ADAPTATIONS OF TWO PSYCHOTHERAPEUTIC TECHNIQUES IN THE CULTURAL DYNAMICS OF THE TREATMENT OF POSTNATAL DEPRESSIVE WOMEN ATTENDING A POST-ANTENATAL CLINIC IN A TEACHING HOSPITAL IN AWKA NIGERIA

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ABSTRACT

The study investigated the adaptation of two Psychotherapeutic techniques namely Meseron therapy and cognitive behavioural therapy in the cultural dynamics of the treatment of postnatal depressive women attending a post-antenatal clinic in a Teaching Hospital in Nigeria. 200 participants were randomly selected among Igbo nursing mothers from South-East Nigeria suffering from postnatal depression. MT and CBT were used as psychotherapeutic interventions to alleviate the mental health condition of the women. The treatment modalities were modified in line with the cultural context of the study, across three domains for MT and eight domains for CBT, ranging from the patients' cultural factors in the Igbo communities. The study is a survey, adopting a mixed design and the data was analysed with a one-way analysis of variance and linear regression analysis. The result revealed that the culturally adapted MT was more effective than CBT in the treatment of nursing mothers suffering from postnatal depression. Further results confirmed that MT reduced PND more than CBT.The study concluded that psychotherapists and mental healthcare practitioners should adopt these psychotherapeutic approaches to the treatment of PND in relation to the cultural dynamics of their patients.

Keywords: *Adaptations, Psychotherapeutic techniques, cultural dynamics, Awka, Nigeria.*

INTRODUCTION

There is an urgent need to close the yearning gap between-western based psychotherapeutic interventions and African-based psychotherapeutic prophylactic measures. To achieve the treatment goals, each psychotherapeutic intervention needs to be sensitive to the culture which is being applied for the treatment of mental illness (Ebigbo, Elekwachi & Nweze, 2017). For the past three decades, the cultural adaptation of psychological treatment has been a major topic of debate among healthcare practitioners and academics in the mental health profession. Specifically, this debate has been focused on the role cultural dynamics play in a psychotherapeutic intervention (Bernal &Domenech-Rodriguez, 2012). Critiques have strongly voiced the relevance of contemporary psychology and the adaptation of cultural dynamics such as ethnicity, cultural background, and language in psychotherapeutic intervention. Cultural adaptation is described as the systematic modifications to evidence-based intervention or treatment to suit the context, language, and culture, of a people in such a way that it becomes compatible with their cultural norms, values, and general way of life (Sit, Ling, Lam, Chen, Latkin & Hall, 2020). Empirical evidence suggests that culturally adapting psychotherapeutic intervention has been one of the major ways to achieve effective treatment for mental health-related issues (Faregh, Lencucha, Ventevogel, Dubale & Kirmayer, 2019). Through the incorporation of cultural elements such as traditional beliefs system, social norms, and religious and spiritual beliefs, the selected psychotherapy can adequately take into account the local context for the psychological and mental health problem that is being treated, offer good evidence-based intervention for the target population (after rigorous modifications to suit cultural context), and improve the attitude of the locales towards the mental health intervention (Li, Zhang, Luo, Liu, Lin, et.al. 2017).

The attitude of locales towards psychotherapy can be influenced positively when they perceive that psychotherapy is effective in relieving mental-health-related issues. Evidence-based treatment that is sensitive to culture, ethnicity, and language produces positive changes for the clients involved. Understanding the application of the Igbos culture to some selected psychotherapeutic techniques requires that we first understand and have a brief knowledge of the Igbos. The Igbos are the second largest ethnic group living in the Southern part of Nigeria (Human Development Report, United Nation Development Project, 2020). The Igbos are socially and culturally integrated, consisting of many subgroups. Although they live in densely populated groups of villages, they all speak a common linguistic "Igbo Language". Traditional religious beliefs are shared by almost Igbo-speaking tribes. However, most of the Igbos' cultural practices are locally organized with the most effective unit of religious worship within the extended families (Nwagbara, 2011). The cultural dynamics of the Igbos need to be considered during Psychotherapeutic intervention in the region. Therefore, it has become pertinent to understand the cultural dynamics of the Igbos in the South Eastern region of Nigeria and how the dynamics can be applied to psychotherapeutic techniques for better treatments or interventions.

Empirical effort in understanding the adaptations of cultural dynamics to psychotherapeutic intervention is appreciable and has been largely focused on western countries with less attention given to low and middle-income countries globally. Although empirical literature on the cultural adaptations of Psychotherapeutic techniques exists in low and middle-income countries (e.g., Fendt-Newlin, Jagannathan & Webber, 2020; Zubieta, Lichtl, Trautman, Mentor, Cagliero, Mensa-Kawo, et. al. 2020), but there exists a lacuna within the Nigeria context especially as it relates to the Igbo people of the South-East region of Nigeria. There is a paucity of empirical and theoretical studies about this context. Hence, it is vital to consider some salient and effective psychotherapeutic techniques and modify them to suit the cultural dynamics of the Igbo people. Consequently, two psychotherapeutic techniques will be adapted and modified based on their intended cultural adaptations that are being studied. The Psychotherapeutic techniques are Meseron therapy and cognitive behavioral therapy. The two psychotherapeutic techniques were adapted with consideration of the Igbo cultural dynamics and they are conceptualized below:

Meseron Therapy (MT)

Meseron therapy is a psychological treatment approach developed in Nigeria by Awaritefe, (1995). The term 'Meseron' is derived from the Urhobo language (the language of the Urhobo people of Delta State, Nigeria) which means "I reject/refuse it." Its origin derives from the Nigerian belief in the power of spoken words. The power of spoken words is their potency, meanings, and consequences. Meseron therapy is seen as a form of cognitive therapy as its technique reflects a cognitive orientation and requires a mental restructuring for the client (Awaritefe & Ofovwe, 2007). MT is a psychotherapeutic treatment approach of African descent that consists of a direct and holistic counter-attack on undesirable human situations. It was conceived from a Nigerian custom of rejecting the negativity of life while accepting the positive circumstances of life. It is also considered a motivational theory because it affirms the need for a man to strive for a desirable goal using his inherent potential and attributes. (Awaritefe & Ofovwe, 2007).

