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EFFECTS OF PSYCHOEDUCATION AND ACCEPTANCE COMMITMENT THERAPY ON ANXIETY FOR USE OF HORMONAL CONTRACEPTIVES AMONG WOMEN IN AWKA SOUTH LOCAL GOVERNMENT AREA

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ABSTRACT

This study examined the effect of Psychoeducation and Acceptance and Commitment Therapy on anxiety for use of Hormonal Contraceptives among Women in Awka South Local Government Area. A total of 36 women with anxiety for use of Hormonal Contraceptives among Women in Awka South Local Government Areawho were within the age range of 18 to 45 years, mean age of 29.67 and standard deviation of 8.4 were recruited from ChukwuemekaOdumegwuOjukwu University Teaching Hospital, Amaku, Awka, Anambra State, Nigeria.The participants were administered the State Trait Anxiety Inventory. The study made use of between subject pretest\posttest research design and One-Way Anova statistics. The first hypothesis indicated a significant effect between Psyhchoeducation and the control group at F (1, 47) P<.05. The second hypothesis was accepted indicating a significant effect between Acceptance Commitment Therapy and control group at F (1, 47) P<.05. The third hypothesis was rejected indicating psychoeducation had less effect than Acceptance Commitment Therapy at F (1, 48) P<.05 respectively. It is however recommended that Psyhchoeducation and Acceptance Commitment Therapy are effective and safe treatment for anxiety for use of hormonal contraceptives among Women in Awka South Local Government Area, Amaku, Awka, Anambra State, Nigeria. It is further suggested for studies to cover more women diagnosed with anxiety foruse of hormonal contraceptives so that more generalizable result is obtained.

Keywords: *Psych-education, acceptance and commitment therapy, hormonal contraceptives, women.*

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Introduction

The uses of hormonal contraceptives from observation are common among women of child bearing age in Nigeria and other climes for the purpose of birth control. Its use is currently estimated to be prevalent among more than 100 million women worldwide (United Nations(UN), 2015). Hormonal contraceptives (HCs) represent one of the most influential discoveries of the twentieth century (Pletzer&Kerschbaum, 2014). Hormonal contracept providean effective option for contraception and safe family planning as well as for managing cycle-related physiological symptoms; this suggests that hormonal contraceptives use is beneficial for many women (Pletzer&Kerschbaum, 2014).However, despite being on the market for decades, its benefits and having millions of users worldwide, there is a subset of women who suffer severe anxiety disorder for use of hormonal contraceptives (Pletzer&Kerschbaum, 2014). The myths and negative stories associated with the use of hormonal contraceptives have been observed to lead to certain levels of anxiety among women of child bearing age when it is being introduced to them. This can be attributed to the predominant religious orientation of the people. As a result,it seems that so many research efforts has been made on prevention and treatment of anxiety, hence the need for this study becomes imperative.

Although, drug therapy as a treatment model for anxiety has yielded admirable results, yet evidence has shown that this method of treatment alone cannot be relied upon for quick recovery(Collins, Witkiewitz, Kirouac & Marlatt, 2016). Moreover, it has been observed that a good number of people treated with anxiolyticsalone experience relapse. Thus, indicating the need for testing other psychotherapeutic modalities so as to address the public health burden of anxiety among women for use of hormonal contraceptives, hence, the need for this study.

Essentially, anxiety disorder is the most significant psychopathological disorder experienced by women using hormonal contraceptives (Celik,S.,Genc,G.,Kinetli,Y.,Asiluoglu,M.,Sari,M.&Kivanc,M.M.(2016);Wu,J.,Zhang,J.,Mitra,M.,Parish,S.L.&Reddy,G.K.M(2018). Also, anxiety has been shown to affect the decision-making in women for the use of hormonal contraceptives and may lead to exacerbation of other symptoms, such as pain, anger, depression, dyspnoea (Traeger,L.,Greer,J.A.,Fernandez-Robles,C.,Temel,J.S.,Pirl,W.F.(2012) and decreased quality of life (Bužgová R, Jarošová D, Hajnová E. (2015). This may have occurred as a result of the threatening nature of the side effects related to the use of hormonal contraceptives (Traeger et al, 2012).

