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Effects of Psychoeducation on Depressive Symptoms among Patients Living with Chronic Illnesses

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Abstract

Psychological states are perhaps among the most paramount reasons for poor treatment outcome among hospitalized patients; especially those suffering from chronic ill health condition; hence, the need for this study which investigated the effect of psychoeducation on depressive symptoms among patients living with chronic illnesses. Twenty-four (24) participants (HIV and Diabetes patients in Iyi Enu Hospital Ogidi) participated in this study; out of the 24 participants, 8 (33.3%) were males while 16 (66.7%) were females. 13 (54%) of the participants were being treated for Diabetes while 11 (45.7%) were being treated for HIV. The ages of these participants ranged from 18 years to 60 years with a mean age of (38.7) and standard deviation of (10.3); Pre-test post-test between subject design was used in the study. The 21 item Beck Depression Inventory was used for data collection while Independent T test was adopted as the statistical tools for data analysis. The result indicated that chronically ill patients who received psychoeducation showed significantly lower depressive symptoms compared to those in the control group at t (22) =-8.53, sig (.001), p<.05 levels of significant. However, patients living with HIV who received psychoeducation did not show significantly lower depressive symptoms when compared to Diabetics at t (22) =-.171. sig (.87), p>.05, levels of significant. Thus, while hypothesis one was accepted, hypothesis two was rejected. Based on the findings, the researcher recommended that mental health personnel's and psychotherapist should use psychoeducation for the treatment of depressive symptoms associated with chronic illnesses.

Key words: Psychoeducation, Depressive Symptoms, Chronic Illness

Introduction

Psychological states are perhaps among the most paramount reasons for poor treatment outcome among hospitalized patients, especially those suffering from chronic ill health condition. One of the known psychological states that adversely affects treatment outcome among chronically ill patients is depression (Reis, Haas, Santos, Teles, Galvao, & Gir, 2011). Depressive symptoms among chronically ill patients sometimes manifest through poor drug compliance, suicidal ideations and overall poor mental health, which most discernibly results from their feeling of worthlessness and hopelessness generated by the idea that there is no cure for their illness. Reducing depressive symptoms to release cognitive and physiological strength required to improve the overall health status of chronically ill patients thus becomes a research allure.

According to Beck's, development of depression is seen as a "cognitive triad" which implies having a negative view of self, the world, and or a negative view of the future. The depressed person views the world through an organized set of depressive schemata that distort experience about self, the world, and future (Beck's, 1963). It is notable that negative interpretations of self are usually referenced to current and past functioning and depressed persons are negatively biased in memory about the past and hold a negative view of the future (Bower, 1981). According to McLeod, (2015), Negative self-schema predisposes individuals to depression, and therefore someone who has acquired a cognitive triad does not necessarily develop depression rather, some kind of stressful life event; example, chronic illness is required to activate this negative schema later in life.

Once the negative schema is activated, a number of illogical thoughts or cognitive biases seem to dominate the persons thought hence depressive symptoms.

Several studies have reported an association between HIV/AIDS and depression, and demonstrated that depression is associated with worse HIV/AIDS treatment outcomes and poorer quality of life (Reis, Haas, Santos, Teles, Galvao, & Gir, 2011). Also, a longitudinal study by Rotella and Mannucci (2013a) shows that depressive symptoms are associated with a significantly increased risk of diabetes, while in another meta-analysis of longitudinal studies by Rotella and Manucci (2013b), people with diabetes were at an increased risk of developing depressive symptoms. Furthermore, some studies reported the prevalence of depressive symptoms among patients living with HIV; such as Logie, James, Tharao, and Loutfy (2013), employed sample of 173 Africa, Caribbean, and Black women; describing the prevalence of depressive symptoms as 64%. While according to Nanni, Caruso, Mitchell, Meggiolaro and Grassi (2015), depression affects up to half of people living with chronic illnesses; a prevalence that is two to four times higher than that found in the general population; and is a major cause of suicide (WHO, 2016).