Cognitive Behavioural Therapy (CBT)

According to the American Psychological Association (2021), "Cognitive Behavioural Therapy (CBT) is a type of psychological treatment that has been demonstrated to be potent for a range of psychological problems including depression, anxiety disorders, alcohol and, drug use problems, marital problems, eating disorders, and severe mental illness". Several studies suggest that CBT leads to significant improvement in functioning and quality of life. In some other studies,

CBT has been demonstrated to be as efficacious as other forms of psychological therapies or psychiatric medications (American Psychological Association, 2021).

Studies have shown that about 1in 10 mothers develop postnatal depression (Harding, 2017). It is very prominent and almost considered normal to have the disorder after childbirth. Symptoms include being weepy, irritability, and, feeling low. Baby blues usually occur around the third day but usually go by the 10th day after childbirth. It usually did not require any medical treatment. This is a rare but severe form of mental illness, it may occur with a low mood, but there are several visible features. If the baby blues linger for more than two weeks, it may lead to postnatal depression. It is not uncommon for the baby's father to develop depression in the weeks after a baby is born. In PND symptoms are usually there on most days, most of the time, they may persist for two weeks or more (Harding, 2017). The symptoms are similar to those that occur with depression at any other time. They usually include one or many of the following: (i) decreased mood: It tends to be worse first thing in the morning hours, but not always; (ii) unable to enjoy anything: It usually leads to a lack of interest in self and your baby; (iii) lack of motivation to carry out any task; (iv) often having a weeping spell; (v) feeling irritable most of the time; (vi) feeling of guilt, rejection, or not being proactive in doing things.; (vii) Poor concentration (like forgetting or losing track of usual house chores) or being unable to make or contribute to decisions about family matters; and (viii) unadjusted feelings and unable to do anything at their disposal. In the treatment of postnatal depression, support and understanding from family, friends, and sometimes from professionals such as clinical psychologists and psychiatrists can help the client or the patient to recover. Other vital treatment options may include psychological treatment of administering therapies or other psychotherapeutic techniques that are adaptable to the patient's culture. Antidepressant medications can also be a treatment option. Some of the cognitive therapeutic options are as follows: Cognitive behavioral therapy (CBT) which is a combination of cognitive therapy and behavioural therapy that gears toward restructuring individuals' cognitive defects; the guided self-help related - CBT and during which patient or client will be offered some readings or computer-based information or video. He or she would go through the reading, watching or listening to it at his or her own pace. In the treatment method, the client would be able to talk to a therapist regularly, either face-to-face or by, -telephone, who would help the client regain insight into his or her problems and deal with them accordingly. In addition, interpersonal therapy can assist the patients or clients to identify problems in their relationships with family, friends, partners, and other people and see how these could relate to PND and other psychological problems. Lastly, other types of therapies include problem-solving therapies; such as assertive training and psychodynamic psychotherapy could also be adapted to treat PND.

Conceptual models of cultural adaptation of psychotherapy have been available for over 30 years. Early cultural adaptation models focused on some therapies' that demand that demographics such as ethnicity and language need to match with modifying therapy method that will be compatible with clients' worldviews, such as incorporating indigenous healers, religious leaders, and family members into the psychotherapeutic measures. (Bernal, Bonilla & Belliodo (1995) provided an exclusive early model, identifying eight dimensions of interventions (language, persons, metaphors, content, concepts, goals, methods, and context) that could be adapted culturally. Several meta-analyses of empirical research generally have demonstrated that culturally adapted interventions produce better outcomes among ethnic minority clients than unadapted interventions (Hall & Yee, 2014; Hall, Ibaraki. et al., 2016; Smith & Trimble, 2016). The humanistic approach can be used to discuss the efficacy of adapting psychotherapeutic techniques to cultural dynamics. Humanistic therapy is a mental health approach that recognizes the importance of being your true self in order to have the most fulfilling life. The Humanistic theory also integrates a core belief that individuals are good at heart and capable of making the correct choices for themselves. The theory makes emphasis about individual values, belief system, and

desire for self-actualization, and how it impacts an individual's life. In application, Psychotherapeutic intervention that is sensitive to human values and a belief system will prove to be more efficacious because it targets very fundamental needs of people across specific societies and cultures.

There are existing works of literature that support the efficacy of the adaptations of cultural dynamics to Psychotherapeutic techniques. For example, Binkley and Koslofsky (2017) studied the cultural adaptation of family-based therapy for bulimia in depressed Latino adolescents. The treatment was brief and incorporated components of family-based therapy and narrative therapy with overarching multicultural dimensions. The progress of the treatment was measured through self-report (Children's Depression Inventory), parent-report, and concrete behavioral markers (e.g., reduced number of purging events). At the end of treatment, there was a quantum reduction of earlier depressive symptoms such as; elimination of suicidal ideation and cutting behaviors, reduction of fatigue, anhedonia, and low mood) as well as disrupted eating behaviours. By supporting the teenager and family to identify and leverage their individual and family strengths, the treatment also strengthened family communication, increased shared positive family experiences (e.g., over family meals), and supported the teenager in participating in community activities consistent with the family's values and approval. The study further described the modified treatment used over the multiple domains to actualize culturally sensitive care, as well as by identifying the merits and demerits of the psychotherapeutic measures. Therefore, the adoption of these methods in the treatment of these adolescents strengthens the clinical outcome.

