The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 9, Issue 2, April- June, 2021
DIP: 18.01.170.20210902, DOI: 10.25215/0902.170
http://www.ijip.in

Research Paper

Effectiveness of Psychosocial Nursing Care on Negative Symptoms, Quality of Life of Persons with Schizophrenia and Attitude of the Primary Care Givers Towards the Patient: A Pilot Report

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ABSTRACT

Schizophrenia is a major mental disorder with varied symptoms like positive, negative and cognitive symptoms. These symptoms blow the client and their family members in various ways. Becoming dependent on the family members, inability to take the family roles and responsibilities, unproductive life create burden for the families and depreciate the quality of life of the clients. Psychopharmacological agents along with the psychosocial interventions knotted together were found to be valuable for the treatment of these symptoms. A quasi-experimental design was conducted with the aim to find out the effectiveness of psychosocial nursing care on negative symptoms, quality of life of the persons with schizophrenia and attitude of primary care givers towards the patient. Socio demographic & clinical pro forma, family attitude scale and WHOQOL-BREF were used to measure the variables. Psychosocial nursing care was implemented for both the clients and primary care givers for experimental group. Negative symptoms were assessed before the intervention, just after the intervention and at one month after the intervention. Family attitude and Quality of life were assessed before and one month after the intervention. Same process was adopted for control group without the intervention. The experimental group showed a significant statistical difference in negative symptoms at pre test, first post test and second post test following psychosocial nursing interventions $F=137.87(2), p<0.001$. The paired 't' test showed no significant difference in post test family attitude score for experimental 't'=2.893, $P>0.05$.No significant difference in quality of life score was found in the post test score for both the group. The findings from the study showed that along with the psychotropic medications various psychosocial nursing interventions were effective to reduce the negative symptoms. However, further studies with larger sample size may provide better inference for the effectiveness of psychosocial nursing care.

Keywords: *Psychosocial Nursing Care, Negative Symptoms, Schizophrenia, Attitude, Quality of Life.*

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Received: May 19, 2021; Revision Received: June 16, 2021; Accepted: June 30, 2021

Schizophrenia is a mental disorder and its symptoms remains most mysterious form of psychological experience. Early onset of the illness, chronic course make schizophrenia a disabling disorder both for the clients and family members (Mueser et al., 2008; Liberman et al., 2012). Negative symptoms have substantial impact on the daily functioning of clients with schizophrenia and contribute more to impair the quality of life and poor functioning than positive symptoms (Barabassy et al., 2018). It is noted that the key sources of distress and disruption for the families were due to the apathy and slowness of the client rather than the aggressive behavior (Barbour S, 2002). All these impaired the overall functioning of the clients which in turns brings more burden among the family members. Families sometimes face harsh changes in their lives which create a change in their behavior, attitude and coping with their strong emotions (Hatfield AB, 2009). All these issues directly or indirectly affects the prognosis, adherence, relapse and quality of life of the clients.

Despite of the advances in understanding the epidemiology, etiology, biology and psychopharmacology of schizophrenia restrictive management options are available for negative symptoms as compared with positive symptoms (Correll et al., 2020). Psychotropic drugs in conjunction with psychosocial interventions are used for the treatment of negative symptoms of schizophrenia. Various psychosocial interventions like social skill training, group activity, activity scheduling, token economy, psychoeducation have shown effective results. However, effectiveness of the combination of these interventions is made out in very minimal scale on the negative symptoms of schizophrenia.

The present study was conducted with the aim to assess the effectiveness of psychosocial nursing care on negative symptoms, quality of life of persons with schizophrenia and attitudes of the primary care givers towards the patients.

Objectives

- To assess the effectiveness of psychosocial nursing care on negative symptoms of persons admitted with schizophrenia.
- To assess the effectiveness of psychosocial nursing care on quality of life of persons admitted with schizophrenia
- To assess the effectiveness of psychosocial nursing care on family attitude of primary care givers of persons with schizophrenia.

METHODOLOGY

The study was conducted in a tertiary mental health care hospital in the north eastern region of India. A quasi-experimental study design was adopted for the study. Patients admitted with the negative symptoms of schizophrenia and their primary care givers were recruited for the study purposively. Both male and female patients admitted with schizophrenia diagnosis as per ICD10 criteria with total duration of illness more than 3 yrs and who are above 20 years of age were included in the study. Primary care givers of both genders, aged above 18 years who had provided care to the patients for more than one year were recruited for the study. Five participants in each control and experimental group who fulfilled these criteria were included in the study. In the experimental group one participant dropped out during the post test.

