

THE INFLUENCE OF DEPRESSION AND ANXIETY ON HELP-SEEKING BEHAVIOUR AMONG INFERTILE WOMEN IN SOUTH-WESTERN NIGERIA

ALLIU Sadiat Iyabode

*Psychology Department,
Christopher University,
Mowe, Ogun State*

and

AKINBOLADE Omosuwa

*Personnel Management Department,
Local Government Service Commission,
Ondo State*

ABSTRACT

There is a critical gap in psychological research on the subject of help-seeking for depression and anxiety resulting from infertility. This study addressed help-seeking behaviour of infertile women who reported symptoms of depression and anxiety as a result of their infertility in South-Western Nigeria. The study was correlational design. A sample of 555 respondents receiving infertility treatment was purposively selected from three tertiary hospitals in South-Western Nigeria. The age of the women ranged from 20-59 years, while the mean and standard deviation of the women's age were 33.44 years and 19.90 years respectively. Two standardized scales: Hospital Anxiety and Depression Scale (HADS); and General Help-Seeking Questionnaire (GHSQ) were completed by the women. The data collected in the study were subjected to both descriptive and inferential statistical analyses.

Infertile women reported less than 10% normal depression level, mild depression of 38.6%, followed by moderate 31.1% and then severe 21.1% depression respectively. In addition the women reported 12.1% normal anxiety level while most of the women reported mild anxiety of 44.5% followed by moderate 26.9% and then severe 18.5% anxiety respectively. There was a statistically significant negative correlation among depression, anxiety, and help-seeking behaviour ($r = -0.20$, $P < .05$).

Introduction

Parenthood is the center of identities for many couple. It is often one of the most important roles in adult life. Through observations and many years of experiences with couples, own children are preferred to adoption and fostering, this seems a natural part of adult life. In Nigeria as soon as couples are married they are expected to produce children, this expectation of parenthood is as a result of social training received while growing up. In most societies children are socially groomed to aspire to the social norm of producing children in their adult life and when couples are unable to produce children within a year of engaging in regular sexual intercourse they begin to sense that there is a problem.

Infertility is a state in which a couple desiring to have a child cannot conceive after 12 months of unprotected intercourse Tsaltas, 1997; Failure to conceive after 12 months of unprotected intercourse Tietze, 1956, 1968 and Tsaltas, 1997 is thus often an unwelcome interruption to most people's planned life course. Fertility problems are accompanied by a lot of psychological challenges, resulting in a reasonable number of women experiencing emotional related problems such as depression and anxiety.

Depression

A number of studies have found that the incidence of depression in infertile couples presenting for infertility treatment is significantly higher than in fertile controls. Most studies have shown that the presence of depressive symptoms is associated with longer duration of treatment (Thiering, 1993; Kee, 2000; Smeen, 2001 and Lok, 2002).

Studies have reported that when the mental health of infertile patients and pregnant women is compared, the rates of anxiety and depression of the former are significantly higher (Sbaragli, Morgante, Goracci, Hofkens, De Leo and Castrogiovanni, 2008). Eliminating psychological stress may also be necessary for successful infertility treatments (Slade, O'Neill, Simpson and Lashen, 2007; Wichman, Ehlers, Wichman and Weaver, (2011).

Anxiety

Anxiety has been shown to be significantly higher in infertile couples than in the general population. About 8–28% of infertile couples report clinically significant anxiety and generalized anxiety disorder is the most common anxiety disorder diagnosed (Anderson, 2003 and Chen, 2004). Anxiety is often manifested at various times during infertility, diagnosis and treatment. It can sometimes affect a person's behaviour regarding his or her health, contributing to a delay in or neglect of measures that might alleviate the distress. Anxiety, regardless of its degree, can substantially interfere with the quality of life of infertile patients. Studies show that infertile women experience higher levels of depression and anxiety than fertile women (Matsubayashi, Takashi and Tsunehisa, 2004).

Help-Seeking Behaviour

Early treatment and prevention can successfully reduce the long-term impact of many psychological problems associated with infertility (Rickwood, Deane and Wilson, 2007). However studies have indicated that between a third and one half of infertile women with anxiety and depressions do not seek treatment or delay help-seeking because of fear of stigma (Andrews, Issakidis and Carter, 2001; Bebbington, Brugha, Coid, Crawford, Deverill, D'Souza and Wessely 2009; Bebbington, Meltzer, Brugha, Farrell, Jenkins, Ceresa and Lewis, 2000; Halgin, Weaver, Edell and Spencer, 1987).