In a similar study by Cumba-Avilés (2017), they explored cognitive behavioural group therapy for Latino youth with type 1 diabetes and depression. The study which was a group case study described the course of a 14-session Cognitive-Behavioural Therapy (CBT) for Latino adolescents with type 1 diabetes mellitus (T1DM) and depressive symptoms. The prophylactic measure, known as Cognitive Behaviour Therapy- Diabetes Mellitus (CBT-DM), is a form of an adaptation of an effective group intervention for adolescents' depression. The treatment objectives and cultural adaption model are described, as well as procedures used to achieve sensitivity to the characteristics of the T1DM culture as experienced by Latino youth from Puerto Rico. Session-by-session protocol was evaluated, and treatment gains on the group as a whole and its members were presented, providing quantitative and qualitative information. Treatment feasibility, clients' acceptance and satisfaction with treatment, and follow-up data up to 6 months post-treatment were also reviewed with due consideration of cognitive, behavioural, emotional, relational, medical, and functional outcomes. Complicating outcomes, barriers to care, and treatment implications are discussed in the context of treating clients with comorbid chronic physical illness and emotional problems that are embedded in a Latino culture. Translation of evidence-based treatments for depressive disorder into primary health care settings and adapting protocols in the treatment of youth populations with other medical illnesses were proposed by the author. As seen from the two empirical pieces of literature reviewed above, most studies are built on interventions occurring in the context of clinical trial research.

A study by Ebigbo et al. (2017) on the cross-cutting issues of the practice of psychotherapy in Nigeria observed that there is a need to bridge the gap between western psychotherapy by ensuring that these therapies are sensitive to the Nigerian context. Some salient factors were identified to help in bridging the gap. Some of these important relativities were adumbrated and they are comprised of frequent somatic complaints of psychological origin, beliefs in spirits including ancestral spirits, independent spirits, and the supreme spirit God to whom duties are owed to keep the moral order. Based on the aforementioned, the authors expressed uncertainty in the use of foreign diagnostic criteria for illnesses. Also, efforts were made to describe the traditional ways of treatment such as the popular prayer houses and traditional healers which some Nigerians have described as being very curative.

Zubieta et al. (2020) carried out a study on the perceived feasibility, acceptance, and cultural adaptation of mental health intervention for rural Haiti. Using a focus group discussion (FGD) consisting of 12 women, five intervention techniques were culturally adapted to the study of promoting mental health: individual counseling, income-generating skills training, peer support groups, reproductive health education, and couples' communication training. The study revealed that individual counseling support groups and skills training components were generally expected to be effective, acceptable, and feasible by both genders of participants. Based on the outcome the participants expressed doubts regarding the acceptability of the couples' communication training and reproductive health education due to: a perceived lack of male interest, traditional male and female gender roles, lack of female autonomy, and misconceptions about family planning. In addition, the feasibility, effectiveness, and acceptability of the components were described as dependent on cost, nearness to participants, and inclusion of female health promoters that are popular in the community.

Another study by Fendt-Newlin et al. (2020) investigated the cultural adaptation framework of social interventions in mental health: Evidence-based case studies from low- and middle-income countries. They adopted a case study approach to discuss the feasibility of developing and adapting psychosocial interventions which are entrenched in local knowledge, values, and practices. The study result indicated that the first case study introduces yoga as an alternative and/or complementary, and culturally relevant, approach for people experiencing mental health conditions in India. The second case study is a cross-cultural adaptation of a psychosocial intervention from the United Kingdom to fit the local idioms of distress and service context in Sierra Leone, as the West African country battled with the Ebola epidemic. The case studies were used to develop a Cultural Adaptation Framework, which takes cognizance that people and their mental health are products of their cultural heritage, and to inform the Clinicians and the general populace about the future development, adaptation, and evaluation of sociocultural interventions for people experiencing mental health conditions in low- and middle-income countries. Fendt-Newlin et al. (2020) concluded that a cultural adaptation framework can be utilized to ensure interventions that are culturally relevant, relative, and, effective to local conditions prior to evaluation in the clinical studies.

Research has also shown that 11.5% of nursing mothers attending antenatal clinics in Nigeria experienced symptoms of postnatal depression. The authors used the Edinburgh Postnatal Depression scale to measure the prevalence of postnatal depression (Olaoye et al, 2019). The Study included 400 nursing mothers attending antenatal clinics in three health facilities in Nigeria. The study found that factors such as unplanned pregnancy, unsupportive partner, and financial problems were associated with an increased risk of postnatal depression. Additionally, the authors noted that the severity of symptoms was not related to the number of children a woman or her level of education (Olaoye, et al, 2019). The study concluded that postnatal depression is a major public-health concern in Nigeria and that more needs to be done to address the issue. The authors recommended that interventions such as increasing access to mental health services and improving the social support available to women who are at risk of developing postnatal depression (Olaoye, et al, 2019).

Based on the foregoing, the following hypotheses was tested: (1) Meseron therapy will significantly be more effective than Cognitive behaviour therapy in the treatment of Postnatal depression among nursing mothers attending post antenatal clinics in a teaching hospital in Awka.

