

Effect Of Nurse-Led Psycho-Education On Family Knowledge Regarding Factors Associated With Relapse In Psychiatric Patients

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Abstract

Background: Patients with some specific psychiatric challenges require long courses of drug treatment to improve their psychological symptoms and prevent relapses. However, patients who live in local communities after being discharged are often repeatedly hospitalized due to relapses caused by poor medication adherence, poor family support, poor interpersonal relationships, and stressful life events. This study investigates the effect of Nurse-led psycho-education on the Knowledge of caregivers on factors associated with mental illness relapse in Neuro-Hospital Akure.

Method: This study is a quasi-experimental study conducted among sixty-six family caregivers of patients with mental illness at the Neuro-psychiatric Hospital. The data was obtained in three phases: pre-intervention phase, intervention phase and post-intervention phase and processed using SPSS version 25. Analysis was done using descriptive statistics such as frequency and valid percent. The hypotheses were tested using a t-test at 0.05 level of significance.

Results: There is a significant difference between pre and post-intervention knowledge on patient-induced factors associated with mental illness relapse ($t_{65}=9621$; $p\text{-value}= .000$), knowledge on caregiver-induced factors associated with mental illness relapse ($t_{65}=3.811$; $p\text{-value}= .009$) and knowledge on environmental-induced factors associated with mental illness relapse ($t_{65}=1.163$; $p\text{-value}= .081$).

Conclusion: Psychoeducational intervention was instrumental in increasing knowledge on patient-induced, caregiver-induced and environmental-induced factors associated with mental illness relapse during post-intervention. Mental health nurses need to strategically prepare psycho-educational for caregivers of patients during clinic sessions to enable them to prevail over patients to avoid any form of relapse.

Keywords: Psychoeducation, Mental Health Nurses, Psychiatry, Nigeria

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I. Introduction

The increasing prevalence of relapse among patients with mental illness has been a subject of concern among mental health experts.¹ However, most previous investigations have shown that non-compliance to medication and therapies after discharge is a major reason for relapse and these can be broadly categorized as patient-related factors, illness-related factors, and treatment-related factors.^{1,2}

Relapse places a huge financial burden on the patients, families, hospital and community services. The cost of managing relapse cases is four times higher than of the cost of managing other non-relapse cases. The financial burden of hospitalization is roughly one- to two- third of the entire cost of caring for an individual with schizophrenia.^{3,4} The number of relapsed cases is on the increase, and as every mental health practitioner knows, relapse which is the resumption of substance use after a period of abstinence is a frustrating but frequent part of the recovery process. Several substances, including opiates, cocaine and alcohol have a particularly high relapse rate with the majority of clients relapsing within one year following treatments.^{5,6}

Various multifaceted interventions have been explored for managing non-compliance-related issues among clients with mental illness. These include clinician or patient psychological interventions, cognitive behavioral interventions, and technology-based services such as electronic reminders through text messages and telephones.^{7,8} The interventions were focused on the individual and group.

The psycho-educational interventions were often categorized as “compliance therapy” or “adherence therapy” and primarily focused on enhancing the knowledge about the illness and management of side effects to achieve medication adherence in patients with mental illness.⁹ Most of these researches do not consider family factors as being major contributors to relapse.

Thus, a nurse-led version of a psychoeducation program for patients' families has been widely applauded as one of the major strategies for reducing relapse cases.¹⁰ This study therefore investigated the effect of a Nurse led psycho-education on the knowledge of family caregivers on factors associated with relapse among psychiatric patients attending Neuro-psychiatric Hospital Akure.

II. Methodology

Study Design

This study adopted a quasi-experimental design conducted among sixty-six family caregivers of patients with mental illness at the Neuro-psychiatric Hospital Akure.

Study Instrument

The study obtained data using a structured questionnaire; section A with six (6) items was designed to gather information on the respondents' demographic characteristics. Section B with ten (10) items focused on pre and post-intervention knowledge on patients-induced factors associated with mental illness relapse. Section C with Ten (10) items focused on pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse.

Sampling Technique

The study adopted purposive sampling techniques. The need for this was based on the fact that only family members who were frequent in the clinic were considered in the study.