Diagnosis of chronic illnesses often impact negatively on the overall psychological well-being of patients because of the thought that there is no cure for such diseases. Patients living with HIV/AIDS or Diabetes are mostly faced with preoccupied thought of their health conditions which usually triggers some levels of depressive symptoms. Sometimes, this depressive symptom hampers the overall physical and psychological wellbeing by threatening the life of such patient through poor drugs compliance. Chronically ill patients require a life time medication in other to stay alive and patients diagnosed with HIV/AIDS

or diabetes requires a regular intake of one drug or another. This regular drug consumption serves as a reminder of their ill health condition. As such, it unconsciously affects their sense of worth and wellness which is expressed as negative emotions often observed among most patients living with chronic illnesses. Despite the negative effect of depressive symptoms among chronically ill patients, over 50% of people living with chronic illnesses do not receive treatment for their depression and this failure to treat contributes to significant negative clinical and quality-of-life outcomes (Uthman, Magidson, Safren, & Nachega, 2014).

In as much as there is high prevalence of depressive symptoms among patients living with chronic illnesses, there is no specific educational program for patients under treatment. According to Falvo (1994), education is a gradual process by which a person gains knowledge and understanding through learning. Learning, however, involves more than knowledge; it involves cognitive, affective and psychomotor processes; learning implies changes in behavior, skill or attitude. Patient education can take a variety of forms depending upon the abilities and interest of the patient and family. For example, the education may take place in small groups or on a one on one basis and may involve the use of videotapes, pamphlets or the combination of both (Xia, Merinder & Belgamwar 2011).

The psychological intervention known as psychoeducation was first noted in the medical literature in an article by Donley (1911); and has been popularized into its current form based on a study by an American researcher named Anderson *(Anderson, Hogarty & Reiss 1980).* According to Colom, Vieta, Sánchez-Moreno, Martínez-Arán, Reinares, Goikolea and Scott (2005), psychoeducation focuses on educating the patients on the need for

compliance enhancement, early identification of prodromal signs of depression; also, on the need for proper life-style regulation, having a positive health beliefs and adequate understanding of their illness. Psychoeducation also enables an individual to understand the complex relationship between symptoms, personality, interpersonal environment, and medication side effects. Psychoeducation in behavior therapy requires patient's relearning of emotional and social skills (Saga, 2017).

There are some empirical studies which have established the reliability of this psychological method in respect to depression. Dowrick, Dunn and Ayuso-Mateos (2000), reported a study on psychosocial educational interventions involving participants living with major depressive disorder; in the study, they assigned individuals suffering from major depressive disorder to either a problem-solving course, a course on the prevention of depression, or to a control group. They found that both interventions reduced the number of participants meeting a diagnosis for depression, a reduction in depressive symptoms, and improved subjective functioning. In the 12 months follow up study, they found a slight advantage for the problem-solving programme over the course on prevention of depression in reducing depressive symptoms. However, it is possible that the problem-solving skills acquired allowed participants to cope with the continuing and changing demands in their lives in the longer term.

Griffiths (2016) also conducted a study on depressed individuals. The study involved non-hospitalized participants suffering from late-life depression in New York. He utilized a psychoeducation intervention largely based on goal-focused model of hope. This intervention employed individualized goal formulation, psychoeducation, and skills

training in the areas of anxiety management, cognitive restructuring, individualized behavioural assignments and the utilization of past success to guide achievement. He found that this intervention resulted in a significant reduction in depressive symptoms. The researcher also found positive improvements in measures of hope, hopelessness, anxiety, and social functioning.

Theoretical Framework

The theoretical framework guiding this study is the cognitive theory of depression by Beck (1963). According to the theory, the development of depression is seen from a "cognitive triad": (a) a negative view of self, (b) a negative view of the world, and (c) a negative view of the future. The depressed person views the world through an organized set of depressive schemata that distort experience about self, the world, and the view of the future. Depression in this theory is also seen from the angle of arbitrary inference; which involves the arbitrary assumption that some negative event was caused by oneself. For example, chronically ill person appears preoccupied with the thought of his illness, arbitrary inferred "I did this to myself". This is known as selective abstraction which occurs when the person focuses on the negative element and that leads to depression. Psychoeducation can attack these negative elements by resetting automatic self talks through the introduction of more positive ideas generated by new information (education) made available to the patient/client, hence, relief is expected.