METHOD

Participants

Two hundred (200) selected nursing mothers from the Igbo tribe of South east suffering from postnatal depression participated in this study. The sample size of the study was realized through the stratified random sampling techniques from post-antenatal out-patient women attending a post-antenatal clinic in Chukwuemeka Odumegwu Ojukwu University Teaching Hospital Awka. The stratified random sampling was carried out to select the participants of the study; the researcher(s) chose an even number method of sampling. In this study, 10 participants were randomly selected in a cluster of 20 nursing women suffering from postnatal depression in the post-antenatal clinic sessions.

Their ages ranged from 18 to 45 years with a mean age of 31.5 and a standard deviation of 8.22. Previous studies have shown that PND occurs in about 1 in 20 mothers in Nigeria (Abamara, 2022). It usually develops within the first four weeks after childbirth. However, it can occur several months following childbirth. Symptoms including low mood may last longer than expected. We included in the study women who had a normal birth within three months period. Exclusions were women who gave birth through cesarean section, and those who gave birth for over three months.

Data collection and procedures

An instrument known as Edinburg Postnatal Depression Scale[1] (EPDS) developed by Cox, Holden, & Sagovsky (1987) was administered to women participants of the study. The 10-question EPDS is a valuable and efficient way of identifying patients at risk for "perinatal" depression. The EPDS is easy to administer and has proven to be an effective screening tool. Mothers who score above 13 are likely to be suffering from a depressive illness of varying severity. The EPDS score should not override clinical judgment. A careful clinical assessment was carried out to confirm the diagnosis. The scale indicates how the mother has felt during the previous week. In doubtful cases, the tool was repeated after two weeks. The scale did not detect mothers with anxiety, neuroses, phobias, or personality disorders. Regarding the s***coring*****,** questions 1, 2 & 4 (without an*) were scored 0, 1, 2, or 3 with the top box scored as 0 and the bottom box scored as 3; questions 10 (marked with an*) were reverse scored, with the top box scored as 3 and the bottom box scored as 0. The maximum score was 30, and a cutoff for possible Depression was set for a score of 10 or greater. Regarding ***reliability and validity, a*** pilot study from a clinical trial using the Edinburgh Postnatal Depression Scale (Cox, Holden, & Sagovsky (1987) involved forty (40) participants drawn from the population of postnatal depressive women in another tertiary general hospital in the southeast geopolitical zone of Nigeria. This pilot study was conducted to test the internal consistency and reliability of EPDS. The result of the pilot study shows a Cronbach alpha coefficient of .74. This result confirmed that the research instrument of EPDS is very reliable and suitable for the present study.

Before the commencement of the main study, the researchers obtained written permission from the hospital management of Chukwuemeka Odumegwu Ojukwu University Teaching Hospital Awka. The researchers obtain verbal consent from the postnatal depressive women attending post antenatal clinics to participate in the study. Confidentiality of the study was discussed with participants as well as their right to withdraw at any time. The study was conducted in the outpatient care unit of the maternity ward of the hospital. The researchers with the help of the nurses who served as research assistants administered the research instrument of the Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden &Sagovsky, 1987) to the postnatal women in attendance at the outpatient clinic of the antenatal care unit of the hospital. The administration and data collection tools lasted for two weeks (Tuesdays and Thursdays) on antenatal days. The women

were given extra two days to respond to the research instrument (questionnaire). A total of two hundred and fifty (250) questionnaires were administered to women in the post antenatal outpatient care unit of the antenatal clinic of the hospital. In the end, the researchers thanked the women participants, and the questionnaire was collected and sorted. Out of 250 questionnaires administered, 200 properly filled questionnaires were selected and the responses were coded in an excel spreadsheet.

Treatment

In the further procedure, the treatment modalities of Meseron Therapy and Cognitive Behaviour Therapy were modified in local language to suit the cultural context of the therapeutic milieu. MT treatment was modified across three domains. 1. Rejecting the negatives. 2. Accepting the positive circumstances of life. 3. Power of spoken words. While CBT was modified across eight major domains. 1. Cognitive restructuring or reframing. 2. Guided discovery. 3. Exposure therapy. 4. Journaling and thought records. 5. Activity scheduling and behaviour activation. 6. Behavioural experiments. 7. Relaxation and stress reduction. 8. Roleplaying. These domains are in line with the ecological validity and cultural sensitivity model proposed by Bernal et al. (1995). This model enabled a framework consisting of three major domains of MT and eight major domains of CBT in which interventions were developed and/or modified from an existing treatment to provide culturally sensitive treatment, which is contextualized in consonance with the client's cultural values, language, and socioeconomic status. More especially the contents of these therapies were translated into the linguistic language (Igbo) to ensure that the participants who are not well educated could understand the content of the therapies. The modified Psychotherapies to suit the cultural context of the Igbos in South-East Nigeria were administered to the research participants. The 200 nursing mothers' participants were grouped into 10 groups of participants. The 10 groups were assigned to 10 therapeutic milieus with second-grade clinical psychologists as their therapists. The administration of MT and CBT lasted for two months and two weeks, two times a week. The MT and CBT were administered to the nursing mothers within the time lag of two months and two weeks in all ten groups of participants. The administration of the therapies was done at two-two days intervals, after each administration, the nursing mothers' participants were administered with EPDS to ascertain the statuses of PND, and their scores on the scale were recorded. **Fig.1** below shows the flow chart for the administration of MT and CBT and their treatment outcomes. **Fig. 2** below shows the summary timetable for the administration of the psychotherapies. The scores of the participants obtained from the questionnaire and the two psychotherapeutic techniques of MT and CBT were elicited and coded in an excel spreadsheet of statistical package for the Social Sciences, 23 version.

