30% of pregnant women are affected by periodontal illness, while two additional examinations demonstrated a positive connection among stress and periodontal ailment related hormonal changes. Oral torment during pregnancy adversely affected low-salary pregnant Brazilian women and their personal satisfaction, and the examination infer that without keeping up great oral cleanliness, oral complexities will prompt trouble in keeping up a passionate balance in eating. Silveira, Whitcomb, Pekow, Carbone, and Chasan-Taber, (2016) reported that since oral wellbeing influences by and large body wellbeing, it is imperative to stress keeping up great oral wellbeing among pregnant women and advance oral wellbeing inside this defenceless populace.

As indicated by Vamos, Walsh, Thompson, Daley, and Detman,(2015), a portion of the stressors that generally influence women in pregnancy around the world are low material assets, troublesome business conditions, substantial family and family unit obligations, strain in personal connections, and pregnancy complexities. Pregnancy is a noteworthy occasion in a lady's life and is related to mental and natural changes. Hormonal and way of life changes during pregnancy, including physical dormancy and weight gain, just as low mindfulness about the significance of pre-birth care, may prompt maternal stress and depression, which could endure for a long time after labor. Herrero, Saldaña, Rodriguez, Ritzel saw that roughly 85% of pregnant women experience the ill effects of baby blues state of mind issues, which are shown as depression after pregnancy.

Some proposed reasons for depression during pregnancy as reported by Meijer, et al., (2014) include incorporate family ancestry of depression, having multiple kids, low pay, age under 20 years, family savagery, sexual orientation of past youngsters, number of female kids, caesarean conveyance, undesirable pregnancy, absence of social support, stress, equality, and age at marriage. Notwithstanding, the most critical prescient factor for depression after pregnancy is depression before labour. Symptoms of depression incorporate emotional flimsiness of mother and baby, mother's irregular practices, detachment, carelessness of suggested care during pregnancy, rest issue, and anorexia. Silveira, et al. (2016) placed that in youngsters, low birth weight, formative issues, development disappointment during the earliest stages and adolescence, and overweight are among the results of depression during pregnancy.

Ko, Lin, and Chen, (2015) declared that impedance of day by day exercises, absence of pre-birth care, poor diet, increased rate of abortion due to the consumption of multiple antidepressants, smoking and drug abuse, suicidal tendencies, preeclampsia, hypertension, and gestational diabetes are also associated with depression during pregnancy. Depression during pregnancy may at last lead to post-pregnancy anxiety and diminish mothers' personal satisfaction and breastfeeding. Furthermore, the emotional prizes of pregnancy are ruined due to the requirement for multiple hospitalizations and medicinal medications for the mother and new-born child.

Stress and anxiety issue during pregnancy don't just impacts affect the course of the pregnancy, yet it can also influence its result, the advancement of a kid and maternal prosperity. It is generally perceived that stress during pregnancy may influence neuroendocrine improvement in the hatchling and the arrangement of a safe connection bond with the infant and, subsequently, the socio-emotional advancement of the kid (Jacobsen, 1999). High anxiety during pregnancy has been connected to bring down birth weight, shorter birth length, shorter incubations and increased uterine supply route obstruction Teixeira, Figuerido, Conde, Pachecho, Costa, (2009). Anxiety in pregnancy could have long haul impacts on children's social/emotional issues. Unmistakable wellsprings of stress during pregnancy incorporate evolving jobs, life change, and relationship challenges. The mental outcomes of such stress might be enhanced by hormonal changes that happen during the course of pregnancy. Studies have also revealed that accomplice strife during pregnancy is identified with pregnancy-related stresses or concerns. (Da Costa, Larouche, Dritsa, & Brender, 2000) and emotional distress.

Pregnancy is not only a period of great joy but also one of great physical and emotional stress to a woman. Even in healthy women, pregnancy may give rise to many anxieties because of anticipated uncertainty associated with it. Evidence from these researchers like (Catov, Abatemarco, Markovic, & Roberts, 2010; Hernandez, Val, Murphy, Busquets, & Sans, 2011; Lobel, Cannella, Graham, DeVincent, Schneider & Rauchfuss, 2008). Findings of Findings of Lee, Lam, Lau, Chong, and Chui, 2007; Teixeira, Figuerido, Conde, Pachecho, and Costa, (2009) have shown that pregnancy anxiety not only affects pregnant women's health but also have an impact on labor outcomes such as preterm delivery, prolonged labor, cesarean birth, low birth weight, also revealed a varied prevalence of pregnancy anxiety at different trimesters of pregnancy with high levels in first and third trimesters. A high and diverse prevalence rate of 14-54% of pregnant anxiety from different parts of the world is reported from previous studies of scholars such as Hernandez-Martinez, Nieminen & Stephansson, (2011). However, most of these studies explored general pregnancy anxiety than pregnancy-specific anxiety