Statement of Problem

Most patients living with chronic illnesses have being observed to present depressive symptoms as cormobid condition to their illnesses. This depressive status manifest with poor commitment to treatment plans, hopelessness, poor drugs compliance and suicidal

ideations and thus, leads to poor treatment outcome that threatens the life of chronically ill patients. Studies has shown that major depression is the 2nd leading cause of disability worldwide and is projected to be one of the three leading causes of illness worldwide (Mathers & Loncar 2006); and is a major cause of suicide (Ferrari, Charlson, Norman, Patten, Freedman & Murray 2010). Furthermore, studies in both high- and low-income countries have reported an association between HIV/AIDS and depression, and demonstrated that depression is associated with worse HIV/AIDS treatment outcomes and poorer quality of life (Reis, Haas, Santos, Galvao & Gir 2011)

Therefore, if depressive symptoms among patients living with chronic illnesses can be removed using psychoeducation, there will be an improvement in the overall physical and psychological wellbeing, proper commitment to treatment plans and drugs compliance which will bring about high positive treatment outcome among patients living with chronic illnesses.

Giving the above evidence on depressive symptoms' adverse effects among patients living with chronic illnesses, there is need for this study which tests the beneficial effect of psychoeducation on depressive symptoms among patients living with chronic illnesses in our local settings.

Purpose of the Study

The purpose of this study is to determine the therapeutic effect of psychoeducation on depressive symptoms among chronically ill patients in Iyi Enu Hospital Ogidi, Anambra State, Nigeria.

Hypothesis

1. Chronically ill patients who receive psycho education will show significantly lower depressive symptoms when compared with the control group.
2. HIV patients who receive psycho education will show significant lower depressive symptoms when compared with diabetic patients.

Methods

Participants

The populations that participated in the study were chronically ill patients in Iyi enu Mission Hospital Ogidi, Anambra State. 24 chronically ill patients were selected to be part of the study using purposive sampling method which was based on the inclusion criteria. Among the 24 participants, 8 (33.3%) were male while 16 (66.7%) were female. 13 (54%) were diabetes patients while 11 (45%) were HIV patients. Their age range from 18years to 60 years with mean age of (38.7) and standard deviation of (10.3), all patients that participated in this study were Igbo.

Instruments

The Beck Depression Inventory Second Edition (BDI-II) which is a 21-item self-report instrument intended to assess the existence and severity of symptoms of depression. There is a four-point scale for each item ranging from 0 to 3. On two items (16 and 18) there are seven options to indicate either an increase or decrease of appetite and sleep. Total score of 0-13 is considered minimal range, 14-19 is mild, 20-28 is moderate, and 29-63 is severe *(Beck, Steer, & Brown 1996).*

Inclusion criteria

Patients who met the following criteria were eligible for the study:

Patients that understand English language.

Patients who were being treated for Diabetes or HIV and also have BDI-II score ranging from 14 (mild mood disturbances) to 63 (severe depressive symptoms).

Patients who were at least 18 to 60 years of age and signed informed consent.

Patients that have been living with any of these chronic illnesses (HIV or Diabetes) for at least, for the period of six months.

Procedure

The researchers obtained permission from the Head of Clinical Services Iyi enu Hospital Ogidi to conduct the research with permission from the Head of the Department of psychology. 25 patients were selected from the hospital using purposive sampling method which was based on the inclusion criteria for the study. From the 25 patients, 24 patients were further selected using simple random method were the 25 patients that met the inclusion criteria were asked to pick a folded paper from a bowel. On the papers were written either yes or no. the 24 patients that picked yes became part of the study while the one that picked no was dropped from the research. After the 24 participants were selected, they were placed into two different groups using simple random method where the participants were asked to pick another folded paper from a bowel. On the papers were written either A or B. those that picked A were called group A experimental group while those that picked B were called group B control group. Group A were administered 6

sessions of psycheducation by a trained clinical psychologist and each session lasted for 50 minutes. Group B were giving no treatment but serve as control for group A. after the intervention was completed, the 21 item BDI-II was administered to both group A and B and data collected was used for analysis. The control group were also debriefed after the study using the principles of psychoeducation so they can benefit from the research.

