

THE ROLE OF COUNSELLING IN PROMOTING MATERNAL HEALTH: A STUDY ON THE EFFECTIVENESS OF COGNITIVE BEHAVIOUR THERAPY AND SYSTEMATIC DESENSITIZATION TECHNIQUES ON PRE AND POSTNATAL DISORDERS IN WOMEN

¹Josephine Adeleke

Article Info

Keywords: cognitive behavior therapy, systematic desensitization, pre and postnatal disorders, psychosomatic problems, pregnant and nursing mothers, maternal education level

Abstract

This study aims to investigate the effectiveness of cognitive behavior therapy (CBT) and systematic desensitization treatment strategies on managing pre and postnatal disorders among pregnant and nursing mothers in Surulere Local Government Area of Lagos State, Nigeria. A quasi-experimental pre-test/post-test control group design was used, with 120 women (60 pregnant and 60 nursing mothers) attending pre and postnatal clinics at Randle General Hospital, Surulere, as participants for the study. The study found that counseling using CBT and systematic desensitization techniques significantly reduced psychosomatic problems among pregnant women, and maternal education level played a significant role in positively affecting the well-being of pregnant and nursing mothers. The study recommends that antenatal clinics should provide more structured counseling services for pregnant and nursing mothers to improve their overall well-being during and after pregnancy.

Introduction

Maternal mental health is a critical aspect of reproductive health that significantly affects both maternal and child health outcomes. Several studies have shown that maternal psychosocial disorders are prevalent during pregnancy and postpartum periods, leading to adverse outcomes for mothers and their infants. In Nigeria, limited access to mental health care services and social stigmatization further exacerbate the problem. This study seeks to investigate the effectiveness of counseling using cognitive behavior therapy (CBT) and systematic desensitization treatment strategies in managing pre and postnatal disorders among pregnant and nursing mothers in Surulere Local Government Area of Lagos State.

The study adopts a quasi-experimental pre-test/post-test control group design and involves 120 women (60 pregnant and 60 nursing mothers) attending pre and postnatal clinics at Randle General Hospital, Surulere. The study aims to determine the impact of counseling on the psychosomatic disorders and educational status of pregnant and nursing mothers. The study hypothesizes that counseling will significantly reduce the psychosomatic

¹Department of Educational Foundations Faculty of Education University of Lagos

disorders of pregnant and nursing mothers and high maternal education level will positively affect the attendance of pregnant and nursing mothers at pre and postnatal clinics. The study recommends that antenatal clinics should provide more structured counseling services for pregnant and nursing mothers to improve their overall well-being during and after pregnancy.

Statement of the Problem

Women during pregnancy and after child birth suffer from psychosomatic disorders; common among them are stress, depression, maternal blues such as restlessness, fever, insomnia (insufficient sleep) which prevents her inability to cope with nursing the new born baby. Post-partum depression is a situation in which a mother lacks the ability, interest, pleasure and productive activities toward taking care of herself and her baby (Sokol, Epperson & Barber, 2014).

Stress in pregnancy has been found to be significant factor that affects the mother to be and also the baby before and after birth. Some women, however, contend with these psychosomatic problems due to the ignorance of how to cope with the situation they find themselves (Bicking et al, 2015). Problems arise due to the pressure of increased desire of the pregnant mother such as the need to change her wardrobe and its financial demand. Inadequate personal hygiene may expose the mother to germs which will cause infection that may affect her and the baby. The depressed mother exhibits mood condition accompanied by fearfulness, tiredness, anxiety and irritability as observed by (Evans, Heron & Francomb, 2001). When these aforementioned have effects on the pregnant and nursing mothers, tension is an added threat towards a successful transition to their optimal well-being.

Pregnant and nursing mothers who have low educational status face the problem of inability to source information from the antenatal clinics. There is the need, therefore, to educate mothers about the dangers of unhygienic environment, poor health habits in order to reduce the problems they encounter during pre-natal and post-partum period. Women are the cornerstone of the family and assume responsibility for many of its vital formation (Brittain et al, 2015). Therefore, lack of knowledge of nutritional values of food and its deficiencies in the growth and development of the child is of great concern to the mothers during post-natal periods. Consequently, the high rate of maternal and child mortality is associated with inadequate information given at the pre and post-natal clinics. The consequential effect of psychosomatic disorders includes poor social adjustment, difficulties in interpersonal skills and lower psychosocial well-being.

The researcher is interested in the effectiveness of cognitive behaviour therapy, systematic desensitization intervention in managing the pre and post-natal disorders of pregnant and nursing mothers.