Similarly, anxiety among women using hormonal contraceptives results in poorer adherence to treatment, decreased quality of life, mood changes and impaired health outcomes (ArrietaO,AnguloLP,Nunez-ValenciaC,Dorantes-GallaretaY,MacedoEO,Martinez-LopezD,Onate-OcanaLF(2013);DeCaralhoSMF,Bezerra,I. M.P.,Freitas,T.H.,Rodrigues,R.C.D., DeCarvalho,I.O.C.,Brasil,A.Q.,Júnior,F.T.C., Diniz,L.F.B.(2015); Thalén-Lindström, 2014). Anxiety in women in the use of hormonal contraceptives may be possible due to certain side effects of hormonal

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contraceptives such as weight gain, headaches, sore breasts, irregular periods, mood changes, decreased sexual desire, Acne, and neausea. For example, researchers had indicatedthat decreased sexual desire and weight gain contributes to higher levels of anxiety among women using hormonal contraceptives and therefore, psychotherapy such as psychoeducation and acceptance commitment therapy may act as an alternative treatment and may be effective in the treatment of anxiety among women using hormonal contraceptives (Reddick,B.K.,Nanda,J.P.,Campbell,L.,Rymman,D.G.,&Gaston-Johansson,F.(2005).

Indeed, hormonal contraceptive is a birth control method that acts on the endocrine system (French & Meltzer, 2020). Almost all methods are composed of steroid hormones, (although in India one selective estrogen receptor modulator is used). The original hormonal method was a combined oral contraceptive pill although many other delivery methods have been developed. However, the oral and injectable methpods are by far the most popular. Hormonal contraception is highly effective especially when taken on the prescribed schedule, users of steroid hormone methods experience pregnancy rates of less than 1% per year while the perfect-use pregnancy rates for most hormonal contraceptives are usually around the 0.3% rate or less (Bradshaw,H.K.,Mengelkoch,S. &Hill,S.E.,2020). Currently, available methods can only be used by women; the development of a male hormonal contraceptive has been active research area. There are two main types of hormonal contraceptive formulations: combined methods, which contain both an estrogen and a progestin, and progestogen-only methods which contain only progesterone or one of its synthetic analogues (progestins). According toHerreraA.Y.,FaudeS.,NielsenS.E.,LockeM. and MatherM.(2019), the combined methods work by suppressing ovulation and thickening cervical mucus; while progestogen-only methods reduce the frequency of ovulation, most of them rely more heavily on changes in cervical mucus; however, side effects are different for the different formulations.

Anxiety towards the use of hormonal contraceptive is nervousness and apprehension regarding the health outcome of the use or adoption of hormonal contraceptive as a method of birth control (Borkovec,T.D.&Ruscio,A.M., 2019). Usually, the uneasy apprehension sterms from abnormal fear of the negative long term effects of hormonal contraceptives in effect that its use and outcomes is not entirely known to Nigerians (Bradshaw et al, 2020).Arguably, there are many causes of anxiety regarding the use of hormonal contraceptive (Adedini, 2021). Some of them include but not limited to: lack of knowledge about the hormonal contraceptives, low levels of education, religious factors, socio-economic factors, marital support, and body image among others. The causes of anxiety are dependent on psycho-sociological factors peculiar to each individual (Adedini, 2021).

Essentially, psychoeducation is an educative method based on clinical findings for providing information and training to families with psychiatrically ill persons to work together with mental health professionals as part of an overall clinical

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treatment plan for their ill family members. Psychoeducation may improve patient outcomes for persons with anxiety for use of hormonal contraceptives, depression, schizophrenia and other major mental illnesses and behavioural disorders (Bauml,J.,Frobose,T.,Kraemer,S.,Rentrop,M .&Pitschel-Walz,G., 2006). Consequently, imminent goals of psychoeducation are to prevent patients with mild, moderate, and severe anxiety for use of hormonal contraceptives from having frequent relapsing episodes of the illness, ensuring medicine as well as treatment adherence, and to promote their re-entry into their home communities, with particular regard for their social and occupational functioning. To achieve these goals, psychoeducation programmes seek to provide the women with the information they need about anxiety for use of hormonal contraceptives and the coping skills that will help them to cope with the psychological components of their condition.