Anxiety during pregnancy is seen as worries, concerns, and fears about pregnancy, childbirth, and health of the infant and future parenting (Huizink, Mulder, Robles de Medina, Visser, Buitelaar; Serçekuş & Okumuş, 2009) reported that nulliparous women's childbirth fears were related to labour pain, birth-related problems, and procedures. Previous researches on pregnancy anxiety concluded that pregnancy anxieties are the real predictor of adverse labour outcomes than general anxiety. These researchers Bayrampour, Heaman, Duncan, and Tough. Huizink, Mulder, Robles de Medina, Visser, Buitelaar, (2004) and Reck, Zimmer, Dubber, Zipser, and Schlehe, (2013) recommended that estimation of anxiety during pregnancy benefit in identification and risk reduction more specifically. It was further indicated that with the limited evidence available on specific fears and worries related to pregnancy, the structure of pregnancy anxiety and its impact on pregnancy outcomes necessitate further studies exploring pregnancy-specific anxieties and its risk factors.

An in-depth community-based study has been done during the antenatal period as most of the past studies have been hospital-based and postnatal centred. The importance of mental health in pregnancy can be emphasized by the fact that even the best obstetric care cannot give a desirable outcome of the pregnancy if the mental health issues of the expectant mother are not addressed at the right time and in the right manner.

The increased weakness for dysfunctional behaviour in pregnancy can be clarified by the biopsychosocial model (Ghaemi, 2006) which integrates the organic, mental, and social factors to clarify the event of psychological sickness. Pregnant women have increased natural defencelessness due to the hormonal maladjustment, mental weakness due to dread for another existence of motherhood, and social helplessness due to the additional demands of family support and care during this basic period of her life.

This study provided scoping bit in the base of these hitherto less explored and less examined and underappreciated issues related to pregnancies, on which further studies can be planned

on a larger constructive framework and better-resourced methodologies. It has also attempted to generate local evidence to fill up the knowledge gap about the mental health problems faced by the antenatal females as well as the demographic characteristics predicting (psychological distress) depression and anxiety among pregnant women in Lagos State.

It was hypothesized that:
Hypothesis 1: Age, duration of the marriage, and duration of waiting will significantly predict anxiety among pregnant women
Hypothesis 2: Age, duration of the marriage, and duration of waiting will significantly predict depression among pregnant women
Hypothesis 3: History of abortion will have a significant influence on the level of depression and anxiety of pregnant women
Hypothesis 4: Pregnancy planning will have a significant influence on the level of depression and anxiety of pregnant women

METHOD

Research Design

The study was a cross-cultural survey adopting the ex-post facto design. This was because variables in the study were not manipulated.

Study Setting

The study was carried out at a Lagos University Teaching Hospital extension in Yaba, Lagos State.

Population for the Study

The population for this study was selected from pregnant women using the Lagos University Teaching Hospital facilities within the period of the study.

Sample Size

For this study one-hundred and eighty-four participants were selected based on the previous prevalence rates of depression and anxiety.

Sampling Technique

Participants for this study were purposely selected from the outpatient clinic on their clinic day. The patients were identified through their appointment registers with the assistance of the recording personnel

Instruments

The researcher administered a structured questionnaire with modification from other researches as presented in the literature review. The research instrument comprised of socio-demographical variables age, ethnicity, religion, years of marriage and duration of waiting.
HADS (Hospital Anxiety and Depression Scale): this instrument is a 14-item measure designed to assess anxiety and depression symptoms in patients with an emphasis on reducing the impact of physical illness on the total score. This study focused on the anxiety section of the scale. The items are rated on a 4-point severity scale. Scores of greater than or equal to 11 will indicate a definitive case of anxiety. Abiodun (1994) reported that Sensitivity for the anxiety subscale ranged from 85% in the medical and surgical wards to 92.9% in the antenatal clinic. Specificity for the anxiety subscale ranged from 86.5% in the gynecological clinic to 90.6% in the community sample. The internal consistency of HADS-A was indicated to be 0.80 with the retest reliability slated to be r >0.80.
HADS has been validated among pregnant women with a sensitivity of 93% and specificity of 90% for anxiety subscale and 90% and 91%, respectively, for depression subscale (Lee et al., 2007). Anxiety and depression are assessed as separate components, each with seven items that are rated from 0 (no problem) to 3; scores are totalled for each component. A score of 7 in a component is taken as a normal result; a score of 8 indicates abnormal symptoms. The Cronbach Alpha reported was .89.