Instruments

Validated self-structured pro forma were used to assess socio demographic, clinical variables for persons with negative symptoms of schizophrenia and their primary care givers. Socio demographic pro forma for patients consist of 10 items, clinical pro forma 11 items and socio demographic pro forma for primary care givers 11 items.

Negative symptoms were assessed by two standardized tools -Positive and Negative Syndrome Scale (PANSS) and Scale for assessment of negative symptoms (SANS). PANSS is 30 items 7-point Likert scale. It consists of 7 positive, 7 negative and 16 general psychopathology subscale and total scores is obtained by summation of ratings across the components. Composite scale score denotes the degree of predominance of one syndrome over another (Kay et al., 1987). SANS is rating scale which measures negative symptoms on a 25 item. Items are listed under the five domains i.e. affective blunting, alogia, avolition/apathy, anhedonia/asociality, and attention (Andreasen NC, 1989).

Attitudes of the family members were assessed with Family attitude scale (FAS). It is a 30 items self-administered, 4 point likert tool developed by Kavanagh. Score ranges from 0 to 120 with higher scores indicating higher levels of expressed emotion (Kavanagh et al., 1997). Tools were translated in vernacular language after obtaining the permissions from the author for this study purpose using standard procedure. Reliability of tool were checked and found to be 0.752 (cornbach alpha).

Quality of life was assessed with World Health Organization Quality of Life (WHOQOL-BREF) consists of 26 items, two items related to general health and overall quality of life and other items in the domain of physical health, psychological, social relationship and environment. Each domain score indicates the individual perception of quality of life. Higher score denotes higher quality of life (WHO 1998). Assamese version of the tool was provided by the concerned authority with permission to use for the present study and cornbach alpha calculated for the Assamese version of tool is found to be 0.867.

Psychosocial nursing care module was developed by the researcher through extensive reviews of research articles, case studies, books, from the clinical experience of the researcher and after consultation with the guide and other experts. Developed module was validated by seven experts from different related fields. Validity index of all the areas of intervention was found to be more than 80%. Final module was developed after incorporation of the suggestions and recommendations of the experts. Ethical clearance was obtained from the institute ethics committee and informed consent was obtained both from the clients and primary caregivers.

Data collection procedure

Data were collected from Dec'2019 to Feb'2020 for control group and from Feb' to Oct'2020 for experimental group. On the 2nd day of admission in the hospital the client were assessed for the presence of negative symptoms from case file and history of present illness. On the 5th day negative symptoms were assessed through PANSS and SANS scale. Negative composite score in PANSS, presence of any three negative symptoms in SANS and who fulfill inclusion criteria were recruited for the study. Informed consent was obtained from primary care givers and self report pre test FAS information and WHOQOL-BREF from the patients were collected on the same day.

From the sixth day of admissions onwards, psychosocial nursing care were provided for fifteen days which comprise of activity scheduling for two weeks, daily exercises on range of motion for ten to fifteen minutes and deep breathing exercise for five minutes. Five sessions of group recreational activities which include musical chair, painting of their choice, game to separate the maximum number of bengal gram from lentils which were kept together on a table, reading a story and narrating it to the group and lessons learnt from the story and watching a uniform funny videos for fifteen minutes in group . All the group activities were carried out for 45-50 minutes with 5 to 7 participants in the group. Ten sessions of social skill training which include discussion of different skills its purposes and summarization of skills, two sessions of psycho education, two sessions of money management techniques for the clients and three sessions of psycho education for the primary care givers on schizophrenia, negative symptoms and its management. Next day following the completion of the psychosocial nursing care PANSS, SANS scale were administered to assess the negative symptoms after the intervention and one month after the intervention. Informed consent was obtained from the clients after the client gain insight. Family attitude and quality of life was assessed one month after the intervention in the first follow up. Same processes of data collection were carried out for the control group without the implementation of psychosocial nursing care for clients and primary care givers. To prevent the mixing of groups the data collection was completed for the control group first followed by the experimental group.