There is evidence that help-seeking delays may reduce the efficacy of treatments for psychological distress. Help-seeking delays may prolong the length of illness and result in greater symptom severity at time of seeking help (Bebbington *et al.*, 2009; Thompson, Issakidis, and Hunt, 2008). As chronicity and higher symptom severity are also predictors of relapse for psychological distress (Keller and Shapiro, 1981; Solomon, Keller, Leon, Mueller, Lavori, Shea and Endicott, 2000), longer help-seeking delays may also result in a higher risk of relapse. Furthermore, long delays in seeking treatment may lead to indirect costs to the economy, through loss of earnings and work productivity, and may damage social and family networks that may support recovery and quality of life (Thompson, Issakidis and Hunt, 2008).

The help-seeking behaviour for depression and anxiety among infertile women in South-western Nigeria has not been investigated. It is important to investigate whether infertile women seek help for depression and anxiety.

Objective of the study:

1. to determine the level of depression and Anxiety among infertile women,
2. to determine level of help-seeking behavior among infertile women,
3. to determine which of depression or anxiety best predicted help-seeking behaviour and;
4. to determine whether there is a significant relationship among depression, anxiety and help seeking behaviour

Research Hypotheses:

1. The hypothesis state that depression will significantly predict help-seeking behaviour better than anxiety.
2. The hypothesis states that there will be no significant relationship among depression, anxiety and help-seeking behaviour.

METHODOLOGY**Design**

The study adopted the cross-sectional correlational design. It determines the relationship among depression, anxiety and help-seeking behaviour of infertile women in South-Western, Nigeria. The study was carried out by administering questionnaires to all the participants within three months.

Study Setting

The study population comprised of all the infertile women in three states and three tertiary hospitals (University College Hospital, Ibadan, Oyo State; Olabisi Onanbanjo Teaching Hospital, Sagamu, Ogun State; Osun State Specialist Hospital, Osogbo, Osun State) in South-Western Nigeria. Only women were sampled because they are often solely 'blamed' for a couple's childlessness (Savage, 1992).

Sample and Sampling Procedures

A purposive sampling technique was used to select all eligible participants who have met the eligibility criteria for recruitment. Three states (Osun, Oyo, and Ogun) were purposively selected. A prevalence infertility rate of 14% was reported for South-West as reported in Araoye, 2002, Ayodele and Adetona 2010; Aluko-Arowolo, 2012).

Instrumentation**Personal Information Questionnaire (PIQ).**

Purposively developed personal information Questionnaire (PIQ) and two standardized scales: Hospital Anxiety and Depression Scale (HADS), and General Help-Seeking Questionnaire (GHSQ) were used for data collection in the study. The PIQ and the two Questionnaires were administered to the respondents within a period of three months. The first section of the research instrument was the purposively developed personal information Questionnaire (PIQ). This was used to collect information on respondents' socio-demographic and clinical background. Most of the information on the PIQ was taken directly from the hospital records of the respective respondents.

Hospital Anxiety and Depression Scale (HADS)

In Nigeria the Hospital Anxiety and Depression Scale (HADS) has been previously used and validated among Hospitals and Community based samples (Abiodun, 1994) and has been adapted extensively by many researchers such as Fatoye, Owolabi, Eegunranti and Fatoye, (2006) and Ukpong and Orji, (2006). The recommended cut off score of eight for this locality was recommended (Abiodun, 1994). In this study the anxiety HADS-A gave a specificity of 0.80 and a sensitivity of 0.86. For depression HADS-D gave a specificity of 0.76 and a sensitivity of 0.80. The Hospital Anxiety and Depression Scale (HADS) as a self report measures has adequate psychometric properties as suggested by reliability and validity information reported in the literature and based on the previous use of these tools in other investigations that involved Nigeria

The General Help-Seeking Questionnaire (GHSQ)

The GHSQ was originally developed to assess intentions to seek help from different sources and for different problems. Using a sample of 218 high school students, the GHSQ was found to have satisfactory reliability and validity and appears to be a flexible measure of help-seeking behaviour that can be applied in a range of contexts.

Procedures for Data Collection

A letter of consent to participate in the study was presented to the women prior to the administration of the questionnaire. The aim of the study was explained to the women in order to gain their consent and trust through the consent forms. The participants were asked to sign if they agree to participate in the study.

Ethical Consideration

Ethical research permission was obtained from the Institute for Advanced Medical Research and Training (IAMRAT) of the College of Medicine, University of Ibadan (UI/EC/16/0071), Olabisi Onanbanjo University Teaching Hospital Health Research Ethic Committee (OOUTHREC52/2016) Specialist Hospital Osogbo Health Research Ethics Committee (HREC/27/04/2015/SSHO/020) and Adeoyo Maternity teaching Hospital, Ibadan, Oyo State (for Pilot study).