Furthermore, Acceptance Commitment Therapy is a third-wave behaviour therapy rooted in the philosophical tradition of functional contextualism (Hayes,S.C.,Hayes,L.J.,Reese,H.W.&Sarbin, T.R. , 2013) and based on Relational Frame Theory (Hayes,S.C.,Barnes-Holmes,D.&Roche,B, 2011). Acceptance and Commitment Therapy (ACT) is a type of psychotherapy that emphasizes acceptance as a way to deal with negative thoughts, feelings, symptoms, or circumstances (Wetherell,J.L.,Afari,N.,&Ayers,C.R., 2011). It also encourages increased commitment to healthy, constructive activities that uphold your values or goals(Wetherell et al., 2011).ACT therapists operate under a theory that suggests that increasing acceptance can lead to increased psychological flexibility(Wetherellet al., 2011). This approach carries a host of benefits, and it may help people stop habitually avoiding certain thoughts or emotional experiences, which can lead to further problems.

Hence, acceptance and commitment therapy has two major goals: (a) actively accepting unwanted and perhaps uncontrollable thoughts and feelings and (b) commitment and action towards goals that are aligned with one's chosen values. Thus, Acceptance and Commitment Therapy is about acceptance and change at the same time (Eifert,G.H.&Heffner,M., 2003).

Acceptance and Commitment Therapy is predicated on the notion that psychological suffering is caused by cognitive entanglement (fusion with maladaptive thoughts), psychological rigidity that prevents individuals from taking action towards their values, and "experiential avoidance" (behaviours that are intended to alter the intensity or frequency of unwanted private experiences such as unpleasant thoughts, feelings, and bodily sensations; (Hayes et al., 2013). Six core processes of Acceptance Commitment Therapy are used to increase psychological flexibility. These include:

i. Cognitive defusion: strategies to restructure the thoughts, sensations, and emotions.
ii. Acceptance: allowing experiences to be as they are without resistance.
iii. Contact with the present moment: being open, interested, and receptive to the here and now.

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iv. Self as context: developing a concrete sense of self as observer that is stable and independent of the changing experiences of each moment.
v. Values: defining what is most important in a person's life and
vi. Committed action: taking actions that are guided by one's values.

When applied towards anxiety disorders, Acceptance and Commitment Therapy teaches clients to end the struggle with the unpleasant sensations stemming from their anxiety while simultaneously choosing behaviours that move them closer to their values, regardless of what unpleasant thoughts and feelings these actions may spawn (Twohig.M.P.,Masuda,A.,Varra,A.A.&Hayes,S.C., 2015). General reviews of the effectiveness of Acceptance and Commitment Therapy have included anxiety together with other conditions (Ost, 2008).

Research Questions

- Given the stated problem of the study, the following pertinent questions guidedthe study:

1. Would women who receivedpsychoeducation (PE) show reduced anxiety symptoms than the control group?
2. Would women who received acceptance commitment therapy (ACT) show reduced anxiety symptoms than the control group?
3. Would women who received psychoeducation show reduced anxiety symptoms when compared with those who received acceptance commitment therapy?

Purpose of the Study

The major purpose of this study is to compare the efficacy of psychoeducation and acceptance commitment therapy in reducing symptoms of anxiety for use of hormonal contraceptives among Women in Awka South Local Government Area, Anambra State.Therefore, the specific objectives of the study were:

1. To examine whether women who received psychoeducation will show reduced anxiety symptoms when compared with the control group.
2. To evaluate whether women who received acceptance and commitment therapy will show reduced anxiety symptoms when with the control group.
3. To ascertain whether women who received psychoeducation will show reduced anxiety symptoms when compared with those that recived acceptance and commitment therapy.