RESULTS

SOCIO DEMOGRAPHIC INFORMATION

Table 1: Demographic Characteristics of Respondents

Variables		No	%
Age	23-27 years	41	22.3
	28-32 years	113	61.4
	33 years and above	30	16.3
Duration of marriage	1-4 years	53	28.8
	5-9 years	108	58.7
	10 years and above	23	12.5
Duration of waiting	1-4 years	31	16.8
	5-9 years	134	72.8
	10 years and above	19	10.3

From Table 1 the age of the pregnant women 41(22.3%) falls between the age range of 23-27 years, 113(61.4%) belong to the age group of 28-32 years, 30(16.4%) fall between the age bracket of 33 years and above. On the duration of marriage, 53(28.8%) of the respondents had been married between 1-4 years, 108(58.7%) had between 5-9 years in marriage and 23(12.5%) had above 10 years and above marital experience. As regards duration of waiting 31(16.8%) waited between 1-4 years before conceiving, majority 134(72.8%) waited between 5-9 years and 19(10.3%) waited between 10 years and above before conceive.

Table 2: Multiple regression showing how age, duration of the marriage, and duration of waiting predict anxiety among selected pregnant women

Source	B	SEB	β	T	R	R^2	Df	F
Age	.567	.181	.254	3.127**				
DUM	.335	.166	.172	2.023*	.405	.150	3, 183	11.788**
DUW	.382	.229	.123	1.667				

DUM: Duration of Marriage; **DUW:** Duration of waiting; **p<.01; *P<.05

The multiple regression above indicated that older pregnant women experienced an increased level of anxiety (β= .245 p<.01). The results from the table above also revealed that a unit increase in duration of marriage increases the level of anxiety by a factor of .335 (β=.172 p<.05). The duration of waiting, however, did not show any significant influence on the level of anxiety among pregnant women (β= .123 p>.05). In addition to the individual contributions of each of the variables, jointly, they contributed to about 15% of the observed variance in anxiety of the participants, and this joint contribution of these variables was found to be significant [F(3,183)= 11.788; p<.01]. This result confirmed the formulated hypothesis 1, hence it was accepted.

Table 3: Multiple regression showing how age, duration of the marriage, and duration of waiting predict depression among selected pregnant women

Source	B	SEB	β	T	R	R^2	df	F
Age	-.360	.173	-.158	-2.077*				
DUM	-.779	.158	-.393	-4.919**	.514	.252	3, 183	21.562**
DUW	-.229	.219	-.072	-1.045				

DUM: Duration of Marriage; **DUW:** Duration of waiting; **p<.01; *P<.05

The multiple regression above indicated that younger pregnant women experienced increased level of depression (β= -.158 p<.05). The results from the table above also revealed that a unit increase in the duration of marriage decreases the level of depression by a factor of -.779 (β= -.393 p<.01). The duration of waiting, however, did not show any significant influence on the level of depression among pregnant women (β= -.072 p>.05). In addition to the individual contributions of each of the variables, jointly, they contributed to about 25.2% of the observed variance in depression for the sampled participants, and this joint contribution of these variables was found to be significant [F (3,183) = 21.562; p<.01]. This result confirmed the formulated hypothesis 2, hence it was partly accepted.

Table 4: t-test for independent sample showing the influence of 'history of abortion' on depression and anxiety among selected pregnant women

	History of abortion	M	SD	*t*	*df*	*P*
Anxiety	Yes	3.48	4.81	-3.989	182	.000
	No	6.75	5.94			
Depression	Yes	14.37	5.33	2.42	182	.016
	No	12.35	5.88			