The data were analyzed using SPPSS version 25. Descriptive statistics were analyzed using frequency, percentage, mean, and standard deviation while inferential statistics paired and independent t test and repeated measures ANNOVA were used.

RESULTS

- In both the group all the participants were male.
- Majority of the primary care givers of the control group 4(80%) had score less than sixty and in experimental group all the primary care givers 5(100%) scored less than sixty which interpret presence of low expressed emotion towards the clients.
- A significant mean difference at pre test, first post test and second post test negative symptom score $F(2)=137.87$, $p<0.001$ were found in the experimental group.
- There was no significant change in the quality-of-life domain following the psychosocial intervention in both the group.
- Independent '*t*' test between the pre test score for WHOQOL and FAS shows no significant difference which indicate that both the groups were homogenous.

Table 1: Description of discrete socio demographic and clinical variables of persons with negative symptoms of schizophrenia. ***n=10***

Variables		**Control Group n=5**		**Experimental Group n=5**	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	5	100%	5	100%
Education	High School	3	60%	1	20%
	Higher Secondary &Above	2	40%	1	20%
	Other Professionals Courses	0	0%	3	60%
Marital Status	Unmarried	2	40%	4	80%

Variables		**Control Group n=5**		**Experimental Group n=5**	
		Frequency	Percentage	Frequency	Percentage
	Married	2	40%	1	20%
	Separated/Divorced	1	20%	0	0%
Occupation	Unemployed	4	80%	4	80%
	Government Employee	1	20%	1	20%
Religion	Hindu	4	80%	2	40%
	Muslim	0	0%	2	40%
	Christian	1	20%	1	20%
Type of family	Nuclear	2	40%	3	60%
	Joint	3	60%	2	40%
Current housing of the patient	Own	4	80%	3	60%
	Rented	1	20%	2	40%
Domicile	Rural	5	100%	3	60%
	Urban	0	0%	2	40%
Any history of traditional treatment	Yes	3	60%	2	40%
	No	2	40%	3	60%
Family History of Psychiatric Illness	Yes	2	40%	5	100%
	No	3	60%	0	0%
Treatment taken before from	Faithhealer /Ojah/ Pujari	1	20%	0	0%
	Psychiatrist	4	80%	5	100%
History of any previous hospitalization	Yes	2	40%	2	40%
	No	3	60%	3	60%
Adherence to treatment plan	Yes	1	20%	2	40%
	No	4	80%	3	60%
Medicine patient received	Poly Drug	3	60%	3	60%
	Not Known	2	40%	2	40%
Any history of any psychosocial treatment before	Yes	1	20%	1	20%
	No	4	80%	4	80%
Whether patient was working in the last 6 months	Yes	1	20%	0	0%
	No	4	80%	5	100%

Table 2: Description of selected socio demographic and clinical variables of persons with negative symptoms of schizophrenia. n=10

Variables	**Control Group n=5**				**Experimental Group n=5**			
	Minimum	Maximum	Mean	SD	Minimum	Maximum	Mean	SD
Age (years)	22	35	28.20	4.76	25	35	27.40	4.27
Monthly income (Rupees)	3000	17000	6200	6099.18	3000	50000	24600.00	19894.72
Age of onset of illness (years)	18	26	22.60	2.96	18	32	23.30	5.26
Total duration of Illness in (months)	41	156	67.00	49.86	38	96	50.80	25.31
Duration of untreated psychosis (days)	15	730	301.00	294.733	2	120	39.00	51.25

Table 3: Description of discrete socio demographic variables of primary care givers of persons with negative symptoms of schizophrenia. n=10

Variables		**Control Group n=5**		**Experimental Group n=5**	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	2	40%	3	60%
	Female	3	60%	2	40%
Relationship to the patient	Parent	3	60%	3	60%
	Spouse	1	20%	1	20%
	Sibling	1	20%	1	20%
Education	Primary School	3	60%	2	40%
	Middle School	1	20%	0	0%
	High School	1	20%	2	40%
	Professionals	0	0%	1	20%
Marital Status	Unmarried	0	0%	1	20%
	Married	3	60%	3	60%
	Widow/Widower	2	40%	1	20%
Currently employed	Yes	4	80%	3	60%
	No	1	20%	2	40%
Occupation	Housewife	1	20%	2	40%
	Cultivator	0	0%	2	40%
	Daily wage workers	3	60%	0	0%
	Government Employee	0	0%	1	20%
	Others	1	20%	0	0%