DATA ANALYSIS AND RESULTS

The data collected in the study were subjected to both descriptive and inferential statistical analyses. The descriptive statistics: simple frequency counts, percentages, mean, standard deviation and tables were used to analyse the objectives of the study. Four objectives and two hypotheses were therefore tested in the study. Objective one to two were not stated in form of relationship, as a result, a descriptive analysis was carried out to assess the level of depression and anxiety and the level of help-seeking behaviour. Objectives three to four were stated in form of relationship and was therefore reduce to the level of hypothesis. Hypothesis one was tested with the Hierarchical Regression Analysis and ANOVA while hypothesis two was tested with the Pearson Product Moment Correlation (PPMC/ Pearson r) at 0.05 level of significance.

Table 1: Frequencies and Percentages of Respondents' Score on Depression and Anxiety.

Dimension	Anxiety		Depression		Total level	
	Freq.	%	Freq.	%	Freq.	%
No concern	66	12.1	50	9.2	65	21.1
Mild	232	44.5	211	38.6	229	41.9
Moderate	147	26.9	170	31.1	151	27.7
Severe	101	18.5	115	21.1	101	18.5

Table2. Mean and Standard Deviation of Respondents' Score on Depression and Anxiety.

Dimension	$\bar{X}$	SD	$\bar{X}+1SD$	$\bar{X}-1SD$
Anxiety	11.63	5.69	17.32(17)	5.94(6)
Depression	12.33	5.90	18.23(18)	6.43(6)
Total score on depression and anxiety)	23.96	10.70	34.67(35)	13.27(13)

The analysis was carried out with mean, standard deviation and simple frequency which sum up each of the two subscales of the 7 items in HADS. The original scoring range of HADS was adopted such as 0-7 normal, 8-9 mild, 10-14 moderate, 15-21 severe. The results of this analysis are presented in Table 1. The results of data analysis on depression showed that infertile women in the study experienced 50 (9.2%) normal level of depression, the majority about 211 (38.6%) experienced mild level, moderate level was 170 (31.1%) and severe depression was 115 (21.1%).

The results of data analysis on anxiety presented in table 1 also showed that 66 (12.1%) scores were within the normal score, the majority about 232 (44.5%) scores falls under the mild level, moderate level was 147 (26.9%) and severe anxiety was 101 (18.5%).

Overall results showed mild results, indicating that infertile women experiences mild anxiety and depression the most 229 (41.9%). Also 65 (11.9%) scores were within the normal level, 170 (27.7%) moderate, and 101 (18.5%) experienced severe psychological distress.

Objective 2

Table3: Scores according Levels of Help-Seeking Behaviour.

Category	Score-range	Frequency	Percent
Minimal	16-41	43	7.90
Fair	42-69	294	53.80
Moderate	70-96	162	29.70
High	97-194	47	8.60
Total		546	100.00

Table 4: Descriptive Statistics of Help-Seeking Behaviour

$\bar{X}$	SD	$\bar{X}+1SD$	$\bar{X}-1SD$
68.67	28.17	96.84	40.50

The statistics, one standard deviation above and below the mean (that is, $\bar{X} \pm 1SD$) was used to calculate the upper and lower cut-off points as follows: $68.67+28.17=96.84$ (approximated to a score of 97) and $68.67-28.17=40.50$ (approximated to a score of 41). Thus respondents with scores within range of 16-41 were categorized as minimal seekers of help. Those with scores in the range of 42-69 were regarded as fair seekers of help. Respondents with scores within the range of 70-76 were regarded as moderate seekers of help. Those with scores within the range of 97-194 were regarded as high seekers of help. The results of this analysis are presented in Table 3.

The results of data analysis showed that the majority 294 (53%) of the women were fair help-seekers followed by moderate help-seekers 162 (29.7%), high help-seekers 47 (8.6%) and then minimal help-seekers 43 (7.9%).

Table 5: Model Summary of Analysis to determine which of the concern (depression and anxiety) better predicted Help-Seeking Behaviour.