Result from the t-test table above revealed that, there exists a statistically significant difference between respondents who had a positive history of abortion (M=3.48; SD=4.81) and those who with negative history of abortion (M=6.75; SD=5.94) as regards their level of [t(182)= -3.989 p<.05]. By implication, individual with positive history of abortion use indicated decreased level of anxiety. Also, there is exist a statistically significant difference between respondents who had a positive history of abortion (M=14.37; SD=5.33) and those who with negative history of abortion (M=12.35; SD=5.88) as regards their level of [t (182) = 2.42 p<.05]. This implies that individual with positive history of abortion experiences increased level of depression compared to those that did not have any positive history of abortion. This confirms the formulated hypothesis three, hence it was accepted

Table 5: t-test for independent sample showing the influence of 'planned pregnancy' on depression and anxiety among selected pregnant women

	Pregnancy planned	M	SD	*t*	*df*	*P*
Anxiety	Yes	2.67	3.83	-6.070	182	.000
	No	7.33	6.13			

Depression	Yes	14.55	5.61	2.687	182	.008
	No	12.35	5.47			

Result from the t-test table above revealed that, there is a statistically significant difference between respondents who planned their pregnancy (M=2.67; SD=3.83) and those who did not plan their pregnancy (M=7.33; SD=6.13) as regards their level of anxiety [t (182) = -6.070 p<.01]. By implication, pregnant women who plan their pregnancy experiences reduced level of anxiety compared to those who did not plan their pregnancy. Also, there exist a statistically significant difference between respondents who planned their pregnancy (M=14.55; SD=5.61) and those who did not plan their pregnancy (M=12.35; SD=5.47) as regards their level of depression [t (182) = 2.687 p<.01]. This implies that pregnant women who plan their pregnancy experiences reduced level of depression compared to those who did not plan their pregnancy. This confirms the formulated hypothesis four, hence it was accepted.

DISCUSSION

It was revealed from the result of these findings that age, duration of marriage, and duration of waiting jointly predicted anxiety among selected pregnant women jointly predicted anxiety while age and duration of marriage had significant independent influence on anxiety among pregnant women sampled. This implies that pregnant women who are older and had longer duration of marriage significantly reported higher anxiety. The result contradicts the study by Arch, (2013) who showed that younger age is associated with higher levels of stress, whereas others find no relationship between maternal age and pregnancy-related stress and anxiety, or mixed findings depending on the timing of assessment. Most likely this is a U-shaped effect with women who are of youngest and oldest maternal age having higher stress anxiety.

In addition, age, duration of the marriage, and duration of waiting jointly predicted depression anxiety among selected pregnant women. The result demonstrates that pregnant women who are older, with longer duration of marriage significantly reported low level of depression. More so, individuals with positive history of abortion use indicated decreased levels of anxiety. The result supports the study by Guardino & Dunkel-Schetter, (2014), found that teenage pregnancies are likely to invoke more anxiety as are pregnancies Mood disorder among antenatal women among women more than 35 years old.

Also, pregnant women with a positive history of abortion experience increased level of depression compared to those that did not have any positive history of abortion. The result corroborates that study by Rue, Coleman, & Rue, 2004; Reardon, Ney, & Scheuren, 2002 found a positive association has been found between having an abortion and subsequent symptoms of anxiety and depression. Also, Coleman, Reardon, and Rue, (2002) found that overall outpatient mental health services use and hospital admission rates for psychiatric reasons are higher in women who have undergone abortion, compared with different samples of women who have not had abortions.

Finally, pregnant women who plan their pregnancy experiences reduced the level of anxiety compared to those who did not plan their pregnancy. Pregnant women who plan their pregnancy experiences reduced level of depression compared to those who did not plan their pregnancy. The result supports the study by Alder, Fink, Bitzer, Hösli, and Holzgreve, (2007) who found that antenatal depression and anxiety were associated with unplanned pregnancies, family history of depression, and marital discord. The presence of psychiatric disorders during pregnancy imposes a significant burden on women and has the potential to adversely affect obstetric, fetal, and neonatal outcomes.

Conclusion

There is an urgent need to move toward quality comprehensive antenatal services. Findings of this study indicate the need to incorporate mental health components in RCH (Reproductive & Child Health) program. For now, universal screening may not be a feasible strategy. However, it is a desirable and achievable goal in the future. Longitudinal prospective research is advocated to establish the temporality of the onset of depression and anxiety in pregnancy. A control group of non-pregnant women with a similar sociodemographic profile may give a good estimate of the actual burden of mental health morbidities in pregnancy. Repeated probing on several occasions could also build up rapport and gain the confidence of the women, so antenatal care visits are an ideal option as there are multiple chances of contact with the healthcare delivery system.

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