Variables		**Control Group n=5**		**Experimental Group n=5**	
		Frequency	Percentage	Frequency	Percentage
Domicile	Rural	5	100%	4	80%
	Urban	0	0%	1	20%
Received any psychosocial treatment before	Yes	5	100%	0	0%
	No	0	0%	5	100%

Table 4: Description of continuous socio demographic variables of primary care givers of persons with negative symptoms of schizophrenia. n=10

Variables	**Control Group n=5**				**Experimental Group n=5**			
	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Age (yrs)	26	65	44.60	15.07	25	60	46.20	16.87
Total time spend for care giving per day (minute)	90	210	156.00	49.29	60	60	60	0.00
Total time taken to reach hospital from home (minute)	30	720	326.00	248.15	60	360	225.60	113.65

Table 5: Mean difference of negative symptom score at pre-test, first post test (21 days of admission) and second post test (at first follow up after discharge from hospital) for control and experimental group.

Group	**SANS Score**	**Mean**	**SD**	**F value**	**Significance**
Negative symptom score for control group (n=5)	Pre-test negative score	88.80	15.123	10.143	0.06
	First post-test negative symptom score	61.40	18.02		
	Second post-test negative symptom score	62.60	16.81		
Negative symptom score for experimental group (n=4)	Pre-test negative score	76.00	8.04	137.87	0.000
	First post-test negative symptom score	39.00	10.61		
	Second post-test negative symptom score	26.50	13.52		

Repeated measures ANOVA in within group measures in linear model for negative symptom of schizophrenia shows that mean scores at pre –test, 21 day of admission and at the first follow up significantly differ $F(2)=10.143, p=0.06$.

Repeated measures ANOVA in within group measures in linear model for negative symptom of schizophrenia shows that mean scores at pre –test, next day of intervention and at the first follow up significantly differ $F(2)=137.87, p<0.01$.

Table 6: Mean, standard deviation and paired 't' test value of pre test and post test score of domain of WHOQOL-BREF .

Parameters	**Control Group n=5**				**Experimental Group n=4**			
	Mean	SD	'*t*'(df)	P value	Mean	SD	'*t*'(df)	P value
Pre-test physical domain score	12.80	2.38	0.356(4)	0.740	13.25	1.70	-0.63(3)	0.572
Post-test physical domain score	12.40	0.54			14.25	3.77		
Pre-test psychological domain score	13.80	2.28	-0.825(4)	0.45	12.25	2.21	-0.87(3)	0.448
Post-test psychological domain score	14.60	2.074			13.50	3.69		
Pre-test social relationship domain score	13.20	4.76	-0.659(4)	0.546	14.50	1.91	-0.209(3)	0.848
Post-test social relationship domain score	14.20	4.49			15.00	4.54		
Pre-test social Environment domain score	11.80	3.19	1.206(4)	0.294	13.00	3.36	0.104(3)	0.923
Post-test social Environment domain score	11.00	2.91			12.75	3.77		

Table 7: Mean, standard deviation and independent 't' test value of pre test and post test domain of WHOQOL-BREF score in experimental and control group. n=9

Domain	**Control group(n=5)**		**Experimental group(n=4)**		***t* (df)**	**P value**
	Mean	**SD**	**Mean**	**SD**		
Pre test Physical domain score of QOL	12.80	2.38	13.20	1.48	-0.318(8)	0.758
Pre test Psychological domain score of QOL	13.80	2.28	12.00	2.00	1.32(8)	0.221
Pre test Social domain score of QOL	13.20	4.76	14.00	2.00	-0.346(8)	0.738
Pre test Environment	11.80	3.19	12.20	3.42	-0.191(8)	0.853

Domain	**Control group(n=5)**		**Experimental group(n=4)**		***t* (df)**	**P value**
	Mean	**SD**	**Mean**	**SD**		
domain score of QOL						
Post test Physical domain score of QOL	12.40	0.54	14.25	3.77	-1.10(7)	0.307
Post test Psychological domain score of QOL	14.60	2.07	13.50	3.69	0.56(7)	0.587
Post test Social domain score of QOL	14.20	4.49	15.00	4.54	-0.264(7)	0.799
Post test Environment domain score of QOL	11.00	2.91	12.75	3.77	-0.788(7)	0.457

Table 8 : Mean, standard deviation and paired 't' test value of pre test and post test family attitude score in experimental and control group

Parameters	**Control Group n=5**				**Experimental Group n=4**			
	Mean	SD	'*t*'(df)	P value	Mean	SD	'*t*'(df)	P value
Pre-test family attitude score	53.20	10.15	4.961(4)	0.008	43.50	5.80	2.892(3)	0.063
Post test family attitude score	37.20	0.804			25.00	15.51		

A significant difference was found in the pre test and post test family attitude score in the control group at 0.05 level of significance.