Psycho education and Anxiety

Eifert and Heffner, 2003 investigated the effectiveness of Psychoeducation in a case of a 51 year-old male patient who presented with a primary diagnosis of generalized anxiety disorder and a secondary diagnosis of dysthymia. The specific social situations that he feared the most involved public speaking, being assertive, speaking with unfamiliar people, and attending social gatherings. By the end of the 12-week treatment, outcome measures revealed that the client was more willing to accept undesirable thoughts, to act in accordance with his values, and three times less likely to "buy into" his thoughts and feelings. The

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authors also reported that this patient experienced significant decreases in distress related to his anxiety and dysthymia. For example, he showed significant reductions in anxiety sensitivity, worry, mood-related distress, and obsessional thinking.

Anderson,C.M.,Gerard,E.,Hogarty.,G.E. and Reiss,D.J.(2019) studied the effect of Psychoeducation on anxiety for use of hormonal contraceptive among women with HIV: A randomised controlled trial. The purpose of the study was to investigate the effect of Psychoeducation on hormonal contraceptive use in women with HIV. The randomised controlled trial was conducted in 2017. Sixty HIV-infected women who referred to Imam Khomeini Hospital Consultation Centre for clients with risky behaviour in Tehran participated in this study. The sampling method was census, and samples were randomly assigned to two groups: control and intervention. In addition to routine care, the intervention group received seven Psychoeducation sessions on hormonal contraceptive use. The questionnaire used in this study was a hormonal contraceptive use assessment scale for HIV-positive women. The result showed no statistically significant difference between the demographic characteristics in the control and intervention groups ($p < 0.000$).

Orsillo,S.M.,Roemer,L.,Block-Lerner,J.,LeJeune,C. and Herbert,J.D.(2015) used an integrated protocol of traditional psychoeducation methods and acceptance- and value-based concepts inherent to Acceptance Commitment Therapy to treat four women who had Anxiety for use of hormonal contraceptives. After the 10-week treatment period, two of the four clients demonstrated substantial reduction in anxiety symptoms, and the third showed modest improvement. The fourth individual missed several sessions and did not demonstrate improvement in symptoms. However, all four participants made significant and positive life changes, especially in regards to their jobs and relationships. They reported that the values and acceptance elements of treatment were particularly helpful.

Acceptance Commitment Therapy and Anxiety

Several studies implementing concepts from Acceptance and Commitment Therapy in the treatment of Anxiety Disorder have demonstrated its potential effectiveness with this population.

Zaldívar, F and Hernández, M. (2001) investigated the therapeutic effectiveness of Acceptance Commitment Therapy on a 30-year old woman complaining of agoraphobic problems, anxiety, and depression in Egypt. The study used experimental (pre and posttest) design and the setting of the study is inpatient department in Mansoura University Hospital. Purposive sampling technique was used as sampling technique, structured interview Schedule, Beck Anxiety and Beck Depression inventory-II (BDI-II) were used to collect data from the participant. The study findings revealed that after 26 sessions of treatment with Acceptance and Commitment Therapy, there was a statistical significant difference in scores of anxiety and depression pre and post the Acceptance Commitment Therapy group ($P \leq 0.001$), the findings equally revelaed that the client had increased value-oriented actions and decreased avoidance

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responses. The results of this case study suggest that Acceptance Commitment Therapy should be explored as a viable option for the treatment of anxiety for use of hormonal contraceptives.