Procedure

The data collection was divided into three phases:

Pre-interventional phase: The pre-interventional phase lasted for two weeks. Respondents were presented with a questionnaire containing the above instrument. Knowledge of factors associated with mental illness relapse was tested. This lasted for four days per week for two weeks.

Interventional phase: The intervention was prepared using a supportive mode of psycho-education. Respondents were educated during clinic days on various factors responsible for relapse, which also lasted 8 days.

Post-interventional phase: Then respondents were permitted to reflect and practice what they had been taught for two weeks. After this, the post-intervention assessment was done. Overall, the data collection exercise lasted for a month.

Data Analysis

The data collected was checked, edited, sorted and processed into SPSS version 25. Analysis of specific objectives was done using descriptive statistics such as frequency and valid percent. The hypotheses were tested using a sample t-test at 0.05 level of significance. A p-value equal or lower than 0.05 implies null hypothesis was rejected, while otherwise, the null hypothesis was upheld.

Ethical Consideration

An approval letter was collected from the Ondo State Health Research Ethics Committee at the Ondo State Ministry of Health with protocol number OSHREC17/08/22/471.

III. Results

The study included sixty-six respondents, among whom about half (48.5%) were 18-27 years old, over a quarter (28.8%) were 28-37 years old, a tenth (10.6%) were 38-47 years old, and 12.1% were 48 years and above. The majority (81.8%) were male, while below a fifth (18.2%) were female. Also, the majority (81.8%) had no family history of mental illness, while 18.2% had a family history of mental illness. Table 1.

Table I: Frequency distribution of demographic characteristics of respondents

Variable	Frequency (n=66)	Percentage (%)
Age		
18-27 years	32	48.5
28-37 years	19	28.8
38-47 years	7	10.6
48 years and above	8	12.1
Gender		
Male	54	81.8
Female	12	18.2
Marital Status		

Single	44	66.7
Married	21	31.8
Cohabiting	1	1.5
Religion		
Christianity	29	43.9
Islam	37	56.1
Traditional	0	0.0
Employment Status		
Employed	9	13.6
not employed	1	1.5
Self-employed	56	84.9
Education Attained		
No formal education	11	16.7
Primary	8	12.1
Secondary	32	48.5
Tertiary	15	22.7
Relationship with the Patients		
Parent	33	50.0
Sibling	25	37.9
Friend	2	3.0
Others	6	9.1
Number of hospitalizations		
One time	46	69.7
Two times	17	25.8
More than two times	3	4.5
Family history of mental illness		
Presents	12	18.2
Absent	54	81.8

The majority (86.4%) during pre-intervention affirmed that Forgetfulness to take medicine could result in subsequent hospital admission, however, during post-intervention a higher percentage (92.4%) affirmed. A few (28.8%) pre-affirmed that, alteration/changing of dosage of prescribed medicine without doctor’s prescription could result in subsequent hospital admission, however, during post a higher percentage (84.8%) affirmed. The majority (86.4%) during pre affirmed that Not adhering to time to take medication could result to subsequent hospital admission, however, during post a lower percentage (62.1%) affirmed. A few (4.5%) during pre-affirmed that, Skip of dosage could result to subsequent hospital admission, however during post a higher percent (74.2%) affirmed. Majority (66.7%) during pre affirmed that, Involving in substance could result to subsequent hospital admission, however during post a higher percent (97.0%) affirmed. Majority (92.4%) during pre, affirmed that, Reoccurrence of what led to onset could increase chances of relapse during post a higher percent (98.5%) affirmed.

Table II: Patients-induced factors associated with mental illness relapse

Items	D	Pre		Post	
		Yes	No	Yes	No
Forgetfulness to take medicine could results in subsequent hospital admission	F	57	9	61	5
	%	86.4	13.6	92.4	7.6
Alteration/changing of dosage of prescribed medicine without doctor’s prescription could results in subsequent hospital admission	F	19	47	56	10
	%	28.8	71.2	84.8	15.2
Not adhering to time to take medication could result to subsequent hospital admission	F	57	9	41	25
	%	86.4	13.6	62.1	37.9
Skip of dosage could result to subsequent hospital admission	F	3	63	49	15
	%	4.5	95.5	74.2	22.7
Involving in substance could result to subsequent hospital admission	F	44	22	64	2
	%	66.7	33.3	97.0	3.0
Reoccurrence of what led to onset could increase chances of relapse	F	61	5	65	1
	%	92.4	7.6	98.5	1.5