Design & Statistics

The study was an experimental research. The experiment used a pre-test post-test between subject design. Based on the design, independent T test was adopted for data analysis.

TABLE: 1

TABLE OF MEANS

	PRE-TEST	N	Mean	Std. Deviation	Std. Error Mean
DEPRESSIVE_SYMPTOMS	(GROUP A)	12	21.4933	6.00536	1.75010
	(GROUP B)	12	21.5833	6.06717	1.75144

From the table 1 above, pre-test group B numerically obtain the score of M=21.58, SD=6.07, Std error =1.75 compare to pre-test group A; M=21.49, SD=6.01, Std error 1.75. This indicated that there is no mean difference between the groups (group A and B) before the intervention.

Hypothesis 1

Chronic ill patients who receive psychoeducation will show significantly lower depressive symptoms when compared to the control group.

TABLE: 2 **t-test for Equality of Means**

							95% Confidence Interval of the Difference	
		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
DEPRESSIVE_SYMPTOMS	Equal variances assumed	-8.525	22	.001	-16.2500	1.90610	-20.2030	-12.2970
	Equal variances not assumed	-8.525	14.92	.001	-16.2500	1.90610	-20.3145	-12.1854

The report from the above table shows that there is a significant difference between chronically ill patients who received psychoeducation and control group on depressive symptoms at t(22)=-8.53, sig(.001), p<.05, levels of significant. We can be 95% confident that the true difference between these means is CI= (-20.20, -12.30). Hence, we here by accept the first hypothesis of this study.

Hypothesis: 2

HIV patients that received psychoeducation will manifest significantly lower depressive symptoms when compare with patients living with diabetes.

TABLE: 3

t-test for Equality of Means

							95% Confidence Interval of the Difference	
		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
DEPRESSIVE_SYMPTOMS	Equal variances assumed	-.171	22	.868	-.67832	3.96541	-8.90208	7.54544
	Equal variances not assumed	-.168	19.32	.868	-.67832	4.03576	-9.11593	7.75929

The table above indicates that there is no significant difference between patients living with HIV and those living with Diabetes on depressive symptoms after the treatment condition at t (22)= -.171, sig.(.87), p>.05. We can be 95% confident that the true difference between these means is CI= (-8.90, 7.55). Hence, we hereby reject the second hypothesis of the study.

Discussion

From the results of this study titled the effects of psychoeducation on depressive symptoms among patients living with chronic illnesses, the first hypothesis which stated that chronic ill patients who received psychoeducation will show significantly lower depressive symptoms when compared with the control group was confirmed. This showed that psychoeducation is a sound psychological intervention to be administered to patients living with chronic illnesses that are experiencing depressive symptoms in other to reduce their depressive symptoms. This is in line with the findings of Espahbodi, Hosseini, Mirzade and Shafaat, (2015) they conducted a study on effect of psychoeducation on depression and

anxiety symptoms among patients on hemodialysis. In the study, hospital Anxiety and Depression Scale (HADS) was used for data collection. The mean score of pre-tests for depression in dialysis group with psychoeducation was 10.22 ± 3.40, while it decreased to 8.33 ± 3.72 after education. The result of paired t-test revealed a significant difference between the sores before and after the intervention ($P < 0.001$). For anxiety, the mean score for pre-test was 9.56 ± 3.19, but after psychoeducation, it was 8.78 ± 3.27. However, the result of paired t-test indicated no significant difference between the scores of before and after the intervention ($P = 0.185$). Hence, the result of the study indicated that psychoeducation reduced depression among patients on hemodialysis. While among those with anxiety symptoms, psychoeducation did not reduce the level of anxiety observed among patients on hemodialysis.

Furthermore, Griffiths (2016) conducted a study on depressed individuals, in this case non-hospitalized participants suffering from late-life depression in New York, US. The study utilized a psychoeducation intervention largely based on goal-focused model of hope. This intervention model employed individualized goal formulation, psychoeducation, and skills training in the areas of anxiety management, cognitive restructuring, individualized behavioural assignments, and the utilization of past success to guide achievement. They found that this intervention resulted in a significant reduction in depressive symptoms. They also found positive improvements in measures of hope, hopelessness, anxiety, and social functioning. These studies supported the result of this study which indicated that psychoeducation is an effective psychological intervention for depressive symptoms associated with chronic illnesses.