Eifert,G.H.,Forsyth,J.P.,Arch,J.,Espejo,E.,Keller,M.&Langer,D.(2019) investigated the effectiveness of Acceptance and Commitment Therapy on anxiety for use of hormonal contraceptives in Denmark. The purpose of the study was to investigate whether Acceptance and Commitment Therapy will be effective in relieving the symptoms of anxiety foruse of hormonal contraceptives among women diagnosed of anxiety disorder at a psychiatric hospital in Denmark. The design is a prospective cohort study combined data from the National Prescription Register and the Psychiatric Central Research Register in Denmark. All women and adolescents aged 15 to 34 years who were living in Denmark were followed up from January 1, 2000, to December 2013, if they had no prior anxiety diagnosis. Data were collected from January 1, 1995, to December 31, 2013, and analyzed from January 1, 2015, through April 1, 2016. The result revealed that a total of 1,061,997 women (mean age 6.4) were recruited. Compared with nonusers, users of combined oral contraceptives had mild anxiety. Users of progestogen-only pills had mild to moderate anxiety, users of a patch (norgestrolmin) had moderate anxiety, users of a vaginal ring (etonogestrel) had severe anxiety, and users of a levonorgestrel intrauterine system also had severe anxiety. For anxiety diagnoses, similar or slightly lower estimates were found. The relative risks generally decreased with increasing age. Adolescents (age range, 15-19 years) using combined oral contraceptives had moderate anxiety. Thefinding revealed that anxiety symptoms for users of hormonal contraceptives reduced to 1.2 after the participants were exposed to AcceptanceCommitment Therapy. The result indicated that Acceptance and Commitment Therapy was effective in reducing anxiety for use of hormonal contraceptives symptoms especially among adolescents, suggesting that Acceptance Commitment Therapy be adopted as a technique to relieve potential adverse effect of anxiety for use of hormonal contraceptives.

Eifert et al., 2019 investigated the effectiveness of Acceptance and Commitment Therapy on a case study involving a 52 year-old woman with a principal diagnosis of anxiety disorder and a secondary diagnosis of panic disorder in Denmark. Two research questions were posed and two hypotheses were formulated to guide the study. The instrument used was Beck Anxiety Inventory. The study adopted one-shot case study research design. The participant received a total of 12 sessions, weekly-1-hour sessions, the data relating to the research questions were analyzed using mean scores. The data relating to the hypothesis were analyzed using the Ananlysis of Co-variance (ANCOVA). The result of the study showed that the participantanxiety disorder severity dropped from moderately severe at pretreatment to subclinical levels at post-treatment. The result also showed significantly lower levels of overall distress, and notably, no distress related to her panic. At the 6-month follow-up, her anxiety disorder problems remained at subclinical levels, and she reported making positive life changes in regards to career aspirations. The researcher recommended that Acceptance Commitment

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Therapy should be utilized by clinicians in reducing symptoms of anxiety disorders.

Hypotheses

The following hypothetical statement shall guide the study.

1. Women who received psychoeducation will show reduced anxiety symptoms when compared with the control group.
2. Women who received Acceptance Commitment Therapy will show reduction in anxiety symptoms when compared with the control group.
3. Women who received psychoeducation will show reduction in anxiety symptoms for use when compared with those who receive Acceptance Commitment Therapy.

Method

Participants

The participants for this study comprised of 21 married women with age range of 18 to 45 years, mean age of 29.67 and standard deviation of 8.4. fromChukwuemekaOdumegwuOjukwu University Teaching Hospital, Amaku, Awka. These women came for 6 weeks post natal check up and immunization at the hospital and were outpatients as well. These participants were recruited using purposive sampling technique. Simple random sampling technique was also used to assign the participants into experimental (treatment) and control groups. This was done to eliminate bias and to ensure that every potential participant was given an equal chance of participating in the study. Hence, the design was between subject group design in which the experimental group of the study comprised two groups, group one or treatment group one (T1) were treated with psychoeducation and the other group (T2) were treated with acceptance commitment therapy, and the control group were exposed to pretest and posttest with no treatment.

Instrument

The instrumentused in this study is State Trait Anxiety Inventory (STAI) by Spielberger, (1983) and it was validated and adapted for use in Nigerian population by Omoluabi (1993). Omoluabi (1993) reported a mean score of 33.59 and a test retest reliability of 0.61. Obidigbo (2023) reported a cronbach alpha of .78.The Nigerian norms or mean scores were the basis for interpreting the scores of participants.