D: distribution, F: frequency

Table III presents frequency distribution of respondents by pre and post knowledge on caregiver-induced factors associated with mental illness relapse and represented graphically in Figure 4.2. Results revealed that, majority (57.6%) during pre-affirmed that, Isolating patient could increase the risk of subsequent hospital admission, however during post a higher percent (84.8%) affirmed. A few (78.8%) during pre-affirmed that, assaultive/abusing patient could increase the risk of subsequent hospital admission, however during post a higher

percent (92.4%) affirmed. Majority (95.5%) during pre-affirmed that, discrimination against patient could increase the risk of subsequent hospital admission, however during post a lower percent (98.5%) affirmed.

A few (18.2%) during pre-affirmed that, Substance consumption in presence of patients could increase the risk of subsequent hospital admission, however during post a higher percent (72.7%) affirmed. Majority (25.8%) during pre-affirmed that, Anger / irritability in presence of patients could increase the risk of subsequent hospital admission, however during post a higher percent (66.7%) affirmed. Majority (43.9%) during pre, affirmed that, Disturbing patients while sleeping could increase the risk of subsequent hospital admission, during post a higher percent (87.9%) affirmed. Majority (47.0%) during pre affirmed that, poor nutrition could increase the risk of subsequent hospital admission, however during post a higher percent (78.8%) affirmed. Majority (31.8%) during pre, affirmed that, stressing patients could crop-up subsequent hospital admission, during post a higher percent (56.1%) affirmed.

Table III: knowledge on caregiver-induced factors associated with mental illness relapse

Items	D	Pre		Post	
		Yes	No	Yes	No
Isolating patient could increase the risk of subsequent hospital admission	F	38	28	56	10
	%	57.6	42.4	84.8	15.2
Assaultive/abusing patient could increase the risk of subsequent hospital admission	F	52	14	61	5
	%	78.8	21.2	92.4	7.6
Discrimination against patient could increase the risk of subsequent hospital admission	F	63	3	65	1
	%	95.5	4.5	98.5	1.5
Substance consumption in presence of patients could increase the risk of subsequent hospital admission	F	12	54	48	18
	%	18.2	81.8	72.7	27.3
Anger / irritability in presence of patients could increase the risk of subsequent hospital admission	F	17	49	44	22
	%	25.8	74.2	66.7	33.3
Disturbing patients while sleeping could increase the risk of subsequent hospital admission	F	29	37	58	8
	%	43.9	56.1	87.9	12.1
Poor nutrition could increase the risk of subsequent hospital admission	F	31	35	52	14
	%	47.0	53.0	78.8	21.2
Stressing patients could crop-up subsequent hospital admission	F	21	45	37	29
	%	31.8	68.2	56.1	43.9

Paired Samples Test showed a difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse. The results show that, there was a significant difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse ($t_{65}=3.811$; $p\text{-value}= .009$). this was an indication that, the null hypothesis which states that, there was no significant difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse was rejected, while the alternative which state that, there was a significant difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse was upheld.

Table IV presents the frequency distribution of respondents by pre and post-knowledge on environmental-induced factors associated with mental illness relapse. The figure revealed that the majority (84.8%) pre-affirmed that, Social seclusion of the patient could increase the risk of subsequent hospital admission, however during post a higher percent (95.5%) affirmed. The majority (81.8%) pre-affirmed that, Permitting open places for substance use could lure patients into it and increase the risk of subsequent hospital admission, however during post a higher percent (89.4%) affirmed. Majority (93.9%) during pre affirmed that, High cost of mental illness treatment and medication could enhance discontinuity of treatment and increase the risk of subsequent hospital admission, however during post a lower percent (100.0%) affirmed. Majority (87.9%) during pre-affirmed that, Loss of confidence in healthcare personnel could enhance discontinuity of treatment and increase the risk of subsequent hospital admission, however during post a higher percent (97.0%) affirmed. A few (3.0%) during pre affirmed that, Resorting to alternative medicine could increase the risk of subsequent hospital admission, however during post a higher percent (22.7%) affirmed