Table 9: Mean, standard deviation and independent 't' test value of pre test and post test family attitude score in experimental and control group. n=9

Group	**Pre test FAS score**	***t*(df)**	**P value**	**Post test FAS score**	***t*(df)**	**P value**
	Mean ±SD			Mean ±SD		
Control group	53.20±10.15	1.38(8)	0.203	37.20±12.09	1.331(7)	0.225
Experimental group	45.60±6.87			25.00±15.51		

DISCUSSION

Both the groups were homogenous and after the psychosocial nursing care a significant difference in negative symptoms were found in the pre test, first post test and second post test in the experimental group. The present study findings contribute to the literature that suggests that interventions like group therapy, exercise, social skill training, activity scheduling improves the negative symptoms (Lutgens et al., 2017; Morin et al., 2017). Psychoeducation help to develop a caring attitude among the family members, significant

gain in knowledge, decrease the level of self stigma, perceptions of burden among the family intervention group (Ivezic et al., 2017; Bulut et al., 2016; Ran et al., 2003). Social skill training also showed a significant post test difference in negative symptoms, significant cognitive insight in experimental group (Barzegar et al.,2016; Valencia et al,. 2007; Dobson et al.,1995). Aerobic exercise program showed reduction in negative symptoms in experimental group than the TAU (Acil et al,. 2008; Gholipour et al., 2012).

However, in the control group there is a significant improvement in the negative symptom in the first post test score during the hospital stay but after discharge no significant improvement was found. It may be due to the regular treatment and psychosocial services received during hospital stay by the client. But, after discharge such services are withdrawn and family members may not be able to render psychosocial services regularly provided during hospital stay.

No significant improvement was found in the quality-of-life score following the psychosocial nursing care in both the group. QOL score was highest in the psychological domain for control group (13.80±2.28) and highest in social domain for experimental group (14.00±2.00). It may be due to the fact that being married is considered to be the protective factor for schizophrenia and support from the spouse might have contributed to develop a better wellbeing in the control group. The prominence of QOL score is in contrast to the findings that show that persons with schizophrenia had lowest QOL score in social relationships domain (Solanki et al., 2008). Studies establish that subjective and objective QOL is correlated with emotional discomfort, negative symptoms and cognitive factor and proper treatment of symptoms like depressive, negative and extra pyramidal symptoms may enhance subjective and objective QOL (Yamauchi et al., 2008).

Present study reported low level of expressed emotion among primary care givers in both control (80%) and experimental (100%) group. Concept of expressed emotion varies across the globe and culture. Western countries reported high expressed emotion than India (Bhugra et al., 2003). However, the neighboring countries like Pakistan, China reported high expressed emotion among the family members which support the variation across the culture (Ikram et al., 2011; Phillips et al., 2002). Since ancient times onwards in India, care are usually provided by the families members together to the client in any illness and till date it still persist which facilitate them to concede their care provider role. Usually, the responsibilities were shared among the family members jointly which reduces their burden and stress associated with the care of the patients. A similar pattern of results was also found in which 79% of family members of persons with schizophrenia had low EE and 21% had high EE (Gogoi K., 2017). It is found that no significant difference in level of expressed emotion on global item of negative symptom score in BPRS scale. However, family members of patients with more positive symptoms exhibited high expressed emotion (Glynn et al., 1990).

Limitations

There are some limitations in this study. Small sample size of the study and psychosocial nursing care were provided for short duration not till the time of discharge. It took more time were taken to collect the information from clients due to the presence of negative symptoms.

Only the accompanied primary care giver during hospital stay expressed their attitudes towards the patient, however there may be other family members who are mainly involved

in the care of the client. Different level of insights for the client may underrate or overrate their quality of life.