Model	R	R ²	Adjusted R ²	Std Error of the Estimate	Change Statistics		
					R ² Change	F Change	df1
1	0.267	0.071	0.071	27.17362	0.071	41.886	1
2	0.296	0.087	0.084	26.96486	0.016	9.456	1

Table 6: ANOVA of the Model Summary

Model		Sum of Squares	Df	Mean Squares	F	Sig
1	Regression	30928.552	1	30928.552	41.886	0.001
	Residual	401692.781	544	738.406		
	Total	432621.333	545			
2	Regression	53862.588	2	18902.079	25.996	0.001
	Residual	378758.746	543	727.103		
	Total	432621.333	545			

a. *Dependent Variables Help-seeking behaviour*

b. *Predictors (Constant), Anxiety*

c. *Predictors (Constant), Depressions*

Hypothesis 1

To determine whether depression is significantly better at predicting Help-Seeking Behaviour than anxiety. This analysis was carried out with the hierarchical regression analysis to determine which of the concern; depression or anxiety best predicted help-seeking behaviour. The first model- anxiety accounted for 7.1% of the variation in help-seeking behaviour. However when depression was entered in to the equation both variable now explained 8.7% of the variance in help-seeking behaviour. That is depression accounted for 1.6% of the variation in help-seeking behaviour of the women. It is concluded that both models significantly predicted the outcome (help-seeking behaviour). The results of this analysis are presented in Table 5 and 6

Hypothesis two

Table 7. Correlation among Depression, Anxiety and Help-Seeking Behaviour

Variable	$\bar{X}$	SD	df	R	P
Depression and Anxiety)	23.97	10.70			
Help-Seeking Behaviour.	66.67	28.17	546	-0.20	0.001

The hypothesis states that there will be no significant relationship among depression, anxiety and help-seeking behaviour. The hypothesis was tested with Pearson r. The results of this analysis are presented in Table 7. The results of the data analysis revealed that there was a statistically significant negative correlation among depression, anxiety and help-seeking behaviour. ($r = -0.20$, $P < .05$).

DISCUSSION

This present study which investigates the relationship among depression, anxiety and help-seeking behaviour among infertile women may be considered a pioneering research in reference to Nigeria context. While many previous studies investigated the relationship among depression anxiety and infertility and its treatment, studies on help-seeking for depression, anxiety among infertile population are very scarce. The present study focused on help-seeking for depression and anxiety experienced by infertile women after being diagnosed with infertility. This is mostly neglected and least heard because of the stigma associated with seeking psychiatric or psychological help. The present study identified the different level of depression, anxiety and help-seeking behaviour among infertile women. In line with the first two objectives in this study, the results indicated that infertile women tend to demonstrate mild levels of depression (38.6%) and anxiety (44.5%) the most; it was also found that the majority of the women in this study were fair help-seeker (53%) for both anxiety and depression.

For the first hypothesis, which investigate, which of depression and anxiety better predict help-seeking behaviour found that both depression and anxiety predicted help seeking behaviour and the results of the second hypothesis concerning relationship among depression, anxiety and help-seeking behaviour shown that a significant negative correlation exist among the three variables.

This result is slightly different from high level of depression reported by, Alhassan, Ziblim and Muntaka, (2014) that 62% of infertile females experience depression in Ghana.

Similarly, Guerra, Llobera, Veiga and Barri, (1998) found prevalence of depression to be 69% among infertile women in China. The prevalence of depression has been found to be 79% in Yusuf, (2016) study. This is inconsistent with a study by Belton, (2013) among non-infertile population which concluded that depressive symptoms, within the total population sample were in the minimal range and that the majority of the women reported no depressive symptomology.

The finding from this study is higher than what was reported from non-psychiatric units of general hospitals and community samples cited in Fatoye, Owolabi, Eegunranti and Fatoye, (2006) study in Nigeria where the overall prevalence rates for psychiatric morbidity of 30.2%, 35.2% and 12.5% have been documented in gynaecology clinic attendees, patients in medical/surgical wards and antenatal clinic populations respectively (Abiodun, 1994). From community samples in Nigeria, rates of 19.2% to 28.5% have also been reported (Ohaeri, Odejide, Gureje, 1994; Abiodun, 1994 and Amoran, Lawoyin and Oni, (2005) which is less than what was found in this study. A higher prevalence rate of depression was also found in this study than in several previous African studies (Tomlinson, Grimsrud, Stein, Williams, Myer, 2009; Gureje, Uwakwe, Oladeji, Makanjuola, Esan, 2010; Herman, Stein, Seedat, Heeringa, Moomal and Williams, 2009; Kebede and Alem, 1999 and Stein, Seedat, Herman, Moomal, Heeringa, Kessler, Williams, (2008). A recent study on employed people in South Africa found prevalence for depression of 18.3%. However, an additional 16% stated that they were unsure if they had depression or not (Welthagen and Els, 2012).