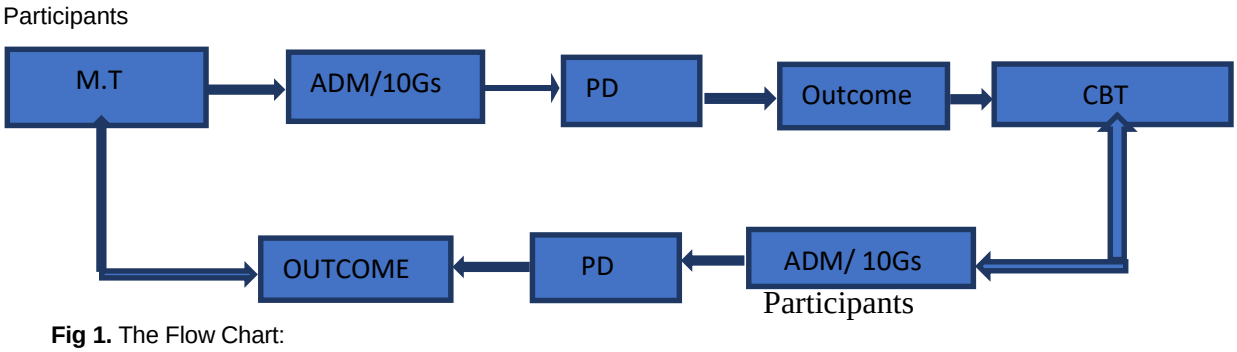

Fig 1. The Flow Chart:

- The flow chart for the administration of Meseron Therapy (M.T) and Cognitive Behaviour Therapy (CBT), and their treatment outcome. The outcome shows a positive improvement in their depressive state.

WEEKS	**DATE**	**THERAPY**	**TOPIC**	**PERIODS/ SESSIONS**
Week 1	Tues 26th July 2022	Meseron Therapy	General introduction of MT and medical history of patient's illness	9.00am-10.00am
	Thurs. 28th July 2022	CBT	General introduction of CBT and medical history of patient's illness	9.00am-10.00am
Week 2	Tues. 2nd August 2022	Meseron Therapy	Using creative hopelessness of MT to reduce PND	9.00am-10.00am
	Thurs. 4th August 2022	CBT	CBT on Postnatal Depression	9.00am-10.00am
Week 3	Mon. 9th August 2022	Meseron Therapy	Using the willingness of MT to reduce PND	9.00am-10.00am
	Thurs. 11th August 2019	CBT	Treatment options andCBT	9.00am-10.00am
Week 4	Tues. 16th August 2022	Meseron Therapy	Using role-playing of MT and problem of control	9.00am-10.00am
	Thurs. 18thAugust 2022	CBT	Training in relaxation/ coping with PND and CBT	9.00am-10.00am
Week 5	Tues. 23rd August 2022	Meseron Therapy	Training on defusion values and commitment of MT	9.00am-10.00am
	Thurs 25th Sept 2022	CBT	Training in relaxation/ coping with PND and CBT	9.00am-10.00am

Week 6	Tues. 30th August2022	Meseron Therapy	General introduction of MT and medical history of patient's illness	9.00am-10.00am
	Thur. 1st September2022	CBT	General introduction of CBT and medical history of patient's illness	9.00am-10.00am
Week 7	Mon. 6th Sept 2022	Meseron Therapy	Using creative hopelessness of MT to reduce PND	9.00am-10.00am
	Thur. 8th Sept 2022	CBT	CBT on PND	9.00am-10.00am
Week 8	Mon. 13th Sept 2022	Meseron Therapy	Using the willingness of MT (rendering lullabies) to reduce PND	9.00am-10.00am
	Thur. 15th Sept 2022	CBT	Treatment options and CBT	9.00am-10.00am
Week 9	Tues. 20th Sept2022	Meseron Therapy	Using role-playing of MT and controlled PND	9.00am-10.00am
	Thur. 22nd Sept2022	CBT	Relapse prevention/Depressive symptoms PND and CBT	9.00am-10.00am
Week 10	Tuesday. 27th Sept 2022	Meseron Therapy	Training on defusion values and commitment of MT to Reduction of PND	9.00am-10.00am
	Thur. 29th Sept.2022	CBT	Training in relaxation/ coping with PND and CBT	9.00am-10.00am
Total =10 weeks	2 months and 2 weeks	2 Therapies		20hrs or 20 sessions

Fig 2: The summary timetable of therapy sessions

Therapist

The main therapist is the first author; He is a Clinical Psychologist with 18 years of practice experience who had undergone different levels of training in psychotherapy and behavior modification in mental health facilities across nations.

Design/ Data Analysis

The study is a survey and exploratory analysis was based on a mixed design, and statistical analyses were performed using Statistical Package for the Social Sciences (SPSS). We performed descriptive statistics summarized as proportions for categorical variables; and means/standard deviation or median/interquartile range for continuous variables. One-way analysis of variance (one-way ANOVA) was employed to determine the differences in two psychotherapeutic techniques MT and CBT about postnatal depression.