Table IV: knowledge on environmental-induced factors associated with mental illness relapse

s/n	Items	D	Pre		Post	
			Yes	No	Yes	No
Social seclusion of patient could increase the risk of subsequent hospital admission	F	56	10	63	3	
	%	84.8	15.2	95.5	4.5	
		F	54	12	59	9

	Permitting open places for substance use could lure patients into it and increase the risk of subsequent hospital admission	%	81.8	18.2	89.4	10.6
	High cost of mental illness treatment and medication could enhance discontinuity of treatment and increase the risk of subsequent hospital admission	F	62	4	66	0
		%	93.9	6.1	100.0	
	Loss of confidence in healthcare personnel could enhance discontinuity of treatment and increase the risk of subsequent hospital admission	F	58	8	64	2
		%	87.9	12.1	97.0	3.0
	Resorting to alternative medicine could increase the risk of subsequent hospital admission	F	2	64	15	51
		%	3.0	97.0	22.7	77.3

Paired Samples Test showed difference between pre and post-intervention knowledge on environmental-induced factors associated with mental illness relapse. Results show that, there was no significant difference between pre and post-intervention knowledge on environmental-induced factors associated with mental illness relapse ($t_{65}=1.163$; $p\text{-value}=.081$). This was an indication that, the null hypothesis which states that, there was no significant difference between pre and post-intervention knowledge on environmental-induced factors associated with mental illness relapse was upheld, while the alternative which state that, there was a significant difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse was rejected.

IV. Discussion

Findings revealed that the majority of the respondents were 37 years or below. This was an indication that the majority of respondents were in their youthful stage and therefore still retained their strength for patient care. More so, the majority of the respondents were self-employed, the reason why they had the time to stay with patients.

Also, the majority were educated, and a plausible reason for a quick understanding of how to care for patients. Velligan *et al.*² emphasize that public education and crisis intervention are the basic components of secondary models of prevention. From the findings, the majority of the respondents were family members of patients. More so, the majority of the patients have been hospitalized just one time and most don't have a history of mental health issues, which implies that the present issue is due to environmental factors.

Findings revealed that respondents improved in knowledge of patients-induced factors associated with mental illness relapse. The implication is that the psycho-education was instrumental to the increase in knowledge among respondents on patients-induced factors associated with mental illness relapse. He further stated that even if they are not strongly motivated to maintain abstinence and do not acknowledge the true severity of their addiction, education on relapse can still be helpful. Findings agree with Gureje *et al.*¹¹ who reported that psychiatric patients should be provided with education on relapse as soon as possible after initial abstinence has been reasonably well established.

Findings also revealed that there was a significant difference between pre and post-intervention knowledge on patients-induced factors associated with mental illness relapse. This was an indication that respondents had more knowledge during post-intervention, which was due to the effectiveness of psycho-education. Ghatwal *et al.*¹² reported that outcome measures were changes in adherence to medication measured as per the medication adherence rating scale (MARS-5©Professor Rob Horne) during a 1-month follow-up.

Findings also revealed that respondents improved in knowledge of caregiver-induced factors associated with mental illness relapse. The plausible reason for this could be that most of the respondents are educated and easily understand what they have been taught. The implication is that the psycho-education intervention captured needed areas and led to an increase in knowledge among respondents on caregiver-induced factors associated with mental illness relapse.

Findings also revealed that there was a significant difference between pre and post-intervention knowledge on caregiver-induced factors associated with mental illness relapse. This was an indication that respondents had more knowledge during post-intervention, which was due to the effectiveness of psycho-education.

More findings also revealed that there was a considerable increase in knowledge of environmental-induced factors associated with mental illness relapse during post-intervention. This was also in line with the fact that the majority of the causes were environmental-based and not heredity and that most of the respondents were educated.

Findings also revealed that there was a significant difference between pre and post-intervention knowledge on environmental-induced factors associated with mental illness relapse. This was an indication that respondents had more knowledge during post-intervention, which was due to the effectiveness of psycho-education in agreement with another study.¹³

V. Conclusion

It is concluded that the psycho-educational intervention was instrumental in the increased knowledge of patient-induced, caregiver-induced, and environmental-induced factors associated with mental illness relapse during post-intervention. This implies that the psycho-educational intervention was designed strategically to cater to an increase in knowledge.

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