Purpose of the Study

The study examined the impact of cognitive behaviour therapy and systematic desensitization on pre and post-natal disorders of selected pregnant and nursing mothers in Surulere Local Government area of Lagos State, Nigeria.

Research Questions

1. What are the effects of counselling on the psychosomatic disorders of pregnant and nursing mothers?
2. Does counselling have an effect on high educational qualification of pregnant and nursing mothers?

Research Hypotheses

1. There will be no significant effect of counselling on the psychosomatic disorders of pregnant and nursing mothers.
2. Family counselling will not significantly affect the high educational qualification of pregnant and nursing mothers.

Methodology

The research is carried out in Lagos State, South Western Nigeria. It has twenty local government areas. This study comprised of all pregnant and nursing women in Surulere Local Government area of Lagos State, Nigeria. The study adopted the quasi-experimental pre test/post-test control group design. Cognitive behaviour and systematic desensitization were used as intervention to assess and manage psychosomatic problems and educational qualification of pregnant and nursing mothers.

The sample comprised 120 women, 60 each of pregnant and nursing mothers who attend pre and post natal clinic at Randle General Hospital, Surulere. The stratified random sampling was used to distribute participants as follows: 60 pregnant/60 nursing mothers for the experimental and control groups. Prior before the main study, a pilot study was done by the researcher to determine the psychometric properties of the instruments. Fifteen participants out of the pregnant and nursing mothers were randomly selected to participate. The stability of the instrument was determined over a period of two weeks in which the researcher administered all the instruments twice to the same set of participants. Three research assistants were appointed and trained by the researcher for effective data collection. The objectives of the study were explained to the research assistants trained for 2 hours, twice in a week on how to administer and score the instruments.

The questionnaire and counselling strategies were used to obtain data for this study. The questionnaire comprised two sections designed by the researcher. Section one comprised 10 items which measured the bio-data of the respondents while section two measured the responses based on the role of counselling on psychometric disorders and educational qualifications of pregnant and nursing mothers. The reliability of the questionnaire was established through pilot testing of the instruments using test-retest reliability method. The reliability coefficient of 0.85 was obtained and high enough for the study. The questions were categorised into a 4-point scale of strongly agreed, agreed, disagreed and strongly disagreed and has a self-reported instrument.

The data collected were analysed and the hypotheses tested with mean, standard deviation and analysis of variance (ANOVA) to ascertain if a significant difference exists in the post-test scores that participants experience after intervention. The participants in the control group were not given treatment.

The study was carried out in three phases.

Phase One: Pre-Intervention Assessment

During the first week of contact with the participants, the researcher, assisted by the research assistants administered the psychosomatic and educational status tools for pregnant and nursing mothers to all the participants in the three experimental groups in pre-test prior to commencement of treatment. **Phase Two:**

Intervention

The sampled groups for the study were randomly assigned to intervention and control groups. The two intervention groups met once a week for six weeks for a minimum of one hour for a session per week, while the control group was on the waiting list.

Phase Three: Post Intervention Assessment

After the intervention sessions which lasted for six weeks, psychosomatic and education status tools were re-administered to the participants in the three experimental groups. This was to find out if the experimental conditions provided a change in the dependent measures. The participants in the Psychosomatic and Educational Status affirmed that they felt better as a result of the interventions.

Results

Hypothesis One: The null hypothesis stated that there is no significant effect of counselling on prevention and reduction of psychosomatic disorders of pregnant and nursing mothers.

The hypothesis was tested using one-way analysis of variance statistic. The result is presented in Table 1 below.

Table 1: One-way ANOVA of effect of counselling on prevention and reduction of psychosomatic disorders of pregnant and nursing mothers

Variables		X	SD
Experimental group: nursing mothers	30	20.83	1.76
Control group: nursing mothers	20	18.53	4.27
Experimental group: pregnant mothers	30	17.4	1.96
Control group: pregnant mothers	30	19.4	5.17

Sources of Variation	Sum of Squares	Degree of Freedom	Mean of Squares	R. Ratio
Between groups	235.75	3	78.58	
				3.54
Within groups	2578.04	116	22.22	
Total	2813.79	119		

* $P < 0.05$; $df = 3/116$; critical $f = 2.68$

Table 1 results show that a calculated f-value of 3.54 resulted as the effects of counselling on prevention and reduction of psychosomatic disorders of mothers. This calculated f-value is significant since it is greater than the critical f-value of 2.68 given 3 and 116 degrees of freedom at 95% confidence level. Apparently, the null hypothesis is rejected while the research hypothesis is retained. Further analysis of data was done based on the significant f-value found. This was with the use of Fisher's t-test test technique to determine which group differs from the other on the variables and the trend of the difference. The result showed that significant difference existed between nursing mothers who had treatment and those in the control group on the prevention and reduction of psychosomatic problems ($t = 2.74$; $df = 58$; $P < 0.05 + 2.02$) ($t = 1.31$; $df = 58$; $P > .05$; critical $+ 2.02$). Consequently, the research hypothesis that stated that there was a significant effect of counselling on the attitude and behaviour of pregnant and nursing mothers is accepted.