RESULTS

Table 1: Sample characteristics (n=200)

Variables	Minimum	Maximum	Mean	Std. Deviation
Age in years	18.00	45.00	30.63	6.63
Employment Status	1.00	2.00	1.50	0.50
Meseron Therapy	40.00	80.00	64.55	9.88
Cognitive Behaviour Therapy	41.00	80.00	63.44	9.54
Post Natal Depression	30.00	78.00	57.57	10.12

Table1 shows that the mean age of the participants was 31 with a standard deviation of 6.63. The mean for employment status is 1.50, and this result shows the participants are underemployed or unemployed. The mean performance of the participants in Meseron therapy is 64.6, while their performance in cognitive behavior therapy is 63.44. The mean gravity of postnatal or postpartum depression is approximately 58.

Table 2: One-way ANOVA on Post Natal Depression treated by Meseron Therapy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1191.810	55	21.669	.817	.802
Within Groups	3817.770	144	26.512	-	-
Total	5009.580	199	-	-	-

Table 2 shows the result of f* ratio of 0.817 was significant at 0.802 criterion level (F =.817 < .802).Meseron therapy is a good treatment option for postnatal depression among women attending post antenatal care in a teaching hospital in Awka Nigeria.

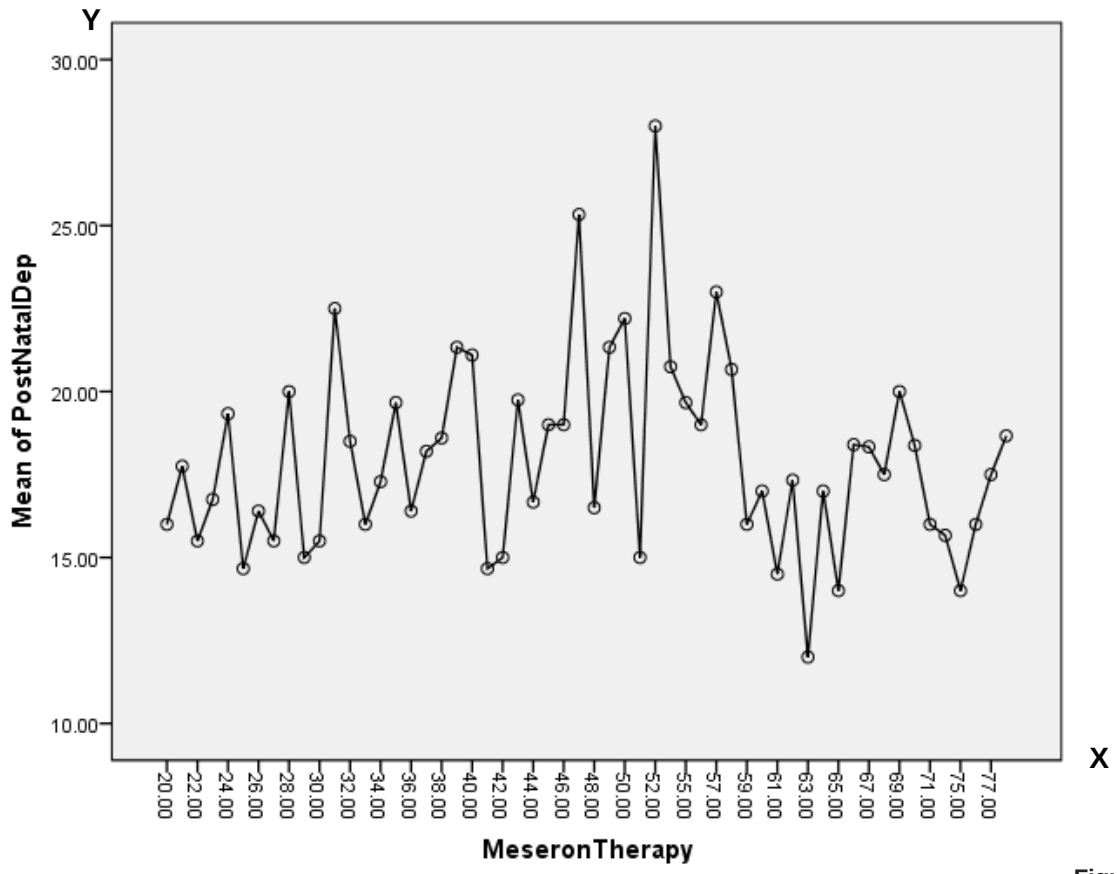

Figure 3

Means plot for the treatment of postnatal depression using Meseron Therapy

Figure1shows that the psychotherapy option of Meseron was effective in the range of 15 to 20 in the treatment of postnatal depression among women attending post antenatal clinics. It was also effective above average in the treatment of postnatal depression among women attending post antenatal clinics that fall between 25.5 and 30.It was less efficacious in the treatment of postnatal depression among women attending post antenatal clinics that fall within 10 to 14.8 on the y-axis.

Table 3: One-way ANOVA on Post Natal Depression treated by Cognitive behaviour therapy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1348.33	64	21.07	.777	.871
Within Groups	3661.251	135	27.120	-	-
Total	5009.580	199	-	-	-

Table3 shows the result of f* ratio of .777 was not significant at .871 criterion level (F =.777< .871). The result shows that cognitive behaviour therapy is not a suitable treatment option for postnatal depression among women attending post antenatal care in a teaching hospital in Awka Nigeria.

