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Original Research Article

Effectiveness of Psycho-Education on Knowledge of Family Members about Home Based Care of Patients with Schizophrenia

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ABSTRACT

Introduction: Family play extensive role in supporting the patient with mental illness and provide needed care to the patient at home. Educational interventional will support optimized outcomes of treatment provided to the patient.
Aim: The aim of the study is to assess effectiveness of psycho-education on knowledge of family members regarding home based care of patient with schizophrenia.
Methodology: Quasi experimental research design under quantitative research approach was used to conduct study. Sixty participants (thirty in experimental and thirty in control group) were selected through convenience sampling technique for study. Data was collected through structured interview schedule using socio-demographic profile and knowledge questionnaire.
Result: Findings of study revealed that the two third of the family members (66.7%) had poor knowledge about home based care of patient with schizophrenia prior to intervention. Psycho-education was highly effective in improving knowledge of family members (p=<0.05).
Conclusion: Study concluded that psycho-education is beneficial to improve the knowledge of family members regarding the home based care of patient with schizophrenia. Mental health nurse should regularly educate and counsel the family members of patient with regarding home based care.

Key words: Knowledge, psycho-education, home based care, schizophrenia, family members.

INTRODUCTION

Schizophrenia is a group of psychotic disorders that interfere with thinking and mental or emotional responsiveness. The term schizophrenia is derived Greek word Shizo (split) and phreno (mind) which means "split mind" was first used in 1908 by Swiss psychiatrist Eugen Bleuler and identified specific fundamental symptoms of schizophrenia to develop his theory about the internal mental schisms of patients. These symptoms included ambivalence, autism, affect disturbances and association disturbances. [1]

According to WHO, the incidence rate of schizophrenia in India is 4.4 per 1000 in the rural areas to 3.8 per 1000 in the urban areas. The prevalence of schizophrenia in different parts of India has averaged out to be 2-3 per 1000. Schizophrenia ranks among the top 10 causes of disability in developed countries worldwide. 90% of the untreated cases of schizophrenia are in the developing world. The total burden of schizophrenia disability in India is 4.3 to 8.7 million people in India. [2]

Every human being is born and brought up in family. It is an architect of an

individual to personality. [3] Avasthi A (2010) [4] reported that 30-85% of adults with schizophrenia have a family member as a caregiver. Magaru Maluo (2012) [5] reported that most of the caregivers (75.0%) had no prior knowledge about schizophrenia. Fung S.C (2013) [6] through his study suggested that even need based short term psycho educational intervention is beneficial for family members of patients with schizophrenia. Rotondi AJ, Anderson CM (1990) [7] revealed that online delivery of psychotherapeutic treatment and educational resources to consumers' homes has considerable potential to improve consumer well-being and offers several advantages over standard clinic-based delivery models.

Considering that the family members are having poor knowledge regarding the home based care of schizophrenic patient and it is extensively proved that family members are the major supportive aspect for the schizophrenic patient the researcher felt the need of conducting the study as well taking in account literacy level of the sample selected for the study the psycho-education was selected as mode of teaching for family members.

MATERIALS AND METHODS

The present study was conducted through quasi experimental non randomized control group design under quantitative approach in selected hospitals of Punjab. The hospitals were selected on the basis of availability of participants, giving permission to conduct the study and convenience in terms of distance.

Sample was selected by non probability convenience sampling technique. Sample size taken was 60 (30 in control and 30 in experimental group). Psycho-education was independent and level of knowledge was dependent variable. Ethical approval to conduct the study was obtained from University and College. Administrative approval was taken from the Medical Superintendent and Chief Medical Officer of selected hospitals of Punjab. Consent form was prepared for the study subjects regarding their willingness to participate in the research project. The research tool for data collection consists of two parts:

TOOL I Socio-demographic profile : It consists of items seeking information pertaining to the selected variables of family such as age, gender, religion, educational status, relationship with patient, monthly family income in rupees, residence, type of family, history of psychiatric illness in family member other than the patient, exposure to any health education regarding home based care of schizophrenic patient.

TOOL II Structured knowledge questionnaire: This part consists of structured interview schedule containing multiple choice questions regarding home based care of schizophrenic patient. The total of 30 questions was included and each question carries 1 mark and unanswered and incorrect answer carries 0 marks. So, maximum score was 30 and minimum score was 0. Score 30-21 was considered as good knowledge, 20-11 as average as and less than 10 as poor knowledge.

Reliability of the tool was checked through split half method. The cronbach alpha coefficient was found to be 0.8, thus the tool was found to be highly reliable. The intervention (psycho-education) was developed and procured from the internet source, books, discussion with supervisor and co-supervisor. The duration of teaching was 1 hour. To ensure content validity of the tool, it was submitted to experts in the field of mental health and language experts in English and Punjabi.