Hypothesis Two: Family counselling will not significantly affect the high educational qualification of pregnant and nursing mothers.

Table 2: One-Way Analysis of Variance of the effect of high educational qualification on women's attendance at pre and post-natal clinics

Level of Attendance		X	SD
High	12	55.7	7.72
Medium	8	52.4	7.57
Low	10	43.58	4.37

Sources of Variation	Sum of Squares	Degree of Freedom	Mean of Squares	R. Ratio
Between groups	768.3	2	384.2	
				5.95
Within groups	1742.9	27	64.55	
Total	2511.2	29		

* $P < 0.05$; $df = 2/27$; F-critical = 3.35

Evidence from table 2 above indicates a higher F calculated value of 5.95 than the F critical value of 3.35. Since the F-cal is $>$ than the F-critical, given 2 and 27 degrees of freedom at 0.05 level of significance, therefore, the

null hypothesis was rejected while the research hypothesis was accepted that there was no significant effect of women who had higher educational qualification on their attendance at pre and post-natal clinics.

In order to determine whether differences exist among the groups, pairwise comparison was done using Fisher's t-test. The result shows that no significant difference in the attendance of high and low medium group ($t_{cal} = 0.9$; $df = 18$; $P > 0.5$; $t_{critical} = 2.10$).

However, there was a significant difference between a high and low group ($t = 4.62$; $df = 20$; $P < 0.5$; $t_{critical} = 2.12$).

Discussion

In hypothesis one, the finding shows that the degree of the effect of counselling on the prevention and reduction of psychosomatic disorders of mothers is significant ($F = 3.54$; df 3 and 116; critical $f = 2.68$; $P < .05$). Furthermore, it was found that significant difference existed between nursing mothers who received treatment and those who were in the control group intervention. This finding confirmed the findings of Martini et al (2015) in the study of factors that lead to excessive stress and anxiety. The investigation revealed that counselling mothers in the management of stress and anxiety during and after birth helped mothers to survive the trauma of child birth and minimize anxiety and stress. In a related research finding, Milgrom and Gemmill ((2014) revealed that irrespective of the causative factors of depression listening and practical help during counselling have been found to benefit mothers who suffer from post-natal depression.

This result also agrees with the earlier findings of Abuidhaul and Abujilban (2014) who explained that provision of information and reassurance are effective strategies for the management of stress during pregnancy.

The researcher therefore is of the opinion that the provision of sufficient information (especially during antenatal clinics) for the expectant mothers is one of the effective ways to alleviate unnecessary worries and to reassure them that their experience is normal rather than abnormal.

Table 2 reveals that the finding indicated that there is a significant effect of women who had higher educational qualification on their attendance at pre and post-natal clinics ($F = 5.95$; df 2 and 27; critical $f = 3.35$). The degree of significance is high and this is in line with the study of Dullar, Daka and Wakgari (2017) which claimed that the trend of seeking pre and post-natal care by women of high socio-economic status was based on their educational level. Furthermore, this finding agrees with a related research study by Adewuya et al (2007) on how educational status affects socio economic status of pregnant women. The finding revealed that women who have high educational status accept pre and post-natal care readily more than women of low educational status.

In line with the finding, the researcher is of the view that high educational status of women enhances the attainment of healthy family life style.

Conclusion

Based on the findings of this study, cognitive behaviour and systematic desensitization therapies are effective simple and practicable in alleviating psychosomatic disorders and promoting higher educational status. Counselling will enable pregnant and nursing mothers make right decision, develop realistic thought ideas and skills to solve challenges.

Implication for Counselling

Guidance and counselling services are for all people (Aina, 2013). Pregnant women, nursing mothers, health personnel such as Drs, midwives, nurses) may benefit from a guidance and counselling services and programmes. One of the goals of counselling is to help individuals overcome the problems. The counselor must endeavour to apply psychotherapy in helping pregnant and lactating mothers who come for pre and post-natal clinics.

The finding is important due to the values and commitment attached to safe motherhood. Guidance and counselling should therefore be given at every level of policy formation in the health sector to enhance a conducive atmosphere and consequently better healthcare delivery system.