The finding from this objective is supported by the theory of chronic sorrow. Conceptually, chronic sorrow provides an excellent framework from which to view the emotional upheaval experienced by the infertile individual (Olshansky, 1962). It evaluated various situations in which loss occurred and provided a framework to evaluate loss and the subsequent grief and bereavement that follows (McEwen, 2002 and Roos, 2002). For some individuals with infertility, the grief and chronic sorrow associated with infertility can be compounded by depression. It is not surprising that the continual reminders associated with infertility would predispose women to depression. The normal emotions of grief and sorrow will, at times, precede depression (Roos, 2002).

There was a statistically significant negative correlation between psychosocial concern (depression and anxiety) and help-seeking behaviour. This finding suggests that as infertile women's distress worsens their help-seeking behaviour improves. That is infertile women more readily seek help due to heightened level of anxiety and depression. Further analysis shows that anxiety or depression best predict help-seeking behaviour. The first model- anxiety accounted for 7.1% of the variation in help-seeking behaviour. However, when depression was entered in to the equation both variable now explained 8.7% of the variance in help-seeking behaviour. That is depression accounted for 1.6% of the variation in help-seeking behaviour of the women. It is concluded that both models significantly predicted the outcome (help-seeking behaviour).

This result is consistent with Huberty, (2010) conclusion in his research done on anxiety and the six approaches to it that as anxiety increases to the point where it affects daily life function, help-seeking behaviour will take place (that is as distress worsen help-seeking behaviour will increase). This type of conclusion may be responsible for the reason for the significant negative relationship between the two variables. It means that infertile women will likely seek help in order to minimize the negative impact of anxiety and depression on their daily function. This significant result may be due to the fact that all the participants were female and

Bebbington, Brugha, Coid, Crawford, Deverill, D'Souza, and Wessely, (2009) showed that women were '70% more likely than men to seek help for a mental health concern, even after severity of illness was controlled'. The result of this study showed that both depression and anxiety inherently predicted help-seeking behaviour.

The result of this study is in contrast with a study among non-infertile women by Wilson, (2010) which concluded that higher levels of general psychological distress symptoms were associated with no stronger intentions to seek help from anyone for a mental health problem. Her study also found that higher levels of general distress symptoms were associated with weaker intentions to seek help. The result of this study is also supported by previous studies which also revealed that people would seek professional psychological help if they are in greater psychological distress or when the illness is very severe (Bland, Newman and Orn, 1997; Rickwood and Braithwaite, 1994 and Sareen, Cox, Afifi, Yu, and Stein, (2005).

The study is supported by the health belief model (Rosenstock, 1966). The theory proposes that the likelihood of seeking help or using health services is a function of the perceived severity of the distress and the extent to which such services are thought to be beneficial. Possible explanation for the significant result could also be that some situations or factors such as the perceived severity of distress condition influence an individual to seek help from significant others. As noted, the majority of patients in this sample believe that the levels of distress they experienced warranted a consultation with others and that they can reduce their distress by seeking help.

Conclusion

In this study mild depression and anxiety were experienced by most of the women suffering from infertility and help was actually sought in order to alleviate the concerns. Eliminating these psychological distress and infertility related stress may be necessary for successful infertility treatments.

Limitations

Despite the importance of these findings, some limitations of this study should be noted. Firstly, the results are based solely on self-report measures and as such, social desirability response biases might be present. This study is also limited by its inclusion of only hospital based samples which has been drawn only from three tertiary hospitals in South-Western Nigeria, excluding State and Primary Health Care Centres from the study, this may decrease the generalizability of study findings and as a result was not able to capture the help-seeking behaviour of women not presently attending Tertiary Hospitals in South-Western, Nigeria. The study was not able to determine the factors which differentiate help-seekers from the non-help-seekers and was not able to establish the factors that hinder or facilitate help-seeking behaviour among these women.

Implications

The current study has practical implications for psychological, clinical, policy making and further studies. Information concerning the depression and anxiety related to infertility has been inconsistent and the relationship between these and help-seeking behaviour varies with different demographic and clinical variables thus, mental health professionals are being advised to continually update their facts about it. Therefore, clinicians and Health Psychologist should understand that women irrespective of their demographic dynamics want children of their own, so they should try to understand their clients in order to have a good therapeutic relationship with them.

Recommendations



Future replication studies using larger samples and longitudinal data are warranted to verify the findings of this study. Findings of this study revealed that the majority of the women had sought help in the past it is recommended that the women's preferences for sources of help should be investigated since self-report measure was used in the study, it is also recommended that a qualitative study be used to ascertain in-depth reasons for their various choices. This study can be replicated using community-based samples, comparism should also be made between community and hospital based samples to ascertain the variations of results.

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