Implications

The interventions can be implemented for the negative symptoms of patient during their hospital stay along with the regular nursing interventions. Workshop and continuing nursing education program can be organized on the detailed psychosocial nursing interventions for both clients and family members.

Future research directions

Future works need to explore the perceived expressed emotions by the clients with negative symptoms, implementation of the interventions for longer duration of time during the hospital stay, challenges faced and coping strategies adopted by the family members during the care of patients with negative symptoms.

CONCLUSION

Psychosocial nursing care was effective to reduce the negative symptoms along with the TAU among the persons with negative symptoms of schizophrenia. However, no significant change was found in the family attitude of primary care givers and quality of life of persons with schizophrenia. Study findings could not be generalized due to small sample size of the study. Study with larger sample size may provide stronger data for the effectiveness of psychosocial nursing care.

REFERENCES

Acil A.A., Dogan, S., Dogan, O. (2008). The effects of physical exercises to mental state and quality of life in patients with schizophrenia. *Journal of psychiatric mental health nursing, 15(10).* https:// DOI:10.1111/j.1365-2850.2008.01317.x

Andreasen, N.C. (1989). The scale for the assessment of negative symptoms (SANS): Conceptual and theoretical foundations. *The British Journal of Psychiatry, 155(Suppl 7). 49-58.* https://www.cambridge.org/core

Barabassy, A., Szatmari, B., Laszlovszky., Nemeth, G.(2018). Negative symptoms of schizophrenia: constructs, Burden and Management. *Psychotic Disorders-An update.*43-62. https://dx.doi.org/10.5772/intechpen.73300

Barbour, S. (2002).Schizophrenia. Greenhaven Press.

Barzegar , S.,Ahadi, M., Barzegar ,Z., Ghahari, S.(2016)The Effectiveness of Social Skills Training on Reducing Negative Symptoms of Chronic Schizophrenia. *International Journal of Medical Research & Health Sciences, 5(7),323-327.* https://www.ijmrhs.com/medical-research/the-effectiveness-of-social-skills-training-onreducing-negative-symptoms-of-chronic-schizophrenia

Bhugra, D., McKenzie, K.(2003). Expressed emotion across cultures. *Advances in Psychiatric Treatment,9(5),342-348.* https://doi.org/10.1192/apt.9.5.342

Bulut, M., Arslantas, M.H., Dereboy, I.F.(2016).Effects of Psychoeducation Given to Caregivers of People With a Diagnosis of Schizophrenia. *Issues mental health nursing, 37(11),800-810. https://*doi: 10.1080/01612840.2016.1222039

Correll, C.U., & Schooler, N.U. (2020). Negative symptoms in schizophrenia: A review and clinical guide for recognition, assessment and treatment. *Neuropsychiatric Disease and treatment*,16, 519-534. https://doi.org/10.2147/NDT.S225643

Development of the World Health Organization WHOQOL-BREF quality of life assessment. The WHOQOL Group. Psychol Med. 1998;28:551-8. DOI: 10.1017/s0033291798006667

Dobson, D.J., McDougall, G., Busheikin, J., Aldous, J. (1995). Effects of social skills training and social milieu treatment on symptoms of schizophrenia. *Psychiatric Services, 46(4*). https://www.ncbi.nl.nih.gov/m/pubmed/7788460/

Gholipour, A., Abolghasemi, S.H., Gholinia, K.,Taheri, S. (2012).Token Reinforcement Therapeutic Approach is More Effective than Exercise for Controlling Negative Symptoms of medicine. *International Journal of Preventive Medicine, 3(7), 466-470*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3415186

Glynn, S.M., Randolph, E.T.,Paz, G.,Leong, G.B., Shaner, A.L.,Strachan, A.(1990). Patient psychopathology and expressed emotion in schizophrenia. *British Journal of Psychiatry, 157, 877-80*. https://doi: 10.1192/bjp.157.6.877

Gogoi, K. (2017). Assessment of expressed emotions in family members of patients with schizophrenia in a selected Medical College Hospital, Assam. *Open Journal Of Psychiatry and Allied Sciences ,8(1).* https://www.researchgate.net/publication/312073862

Hatfield, A.B. (2009). Family education in mental illness. The Guilford Press a division of Guilford Publications.

