

**THE IMPACT OF COGNITIVE BEHAVIOUR THERAPY AND SYSTEMATIC
DESENSITIZATION TECHNIQUE ON PRE AND POST-NATAL DISORDERS OF WOMEN
IN SURULERE LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA**

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Abstract

This study examined the impact of cognitive behaviour therapy and systematic desensitization and relaxation techniques on pre and postnatal disorders of women in Surulere Local Government Area of Lagos State, Nigeria. 120 women comprising pregnant and nursing mothers participated in the study. Quasi experimental pre-test/post-test control group research design was adopted. The researcher-constructed questionnaire was administered in order to gather relevant data of the pregnant and nursing mothers.. Two research questions were raised and corresponding hypotheses were tested at 0.05 level of significance. Mean, standard deviation and analysis of variance statistics (ANOVA) were used to test the hypotheses. The investigation revealed that there is a significant difference in the post-test scores on psychosomatic disorders and educational qualification among participants exposed to cognitive behaviour, systematic desensitization and relaxation therapies. The participants on the control group reported no significant difference. Both counselling strategies were effective in alleviation of psychosomatic disorders and high educational qualification among the pregnant and nursing women.

Key Words: *Psychosomatic disorders, Educational qualification, Cognitive behaviour, Systematic desensitization therapies*

Introduction

Pregnancy and child birth are an important phase in the life of a woman's reproductive health. Bayrampour (2015) stated that pregnancy is seen as an important and normal occurrence but things can go wrong during the period of gestation and labour. There is the need for pregnant and nursing mothers to attend pre and post-natal clinics regularly and obtain the relevant information about their well-being. There are several problems emanating during pregnancy and after child birth such as psychosomatic issues. These maternal disorders include, depression, maternity blues, psychosis and pregnancy induced hypotension (Fellenzer, 2014 et al). Psychosomatic problems consist of physical, emotional, psychological and behavioural symptoms affecting normal activities of pregnant and nursing mothers (Glover, 2014).

The problems listed above interfere with daily functioning, interpersonal relationship and a threat to the physical and emotional health of the women. Different syndromes of pre and post-natal disorders comprise maternal blues such as restlessness, insomnia (insufficient sleep), fever which prevents mother and child relationship during the first week after birth. The psychosocial behaviour affects mothers' reactions such as crying spells. Glover (2015) reported that depression refers to a mother's lack of ability, interest, pleasure and productive activities towards taking care of herself and her baby. Psychosomatic problems experienced by pregnant and nursing mothers elicit consequences such as anger, sadness, insomnia, tiredness, nipple pain among others (Miller, 2005). It affects how the mothers approach the activities in the home as well as their relationship with family members and people.

During pre and post-natal sessions, midwives teach women how to have a safe delivery and moderate exercises of the abdominal muscles (Austin, 2014). It is unfortunate that little or no structured counselling services and management skills are given to the women to cope with their problems especially among those experiencing their first delivery. Saunders, Hunter and Warren (2016) observed that counselling irrespective of the cause of depression have been found to benefit mothers suffering from post-natal depression. Mohamad et al (2015) stated that depression and anxiety are the common psychosomatic disorders women experience during pregnancy and post partum. Antenatal care is the clinical assessment of mother and fetus during the period of pregnancy used for obtaining the best possible result for the mother and child. Early observation and care during pregnancy provided more favourable births compared to no prenatal practise (Burst, 2005). Pregnancy as an experience may differ among women based on their perception and attitude towards their situation Onasoga, Afolayan and Oladimeji (2012). Hence, an adequate use of antenatal health services by women will improve maternal and neonatal health status. Pre and post-natal care affords the promotion of skilled attendance of midwives and nurses at birth and an ideal time to teach women about the benefits of child spacing (Sutan, Hassan & Shamsuddin, 2016).

The effects of educational qualification on pre and post-natal attendance by pregnant and nursing mothers play a significant role on their positive well-being. Dulta et al (2017) observed that females' qualification is vital for understanding health needs, and able to make decisions regarding their health. The knowledge of pregnant mothers therefore may be a factor in determining the extent of their use of antenatal services. Okafor (2016) reported that various parts of the world have shown that higher educational level increased the pre and post-natal attendance of pregnant and nursing mothers. This implies that women of low educational status may not desire the need for the best health care services. Igbokwe (2012) observed that the attitude and practice of pregnant and nursing mother was affected by their educational level.

Various attempts have been made to address the problems associated with educational status and the psychosocial behaviour of pregnant and nursing mothers; hence, the need to assist them through other therapies by recognizing the psychosocial problems early and give them management skills.

The goal of cognitive behaviour therapy is to help the clients to identify self-defeating talk that determines their behaviour (Beck, 1976). Cognitive therapy examines how negative thoughts contribute to tress, depression, anger among others, while behaviour therapy examines and individual's reaction in a situation that triggers stress. The basic premise of cognitive behaviour therapy is that our thoughts and external events affect the way we feel (Beck, 2005). These activities enable the clients to challenge the negative thoughts by replacing with realistic and appropriate thoughts. Systematic desensitization, Wolpe (1969) is a behavioural therapy used to help clients overcome fear, stress and anxiety. It involves the pairing of muscle relaxation with imagined score of the situation inducing stress in the client. The client first learns and practices an adaptive response to deep muscle relaxation that is compatible with stress. Furthermore, the stimuli that causes stress in the client is gradually exposed to it thus desensitized to stress in evolving stimuli. The training helps the participants to eliminate a negative emotion in muscle relaxation and stress hierarchy construction. Cognitive behaviour therapy is a skill that involves restructuring the thought process from negative feeling to realistic adaptive thoughts. While systematic desensitization treatment encourages participants to discriminate between tension and relaxation, hence the participants achieve the later.

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 (Sockol, 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.

Method

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		

* $P < 0.05$; $df = 2/27$; $F\text{-critical} = 3.35$

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 ($t\text{ cal} = 0.9$; $df = 18$; $P > 0.5$; $t\text{-critical} = 2.10$).

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

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 ($F = 3.54$; $df\ 3\ \text{and}\ 116$; $\text{critical}\ f = 2.68$; $P < .05$). 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 ($F = 5.95$; $df\ 2\ \text{and}\ 27$; $\text{critical}\ f = 3.35$). 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.

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