Sample was selected through convenience sampling technique. Sixty subjects were selected (thirty in experimental and thirty in control group). The pre test of experimental group as well as control group was conducted by using structured interview schedule after obtaining the consent and the duration for interview was one hour. Psycho-education was administered to the experimental group only. No intervention was given to control

group. Post test data was collected on 8th day from both the groups. Time spent on psycho-education was one hour. The pre test and post test of experimental group as well as control group was conducted by using structured interview schedule after obtaining the consent and the duration for interview was one hour. Statistical analysis was done through differential and inferential statistics using SPSS where $p<0.05$.

RESULTS

Table 1: Frequency and percentage distribution of selected demographic variables of sample and baseline comparison of experimental and control group (N=60)

VARIABLES	Experimental group f (%) (n=30)	Control Group f (%) (n=30)	chi square value	df	p value
Age					
21-40	11 (18.3)	12 (20.0)			
41-60	15 (25.0)	17 (28.3)	1.968	2	0.374^NS
61 or above	4 (6.7)	1 (1.7)			
Gender					
Male	13(21.7)	17(28.3)	1.067	1	0.302^NS
Female	17 (28.3)	13(21.7)			
Religion					
Hindu	7(11.7)	6(10.0)	0.098	1	0.754^NS
Sikh	23(38.3)	24(40.0)			
Any other specify	0(0)	0(0)			
Educational status					
Illiterate	9(15.0)	4(6.7)			
Primary	9(15.0)	19(31.3)	8.637	3	0.035*
Secondary	9(15.0)	3(5.0)			
Graduation or above	3(5.0)	4(6.7)			
Relation with patient					
Grandparent	4(6.7)	2(3.3)			
Parent	14(23.7)	13(21.7)	1.233	3	0.745^NS
Sibling	7(11.7)	10(16.7)			
Spouse	5(8.3)	5(8.3)			
Monthly family income					
Less than 10,000	5(8.3)	5(8.3)			
10-001-20,000	13(21.7)	18(30.0)	2.149	3	0.542^NS
21.000-30,000	9(15.0)	5(8.3)			
30,001 or above	3(5.0)	2(3.3)			
Residence					
Rural	19(31.7)	23(38.3)	1.270	1	0.260^NS
Urban	11(18.3)	7(11.7)			
Type of family					
Nuclear	22(36.7)	26(43.3)	1.667	1	0.197^NS
Joint	8(13.3)	4(6.7)			
Extended	0(0)	0(0)			
History of psychiatric illness in family member other than the patient					
Yes	8(13.3)	6(10.0)	0.373	1	0.542^NS
No	22(36.7)	24(40.0)			
Exposure to any health education regarding home based care of schizophrenic patient					
Yes	4(6.7)	3(5.0)	0.162	1	0.688^NS
No	26(43.3)	27(45.0)			

Level of significance $p<0.05$

Table 1 shows the frequency and percentage distribution of socio demographic variables of family members and association of socio demographic variables in both the groups. In accordance with age in experimental group majority 15(50.0%) and in control group majority 17(56.7%) were in 41-60 years group. In relation to gender in experimental group majority 17(56.7%) were female and in control group majority 17(56.7%) were male. In accordance with religion in experimental and control group majority 23(76.7%) 24(80.0%) were Sikh respectively. In regard with educational status in experimental group majority 9 (30.0%) were illiterate and in control group majority 19(63.3%) were in primary group. In respect to relation with patient in experimental group majority of them 14

(46.7%) were parents and in control group majority 13(43.3%) were grandparents. In accordance with monthly income in experimental and control group majority 13(43.3%) 18(60.0%) were in 10,001-20,000 group respectively. In relation to residence majority 19 (63.3%), 23 (63.3%) were in rural area respectively. With regard to type of family in experimental and control group majority 22(73.3%) 26(86.7%) were in nuclear family respectively. In accordance with history of psychiatric illness in family other than the patient majority 22 (73.3%) 24 (80.0%) majorities were in no category in both groups. In relation to exposure to any health education regarding home based care of schizophrenic patient 26(86.6%) 27(90.0%) majority were in no category.

It was found that both the groups were same and comparable at base line except the educational status which was significant at $p<0.05$.

Assessment of Pre-Test and Post-Test Level of Knowledge in Experimental Group and Control Group

It represents pre test level and post test level of knowledge in experimental group and control group. While pre test of experimental group majority 20(66.7%) and in control group majority 23(76.7%) were in poor category. While the post test of experimental group majority 19 (63.3%) were in good category and in control group majority 23(76.7%) were in poor category. (Figure 1)