Ikram, A., Suhail, K., Jafery, S.Z., Singh, S. (2011). Rates of expressed emotions in Pakistani relatives of patients with schizophrenia. *Isr J Psychiatry Relat Sci, 48(2),74-81*. https://pubmed.ncbi.nlm.nih.govPMID:22120441

Ivezic, S.S., Sesar, M.A., Muzinic, L. (2017). Effects of group psychoeducation program on self-stigma, empowerment and perceived discrimination of persons with schizophrenia. *Psychiatria Danubina, 29(1)*. https://www.ncbi.nlm.nih.gov/m/pubmed/28291976

Kay, S.R., Fiszbein, A., Opler, L.A. (1987). The positive and negative syndrome scale (PANSS) for schizophrenia. *Schizophrenia bulletin, 13(2),261-276.* DOI: 10.1093/schbul/13.2.261

Kavanagh, D.J., Halloran, P.O., Manicavasagar, V.,Clark, D., Piatkowska, O.,Tennant, C.,Rosen, A. (1997).The family attitude scale:reliability and validity of new scale for measuring emotional climate of families.*Psychiatry Research.70,185-195.*

Kavanagh, D.J., Pourmand, D., White, A., Robertson, D., Halford,K., Vaughan, K. (2008).Predictive validity of the Family Attitude Scale in people with Psychosis.*Psychiatry Res,160, 356-63*

Liberman, J.A, & Stroup. S, Perkins, D.O. (2012). Essentials of Schizophrenia. American Psychiatric Publishing.

Lutgens,D., Gariepy, G., Malla, A.(2017). Psychological and psychosocial interventions for negative symptoms in psychosis: systematic review and meta-analysis. *The British Journal of Psychiatry, 210(5), 324-332*. DOI: 10.1192/bjp.bp.116.197103

Morin, L., Franck, N. (2017). Rehabilitation interventions to promote recovery from schizophrenia: A systematic Review. *Rehabilitation and recovery in schizophrenia, 8(100).* DOI: 10.3389/fpsyt.2017.00100

Mueser, K. T, & Jeste, D.V. (2008). Clinical Handbook of Schizophrenia.The Guilford Press, A Division of Guilford Publications.

Valencia, M., Rascon, M., Jaurez, F., Murow, E. (2007). A psychosocial skills training approach in Mexican out-patients with Schizophrenia. *Psychological Medicine, 37(10), 1393-402*. doi: 10.1017/S0033291707000657.

Lutgens, D., Gariepy, G., Malla, A. (2017). Psychological and psychosocial interventions for negative symptoms in psychosis: systematic review and meta-analysis. *British Journal of Psychiatry, 210,324-332*. https://10.1192/bjp.bp.116.197103

Phillips, M. R., Pearson, V., Li, F., Xu, M., Yang, L. (2002). Stigma and expressed emotion: a study of people with schizophrenia and their family members in China. *British Journal of Psychiatry,181, 488-493.*

Ran, M.S., Xiang, M.Z., Chan, C.L., Leff, J.,Simpson, P., Huang, M.S., Shan, Y.H.,Li, S.G. (2003). Effectiveness of psychoeducational intervention for rural Chinese families experiencing schizophrenia-a randomized controlled trial. *Soc Psychiatry Psychiatr Epidemio, 38(2), 69-75.* https://doi.org/10.1007/s00127-00300601-z

Yamauchi, K., Aki, H., Tomotake, M., Iga, J.I., Numata, S.,Motoki, I.,Izaki, Y., Tayoshi, S., Kinouchi, S.,Sumitani, S., Tayoshi, S.,Takikawa, Y., Kaneda, Y., Taniguchi, T., Ishimoto, Y., Ueno, S., Ohmori, T.(2008). Predictors of subjective and objective quality of life in outpatients with schizophrenia. Psychiatry and Clinical Neuroscience, 62(4), 404-411 https://doi.10.1111/j.1440-1819.2008.01818.x

Acknowledgement

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Ch.P. Roy & Baruah A. (2021). Effectiveness of Psychosocial Nursing Care on Negative Symptoms, Quality of Life of Persons with Schizophrenia and Attitude of The Primary Care Givers Towards the Patient: A Pilot Report. *International Journal of Indian Psychology*, *9*(2), 1711-1723. DIP:18.01.170.20210902, DOI:10.25215/0902.170