References

- Abuidhail, J. & Abujilban, S. (2014). Characteristics of Jordanian depressed pregnant women: A comparison study. *Journal of Psychiatry, Mental. Health Nursery*, 21, 573-579.
- 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. Anxiety*, 24, 15-21.
- Aina, K. (2013). Providing counselling to foster marital adjustment among Nigerian couple. *Journal of Educational Review*, 6(2), 175-182.
- Austin, M. P. (2014). Marce international society position statement on psychosocial assessment and depression screening pre-natal women. *Practices Respiratory. Clinical. Obsetet Gynaecology* 28, 179-187.
- Bayrampour, H., McDonald, S., (2015). Risk factors of transient and persistent anxiety during pregnancy. *Midwifery* 31, 582-589.
- Beck, A. T. (1976). *Cognitive behaviour theory and emotional disorders*. New York: New American Library.
- Beck, A. T. (2005). *Cognitive theory for challenging problems*. New York: Gilford Hall.
- Bicking, Kinsy, C., Baptiste-Robrts, K., Zhu, J. & Kyerulff, K. H. (2015). Effects of previous miscarriage on depressive symptoms during subsequent pregnancy and postpartum in the first baby study. *Maternal. Child Health Journal*. 19, 391-400.
- Brittain, K., Myer, L., Koen, N., Koopowitz, S., Donald, K. A., Barnett W., Zar, H. J., Stein, D.J. (2015). Risk factors for antenatal depression and associations with infants birth outcomes: Results from a South African birth cohort study. *Paediatric. Perinatal, Epidemiology*. Burst, A. (2005). Pre-natal and post-natal depression. *Women's Mental Health*, 7(4), 13-14.
- Dulla, D., Daka, D. & Wakgari, N. (2017). Antenatal care utilization and its associated factors among pregnant women in Boricha District, Southern Ethiopia. *Diversity and Equality in Health and Care*.
- Evans, J., Heron, J. & Francomb, H. (2001). Cohort study of depressed mood during pregnancy and after child birth. *British Medical Journal* ,323, 257-6.
- Fellenzer, J. L. & Cibula, D. A. (2014). Intendedness of pregnancy and other predictive factors for symptoms of prenatal depression in a population based study. *Maternal. Child Health*, 18, 2426-2436.
- Glover, J. (2015). Prenatal stress and its effects on the fetus and the child: Possible underlying biological mechanisms. *Adv. Nuerobiol.*, 10, 269-283.

- Glover, V. (2014). Maternal depression, anxiety and stress during pregnancy and child outcome: What needs to be done. *Best Pract. Res. Clin Obstet. Gynaecolo*, 28, 25-35.
- Igbokwe, C. (2012). Knowledge and attitude of pregnant women towards antenatal services in Nsukka Local Government Area of Enugu State, Nigeria. *Journal of Research in Education and Society*, 3(1).
- Martini, J., Petzolelt, J., Einsle, F., Beesodo-Baurn, K., Hofler, M., Wittchem, H. U. (2015). Risk factors and course patterns of anxiety and depression disorders during and after delivery: A prospective longitudinal. *Study Journal of Affective Disorder*, 1756, 385-395.
- Milgrom, J. & Gemmill, A. W. (2014). Screening for prenatal depression. *Best Pract. Respiratory. Clinical. Obstet Gynaecology*, 28, 13-23.
- Miller, M. (2005). Post-natal debriefing women"s mental health 7(4), 21-28.
- Mohamah, Yusuf, A. S., Tang, L., Binnis, C. N. & Lee, A. H. (2015). Prevalence of antenatal depression symptoms among women. *Sabah Malaysia Journal of. Maternal. Fetal Neo natal*, 1-5.
- Okafor, E. C. (2016). Attitude and practise of healthcare professional regarding HIV and AIDS in Abia State Hospitals.
- Onosoga, O. A., Afolayan, J. A. & Oladimeji, B. D. (2012). Factors influencing utilization of antenatal care services among pregnant women in Ife Central LGA, Osun State, Nigeria. *Advances in Applied Science Research*, 3(3), 1309-1315.
- Sanders, J., Hunter, B. & Warren, L. (2016). A wall of information. Exploring the public health component of maternity care in England. *Midwifery*, 34, 256-260.
- Sockol, L. E., Epperson, C. N. & Barber, J. P. (2014). The relationship between maternal attitudes and symptoms of depression on anxiety among pregnant and post partum first-time mothers. *Arch. Women"s Mental. Health*, 17, 199-212.
- Sutan, R., Hassan, H. & Shamsudin, K. (2016). Health information seeking behaviour among hypertensive disorder. In *Pregnancy (HDP) High Risk Antenatal Mothers*, 6, 2. Wolpe, J. (1969). *The practice of behaviour therapy*. New York: Pergamon Press.