On the contrary, Day, Clarke, Castillo-Eito and Rowe (2020) reported a meta-analysis titled Psychoeducation for Children with Chronic Conditions, which investigated 17 studies that addressed psychoeducational interventions for asthma and diabetes children that were between 12 years and above. They observed that Psychoeducational intervention was associated with a small statistically significant improvement in quality of life (QoL) (standardized mean difference = 0.14; 95% confidence interval: 0.06-0.23). psychoeducational interventions improve QoL for children with asthma but not for children with diabetes. In as much as this study observed that psychoeducation is not effective in the improvement of quality of life among diabetic children which contradicted with the findings of this current study that investigated effect of psychoeduction on depressive symptoms among patients living with chronic illnesses; the observed discrepancy could be associated to cultural variation of participants, settings and mood of administering the intervention in both studies. Nonetheless, age differences could also have influenced learning and understanding of the treatment procedures which might have contributed to the observed differences and increased treatment outcome to a more positive direction as observed in the current study.

The result from this study rejected the second hypothesis which stated that HIV patients that received psychoeducation will manifest significantly lower depressive symptoms when compare with patients living with diabetes. This indicated that psychoeducation is of equal benefit to patients with chronic illnesses and that the depressive symptoms experienced by chronic ill patients may not be as a result of the name giving to the diagnosis or the illness but more likely as a result of their preoccupation with negative thought (there is nothing i can do to change my illness) which is in line with Seligman's

theory of learned helplessness. According to Seligman (1967), people develop depression as a result of their acquired learned helplessness which is based on the experience and information (I am helpless in changing this situation) they have gathered over time in respect to their condition that prevents them from attempting to free themselves from such condition; thereby, they accept the state of hopelessness.

On the other hand, Aaron Beck sees negative thoughts as the leading cause of dysfunctional beliefs and typically, the main reason for depressive symptoms. According to Beck, a direct relationship exists between the amount and severity of someone's negative thoughts and the severity of their depressive symptoms. In other words, the higher the negative thoughts one experience, the higher depressed they will become.

Changing this negative thought, beliefs and knowledge the chronically ill patients have learned about their illness using psychoeduction, some sense of hope, positive self-esteem and positive illness behavior will be observed through proper drug compliance, which in turn brings about improved physical health.

Implication of the Study

The findings of this study imply that psychoeducation is a sound psychological intervention for the treatment of depressive symptoms as comorbidity with chronic illnesses. Theoretically, the result is in line with the theoretical framework which implies that changing those negative elements or knowledge about one's chronic illnesses through learning will bring about reduction in depressive symptoms among chronically ill patients. Finally, government and policy makers in hospitals should implement the use of

psychoeducation for the treatment of depressive symptoms associated with chronic illnesses.

Recommendation

Based on the findings, the researchers recommended that mental health personnel's and psychotherapist should employ the use of psychoeducation for the treatment of depressive symptoms associated with chronic illnesses.

Limitations of the study

The major limitation in this research results is that the patients that participated in this study are in-patients and were under other treatment (medication) which could have influenced the out-come of this research; though randomization was utilized from selection and placement of the participants into groups which should having taken care of any form of bias related to the result. Also, from the result, it was observed that there is no reduction on depressive symptom among the control group. The findings of the study were positive; however, generalization of the findings might be difficult because the research involved only Igbo participants which may not be applicable to other ethnic groups in the country based on cultural differences.

Conclusion

Based on the above findings, the researchers convey the fact that psychoeducation is a good psychological intervention for the treatment of depressive symptoms associated with chronic illnesses.

Also from the second hypotheses, it can be inferred that the idea these patients have about their chronic illnesses could be the reason for the observed depressive symptoms and poor

treatment outcome; after changing those unhealthy ideas these patients have about their chronic illnesses through learning (psychoeducation), positive illness behaviors was observed through proper compliance to drugs and treatment plans, good physical and psychological wellbeing and overall positive illness behaviour.

Finally, it was also observed that depressive symptoms dropped after the intervention and the patients responded to treatment better than before the intervention (psychoeducation) was administered.

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