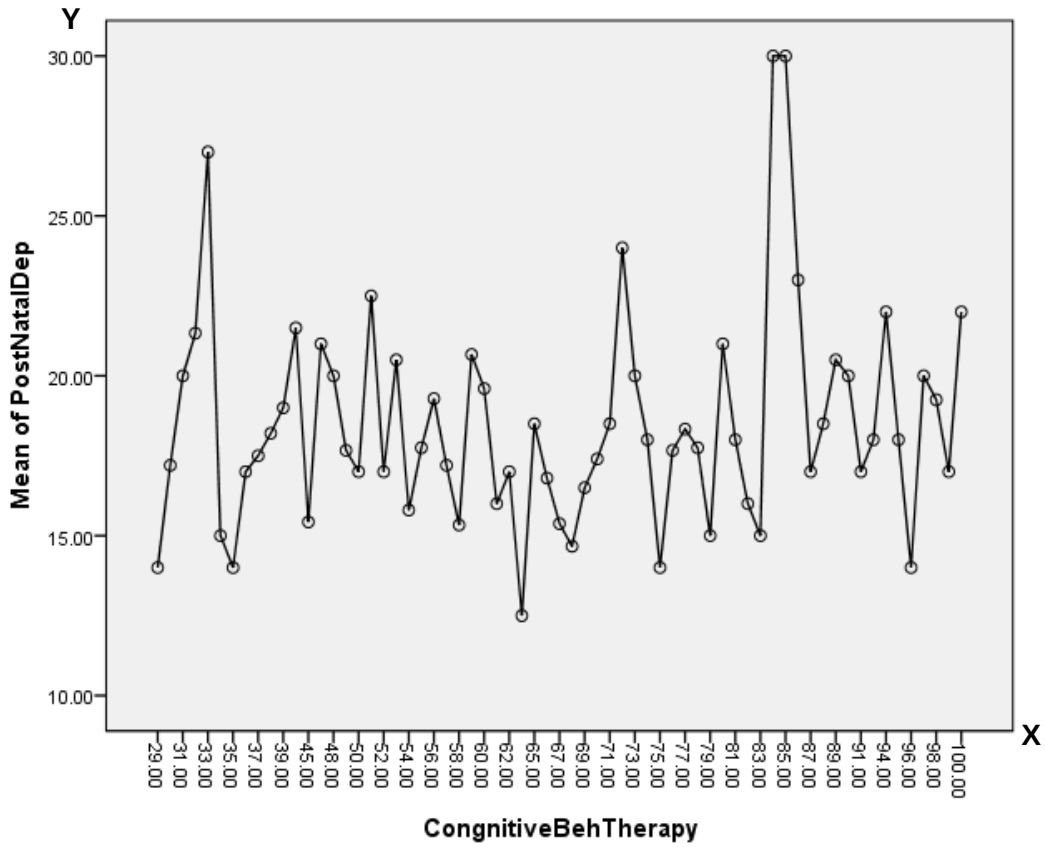

Fig 4: Means Plots for the treatment of postnatal depression using cognitive behaviour therapy

Cognitive behaviour therapy is not suitable enough for the treatment of postnatal depression among women attending postnatal antenatal care in a teaching hospital in Awka Nigeria. Most women in this treatment option fall within 11 to 20 while very few fall within 25 to 30 on the y-axis.

Table 4: Model Regression of the Variables on Postnatal Depression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.173[a]	.030	.010	4.99182

a. Predictors: (Constant), Congnitive BehTherapy, Age, EduLevel, MeseronTherapy

The Summary result in table 4 shows CBT, age, educational level, and MT jointly contributed *(R^2=.030)*, ie 30% to the reduction of PND among the nursing mothers in post antenatal clinics.

Table 5: ANOVA Table of the Variables on Postnatal Depression

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.

	Regression	150.513	4	37.628	1.510	.201[b]
1	Residual	4859.067	195	24.918		
	Total	5009.580	199			

a. Dependent Variable: PostNatalDep
b. Predictors: (Constant), Congnitive BehTherapy, Age, EduLevel, MeseronTherapy

The Summary result in table 5 shows that CBT, therapy, age, educational level, and MT predicted significantlyF= (4,199)<.201 on the treatment of PND among nursing mothers in post antenatal clinic

Table 6: Linear Regression Coefficients of the Variables on Postnatal Depression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	13.052	2.231		5.851	.000
	Age	.075	.046	.115	1.611	.109
1	EduLevel	.179	.355	.036	.504	.615
	MeseronTherapy	.008	.022	.028	.386	.700
	Congnitive BehTherapy	.029	.018	.112	1.561	.120

a. Dependent Variable: PostNatalDep

The Summary results in table 6 show that age predicted significantly the treatment of PND at(t= 1.611; <.109). Educational level predicts significantly the treatment of PND at (t=.504; >.615). MT predicted significantly the treatment of PND at (t=.386; < .700). CBT predicted significantly the treatment of PND at (t=1.561; <.120) among nursing mothers attending post-antenatal clinics. The Beta weight revealed that MT reduced PND to the level of 28% and CBT reduced PND to the level of 112% among nursing mothers attending post antenatal clinics

DISCUSSION

The study investigated the adaptation of two psychotherapeutic techniques of Meseron therapy and cognitive behaviour therapies in the cultural dynamics of the treatment of postnatal depressive women attending a post antenatal clinic in a teaching hospital in Awka. We targeted postnatal depression which has some prevalence among nursing mothers. Studies have revealed that some Igbo women develop postnatal or postpartum depression after childbirth. It is basically a result of how these women were treated at the time of their pregnancies. (Abamara, 2022). Most of these women were ill-treated by their spouses, and some were subjected to some sort of abuse or domestic violence such as wife battering, food, and sexual starvation. Some of these pregnant Igbo women that passed through traumatic experiences during the trimesters of their pregnancies usually died before, during, or after childbirth. Some of them that survived these experiences may develop postnatal or postpartum depression at the birth of their babies. (Abamara, 2022).