Procedure

The researcher submitted a letter of introduction and also a permission to conduct the research to Research Ethics Committee of the ChukwuemekaOdumegwuOjukwu University Teaching Hospital, Amaku, Awka, Anambra State. On approval, appointment was made with the nurses in the Immunization and post-natal unit to sample mothers on anxiety for use of hormonal contraceptives. A licensed and experienced clinical psychologist were sought and served as the therapist. The nurses at the Immunization and post-natal units introduced the researcher and therapist to the participants and asked them to permit the researcher to collect data for research purposes. After the introduction, the researcher created rapport with the participants and the aim of the research were properly explained to them. The participants that indicated interest willingly were selected and assigned to groups. The selected participants were given the STAI – Y1 inventory because the type of anxiety being measured is a state anxiety as a result of being introduced to hormonal contraceptives.

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The participants were guided on how to complete the questionnaire. The research assistant (the therapist) assessed the participants to determine the severity of the anxiety symptoms prior to treatment. This will serve as the pretest measure. After the pretest, the participants were assigned to three groups through the Fishbowl Random sampling Technique.

The non-treatment group

The researcher and the therapist met with the non-treatment group, both pretest and post test was conducted on them as well. No intervention was done in the control group.

Design and Statistics

The design used in this study was between subject pretest/posttest design because the same participants were treated twice (before treatment and after treatment). The statistics was one- way ANOVA statistics due to the three groups (Psychoeducation, Acceptance and Commitment Therapy, and Control Group) on one level of the dependent variable (Anxiety for use of Hormonal Contraceptives). The data was analyzed using the Statistical Package for the Social Sciences, IBM SPSS version 26 and significance was accepted at P <.05.

Results

Table 1: Over all summary of the Mean and Standard Error of Pre-test and Post-test scores of the participants.

ANOVA

Groups	Mean	Std. Error	N
Model-1(pre anxiety)			
Psychoeducation	56.03	1.58	7
ACT	57.06	1.57	7
Control	57.08	1.57	7
Model2(post anxiety)			
Psychoeducation	38.01	1.56	7
ACT	33.02	1.57	7
Control	57.06	1.50	7

Result from Table 1 above showed means and standard error of psycho-education treatment group, acceptance and commitment therapy treatment group and control group of the participants.

For Psycho-educationtreatment group (pretest anxiety) participants had M = 56.03, SE = 1.58, (posttest anxiety) participants had M = 38.01, SE = 1.56. For Acceptance Commitment Therapy treatment group (pretest anxiety) participants had M = 57.06, SE = 1.57, (posttest anxiety) participants had M = 33.02, SE = 1.57. For control group, (pretest anxiety) participants had M = 57.08, SE = 1.57, (posttest anxiety) participants had M = 57.06, SE = 1.50.

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Table 2: Summary table of mean and standard deviation for the variables (Mean difference)

(I) therapy Model (anxiety)	(J) therapy	Std Error	Sig	Mean diff
Psychoeducation	ACT	2.256	.000	9.981
	Control	2.213	.000	-17.404
ACT	Psychoedu	2.256	.000	-9.981
	Control	2.213	.000	-17.404
Control	Psychoedu	2.256	..000	-9.981
	ACT	2.256	.000	9.981

Table 3 Summary table of Post hoc

Source	Type III Sum of Squares	*Df*	Mean square	*F*	*sig.*
Model (anxiety)					
Corrected Model	6112.065	3	2037.355	52.796	.000
Intercept	574.313	1	574.313	14.883	.000
Anxiety scale	25.440	1	25.440	10.659	.002
Therapy(PsyEdu,ACT, Control)	6111.580	2	3055.790	79.187	.000
Total	98638.000	48			
Corrected total	7810.000	47			

a. R Squared = .885 (Adjusted R Squared = .877)

Over all, there was a significant reduction of anxiety in the posttest group when compared to the pretest anxiety group as shown in Table 3 above at F (1, 47) = 10.66, $P<.05$. Specifically for anxiety test in hypothesis one, there was a significant reduction of anxiety for use of hormonal contraceptives symptoms of those treated with Psychoeducation when compared with control (those with no treatment) in post hoc Table (See Table 3). Also, Mean difference between Psychoeducation and control in Table 2, indicated that there is significant symptom reduction for anxiety at MD =

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9.98, SE = 2.25, *P<.05*. For hypothesis two, there was a significant reduction of anxiety for use of hormonal contraceptives symptoms of those treated with Acceptance Commitment Therapy when compared with control in Post Hoc Table (See Table 3). Also, the mean difference between Acceptance Commitment Therapy and control in Table 2 above indicates that there is significant symptom reduction for anxiety at MD = 9.9, SE = 2.25, *P<.05*.