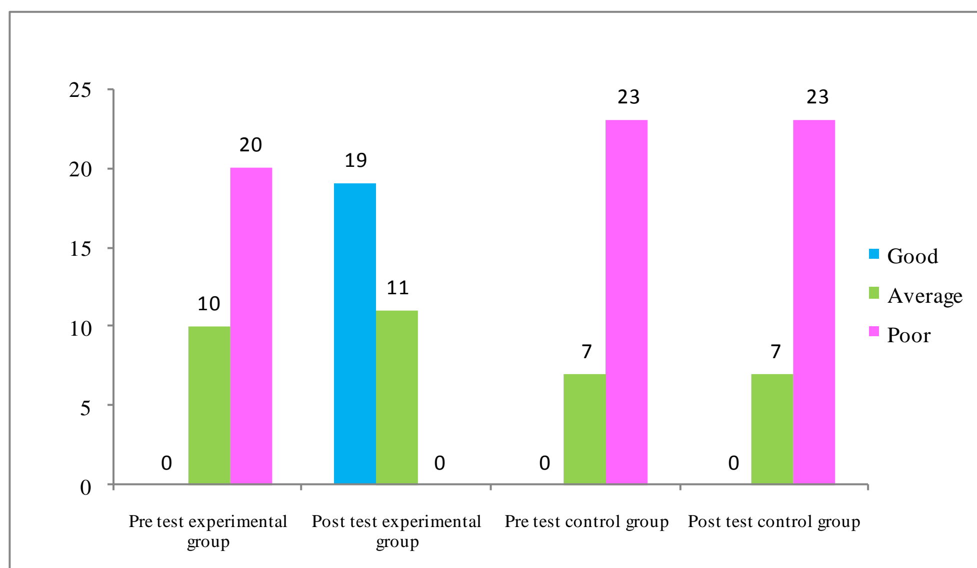

Fig 1: Assessment of Pre-Test and Post-Test Level of Knowledge in Experimental Group and Control Group.

Table: 2 Comparison of pre-test and post-test level of knowledge in control and experimental group: (N=60).

Group	Pre test Mean±S.D	Post test Mean±S.D	t-test
Experimental (n=30)	9.20± 3.274	21.90± 2.644	t=22.618, df=29, p value<*
Control (n=30)	9.53± 4.356	9.83± 4.161	t=.000, df=29, p value= 1.000^{NS}

Table 2: depicts the comparison of pre test and post test level of knowledge in experimental and control group. In experimental group during the pre test mean±S.D is 9.20±3.274 and during post test of experimental group mean±S.D is 21.90±2.644 (t=22.618, df=29, p value= .000) showing significance at the level of $p<0.05$ It is concluded that there is a significant difference between pre test and post test level of knowledge in experimental group after administration of intervention.

Association of pre-test level of knowledge with the selected demographic variables of subjects

There was a significant association of pre-test level of knowledge with age, religion, educational status, and relationship with the patient, monthly family income,

residence, history of psychiatric illness in family member other than the patient.

DISCUSSION

The findings of the present study depicted that there is poor knowledge among the family members prior to intervention. These findings are supported Magaru Maluo (2012) [5] reported that most of the caregivers (75.0%) had no prior knowledge about schizophrenia. Shinde Mahadeo, Desai Anmol et al (2014) [8] caregivers do not have any prior knowledge regarding schizophrenia. The findings present study revealed that there is a significant change in the knowledge of the family members regarding home based care in experimental group after administering intervention. These findings of the present study has been supported Yamaguchi H, Takahashi A et.al (2015) [9] confirmed that family psycho education during hospitalization, even for a short period, is effective for all families.

Worakul P, Thavichachart N et.al (2014) [10] reported that psycho-educational program on schizophrenia increase knowledge and shape the attitude of caregivers. Lorenza Magliano, Andrea Fiorillo et.al (2013) [11] concluded that inpatients whose families received psycho-education, the relapse rate at one year ranged from 6 to 12%, compared with 41 to 53% in routine management care groups. At two years, the relapse rates were 17 to 40% and 66 to 83%, respectively. Paul Mc Crone, Naik Sunita et.al (2013) [12] concluded from effectiveness of collaborative community based education that the primary outcomes are reduction in severity of symptoms of schizophrenia.

The findings of the present study revealed that in experimental group there was a significant association of pre test level of knowledge with educational status, relationship with the patient, residence and in control group there is a significant association of level of knowledge with religion, educational status, monthly family income, residence of psychiatric illness in family member other than the patient. These findings are supported by Marina Economou, Clive Richardson et al (2014) [13] that urban residence and higher education were generally associated with better knowledge and more positive attitudes towards PWS.

IMPLICATIONS AND RECOMMENDATIONS

Knowledge regarding home based care of schizophrenic patient is an important aspect so the family members should be provided knowledge on regular basis. This aspect should be adopted in the nursing practice to give schizophrenic patients a happy life and to reduce the relapse rate.

Findings of the study will act as a catalyst to carry out more extensive research in a large sample and in other settings and such research work enforces evidence based practice. Other interventions can be used to improve the knowledge of family members like psycho education or web based education

Limitations

Convenience method of sampling was used to recruit subjects for the study. The findings of the study cannot be generalized as it was done on small sample.

CONCLUSION

The present study concluded that during the pre test there was poor knowledge (66.7%) about the home based care of schizophrenic patients among the family members. After the administration of intervention there was significant increase and majority were in good (66.3%) category. Hence knowledge regarding home based care should be provided to the family members of schizophrenic patients on regular basis in the hospitals.

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