The current study shows in hypothesis one that there is a significant difference in the treatment of postnatal depression by administering Meseron therapy, which was found very effective in the

treatment of PND among women attending post antenatal clinic in a teaching hospital in Awka Anambra State Nigeria. Moreover, in figure 3 the women were treated on averagely and above with Meseron therapy. Very few that fall below average were not effectively treated. The result of the regression coefficient in table 6 confirmed that MT reduced PND to the level of 28% among nursing mothers in the therapeutic milieu. As an integral part of MT, the cultural cure for treatment and rehabilitation of women with PND are basically to be rendering maternal soft songs and baby lullabies to the affected nursing mothers that will disassociate them from starving their babies and from suicidal ideation or thoughts. They usually use the phrases "I reject" or "gods of our land forbid" me not to take care of my baby, and "I reject killing myself because of the way I was treated during and after the period of my pregnancy. The above finding was in agreement with the work of Awaritefe & Ofovwe (2007).The soft songs are rendered two or three times a day in their respective solitudes for the period of two months and two weeks, and meanwhile, baby milk was used to feed the babies of the nursing mothers that refused to breastfeed their babies. After about one to two months of hearing the soft songs and baby's lullabies, these nursing mothers began to turn around from their depressive moods to appreciate their newborn babies under their mothers' care and began to eat properly and appreciate the people around them.

The postnatal depression they experience is characterized by their inability to take care of their newborn babies. They will neither touch their babies nor breastfeed them. The nursing mothers who have PND in the current study, their mothers were urgently invited to take care of their daughters in their daughters' matrimonial homes. Taking care of a daughter after childbirth by the mothers is called "ile omugwo" in the Igbo language and culture. Ordinarily, mothers are given at least one week to prepare for "ile omugwo", but on seeing the signs and symptoms of PND they were invited immediately to start taking care of their daughters and the babies. If the mothers of these nursing women are not invited in time, it may lead to maternal or infant mortality. The babies may be starved to death by their mothers or their mothers may commit suicide.

The results show in hypothesis 2; that there is no significant difference in the treatment of postnatal depression by administering cognitive behaviour therapy. Cognitive behaviour therapy is less effective in the treatment of postnatal depression among women attending post antenatal clinics in a teaching hospital in Awka Anambra State Nigeria. However in figure 4, more women were treated averagely and below with CBT in this study. Very few that fall above average were not effectively treated. The result of the regression coefficient in table 6 confirmed that CBT reduced PND to the level of 112% among the nursing mothers in the therapeutic milieu. The model summary in table 4 revealed that CBT, age, educational level, and MT jointly contributed 30% to the treatment of PND, and the ANOVA summary in table 5 revealed that CBT, age, Educational level, and MT predicted significantly in the treatment of PND among nursing mothers in the therapeutic milieu. The mean result finally confirmed that MT is more effective than CBT in the treatment of PND among women attending post antenatal clinics in a teaching hospital in Awka Anambra State Nigeria. The finding in hypothesis two is in contrary to the work of Hazrami (2022). She found at the University of Georgia that CBT was the most widely studied treatment. It has been extensively investigated and shown to be equally as effective for depression as antidepressant medication.

The effectiveness of MT over CBT in the treatment of PNDis basically due to its indigenous cultural content in handling the disorder. For CBT to be more curative in handling issues of PND it must go through cultural standardization in traditional cultures in Nigeria. Nursing mothers with PND disorders are usually referred to a clinical psychologist for psychological intervention, and understanding the cultural factors as regards the norms and values of the client's cultural background will bring about excellent clinical interventions.

Strengths and Limitation
The study has succeeded in bringing out the strength of two therapeutic measures in the treatment of postnatal depression among nursing mothers in south east Nigeria. The major limitation of this study was that some nursing mothers in attendance were reluctant to respond to the questionnaire and be receptive to the two psychotherapeutic measures administered.

Implications
The study implies that the two therapeutic measures can be administered in varied degrees to treat postnatal depression among nursing mothers in south east Nigeria.

Conclusion
If a woman has an episode of PND she may have a greater than average chance of reoccurring again if she has another baby. Studies have also shown that about 2 in 16 mothers in Nigeria who have postnatal depression will have another episode of depression if they give birth to another baby (Abamara, 2022). However, the concerned women and their doctors are more likely to be aware of the possibility of it occurring in future pregnancies. It, therefore, means that the affected women are more likely to be diagnosed and treated psychotherapeutically in accordance with their cultural norms and affiliates should the postnatal depression resurfaces in future childbirths.

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Contributions
N.C.A conceived and designed the study. N.C.A and N.B.O collected data and carried out a literature search. N.C.A and N.B.O analyzed and interpreted data and drafted the manuscript. N.C.A and B.M.N.V reviewed the manuscript for technical and intellectual content. All authors contributed to the editing and have approved the final version of the manuscript.

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Ethics declaration

Conflict of Interest
The authors have no conflicts of interest to declare that are relevant to the content of this article.

Ethical approval
All procedures performed in the current study involving humans were by the ethical standard of the Ethical Committee of the Department of Psychology, Faculty of Social Sciences Nnamdi Azikiwe University, Awka Anambra State Nigeria. The study was performed by the ethical standard outlined in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. There was informed consent from all the nursing mothers' participants in the study. All of them filled out a consent form indicating their willingness to participate in the study before the commencement of the study.

Informed Consent

On behalf of all authors, the corresponding author declares that there is no conflict of interest.

Data Availability
The data of this study will be made available on good request.