For hypothesis three, the mean difference indicates that there was a significant reduction of anxiety of those treated with Psychoeducation when compared with those treated with Acceptance Commitment Therapy at MD = 9.9, SE = 2.25, *P<.05* Table 2 above.

Discussion

This study evaluated the effect of Psychoeducation and Acceptance Commitment Therapy on Anxiety for use of Hormonal Contraceptives among Women in Awka South Local Government Area, Anambra State. The first hypothesis which stated that participants treated with psychoeducation will significantly show reduced symptoms of anxiety for use of hormonal contraceptives than the control group among women in Awka South Local Government Area, Anambra State was accepted. The result revealed that participants treated with Psychoeducation showed more reduced symptoms of anxiety for use of hormonal contraceptives than the control group. This is an indication that psychoeducation is effective in reducing symptoms of anxiety for use of hormonal contraceptives. The findings of this work is in line with the findings of Eifertet al (2019);Orsillo,S.M.,Roemer,L.,Block-Lerner,J.,LeJeune,C.&Herbert,J.D.(2015) which upheld that psychoeducation was effective, significant and have an influence in reducing anxiety for use of hormonal contraceptives.

While the works of Atefeh andMitra (2017) did not support the findings of the study which argued that psychoeducation showed no statistically significant effect between the demographic characteristics in the control and intervention groups. The finding of this work is consistent with the social learning theory which emphasized on the importance of observing and imitating the behaviour, attitudes and emotional reaction of others. It theorized that human behaviour is learned which forms an idea of how new behaviours are performed and supports that behaviour can be changed through learning and imitating positive acceptable behaviours. These could be a significant factor to the symptoms reduction of the participants of the study who were educated on the concept of hormonal contraceptives, the types of contraceptives and were also educated on anxiety for use of hormonal contraceptives, the management techniques and its coping mechanisms. Active participation and willingness of the patients to be involved in the therapy also played a role with the patients, being open and accepting them unconditionally and assuring them of their confidentiality during the seasons. The second hypothesis which stated that participants treated with Acceptance Commitment Therapy will significantly show reduced symptoms of anxiety for use of hormonal contraceptivesthan the control group among women in Awka South Local Government Area, Anambra State was confirmed. This finding might be explained due to the nature of Acceptance Commitment Therapy where participants are made to identify the problem at hand and

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accept and commit to behaviours to relieve the challenge. This finding is consistent with the findings of Zaldívar, F. and Hernández, M. (2001) and Eifert et al (2019). The finding of this work is in tandem with the Beck's Cognitive Theorywhich focuses on the way anxious people think about situations and potential dangers. They submitted that individuals who suffer from anxiety for use of hormonal contraceptives tend to make unrealistic appraisals of certain situations, primarily those in which the possibility of danger is remote. They also argued that the victims of anxiety burden themselves with task irrelevant cognitions. The third hypothesis which stated that participants treated with Psychoeducation will significantly show reduced symptoms of anxiety for use of hormonal contraceptives than those treated with Acceptance Commitment Therapy among women in Awka South Local Government Area, Anambra State was rejected. Although the finding showed significant improvement in both treatment conditions, those in the Acceptance Commitment Therapy treatment condition demonstrated higher reduced symptoms at post treatment.

Recommendations

The following recommendations were made:

1. Acceptance commitment therapy should be adopted as an intervention technique in the treatment of anxiety symptoms among women for use of hormonal contraceptives.
2. More collaborative studies of higher magnitude than this study should be carried out in the 3 senatorial zones of the state. This would help to bring to forefront the wide spread and magnitude of this disorder, that clinicians should conduct with large number of samples in regards to psychoeducation and acceptance commitment therapy on anxiety for use of hormonal contraceptives among women in Nigeria for better generalization and also to be replicate with large number of samples.

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