

Development and validation of psychiatric social work intervention package to reduce expressed emotion towards persons with Schizophrenia

Kannappa V Shetty¹, Navaneetham Janardhana², Suresh Bada Math³, Palaniappan Marimuthu⁴

¹Assistant Professor, Department of Psychiatric Social Work (PSW), Dharwad Institute of Mental Health and Neuro Sciences (DIMHANS), Dharwad Karnataka, India

²Professor, Department of PSW; ³Professor, Dept of Psychiatry; ⁴Professor, Dept of Biostatistics National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India

ABSTRACT

Background: Expressed Emotion is an important characteristic of the family atmosphere that has been identified as a foreseeing reason for relapse of symptoms among individuals with Schizophrenia. Previous studies have highlighted the significance of psycho-social intervention alongside pharmacotherapy to get better outcomes and help with the speedy recovery of individuals with schizophrenia. The objective of the present paper was to develop and validate the Psychiatric Social Work (PSW) intervention package. **Methods and Material:** A ten-session structural intervention package, which includes Professional Social work methods, principles, therapeutic activities, brainstorming, case vignettes, role plays, and video clippings on each day's topic. A handout of the take-home message of each session was developed in brief, in two languages (English and Kannada) for distribution to the caregivers. The intervention and methodology were given to nine experienced mental health professionals (MHPs) for face and content validation. The pilot study was done on ten caregivers to check the feasibility of the package. **Results:** All the subject experts agreed that the objective and content used for each session was appropriate. The majority (77.2%) said that the duration used for each session was adequate, and 88.9% agreed that the methodology used for each session was suitable. A standardized PSW programme was developed by incorporating the comments of experts. The pilot results endorsed the utility of the PSW intervention package. **Conclusion:** The PSW programme developed in the present study was found to be useful to the families of persons with schizophrenia, and it can be practiced in a clinical setting.

Keywords: Expressed Emotion, Schizophrenia, Caregivers, Psychiatric Social Work

INTRODUCTION

Schizophrenia is a heterogeneous heritable and major psychiatric condition that substantially interferes with one's functioning and quality of life.^[1-3] This illness also greatly influences and interferes with the quality of life of the family members and the others who are taking care of the individuals suffering from schizophrenia. Expressed emotion is term used when family environment itself becomes one of the main stressors for persons with schizophrenia,^[4] Thus expressed emotion becomes a major predicting factor for


relapse.^[5,6] It becomes challenging for the care givers of individuals with schizophrenia to comprehend the nature of the mental illness due their reluctance for understanding, and often tend to drop out of treatment programmes.^[1] Existing literature demonstrates that the caregiver's knowledge is not sufficient for the betterment of persons with schizophrenia ^[2]. In many societies, culture and beliefs influence the caregiver's attitude about mental illness ^[3]. It also plays a

Address for Correspondence:

Dr. Kannappa V Shetty, Assistant Professor, Department of Psychiatric Social Work, Dharwad Institute of Mental Health and Neuro Sciences (DIMHANS), Dharwad - 580008 Karnataka, India. Email: vksettymsw@gmail.com

How to Cite the Article:

Shetty KV, Janardhana N, Math SB, Marimuthu P. Development and validation of psychiatric social work intervention package to reduce expressed emotion towards persons with Schizophrenia. Indian J Psychiatr Soc Work 2021;12(2):73-80.

Access the Article Online	
DOI: 10.29120/IJPSW.2021.v12.i2.273	Quick Response Code 
Website: www.pswjournal.org	



vital role in high expressed emotion^[4] Numerous studies have found that high EE leads to relapse and acts as a maintaining factor, which usually influences the clinical outcome.^[5, 6]

Majority of the studies have indicated that psycho-social interventions along with the pharmacotherapy will have better outcome and will help in mainstreaming the individuals with mental illness at the earliest.^[7-11] Like western countries, expressed emotion can be seen in Indian culture and can cause frequent relapse and hospitalization^[12-14]. Deriving from the knowledge of previous literature the researcher has found that there is no exclusive package of psycho-social intervention with regard to EE for the care givers in Indian context. Thus, this study has tried to develop and validate the culturally specific Psychiatric Social Work (PSW) intervention for the families of persons with Schizophrenia.

Aim of the Study: The aim of the study was to develop and validate a culturally specific PSW intervention to reduce expressed emotion and enhance knowledge among the caregivers of persons with schizophrenia.

MATERIALS AND METHODS

The development and validation of Psychiatric Social Work (PSW) intervention was conducted in 4 phases, they are as follows; 1) An extensive review of literature 2) Discussion with experts 3) Development of the intervention package and 4) Stabilising the face and content validation.

Extensive review of literature: An extensive search was done from several databases such as PubMed, Science direct, Google scholar, Cochrane library and Psych info. Various search terms used for understanding the concept and to develop the intervention programme such as expressed emotion, caregivers knowledge, psycho-social intervention for EE in schizophrenia etc. While reviewing the literature the researcher has referred 254 studies and in that he has reviewed 131 various studies related to expressed emotion and schizophrenia aspects. Out of that, 1 meta-analysis, 4 RCTs, 34 intervention, 4 cohort and longitudinal, 26 descriptive and 4 explorative studies, 12 Ph.D./M.Phil thesis, 1/book, 40 abstracts and 6 review papers.^[2,6,10,13,15-20] The studies

conducted on schizophrenia and written in English were included for developing the intervention package.

Discussion with experts: After the review of literature, a draft of the intervention prepared and this was discussed individually with several experts of the field of mental health. These experts belonged to multidiscipline (Faculties of Psychiatric Social Work, Psychiatry, Clinical Psychology, Psychiatric nursing and mental health education departments).

Development and validation: Based on the review of the literature and the inputs drawn from the discussion with experts on EE and knowledge of caregivers of persons with schizophrenia, the framework of the PSW Intervention was characterised into two broad categories- Professional social work and specific methodology for each session.^[18, 19, 21-26] A 10 session PSW intervention programme was developed. Each session of the programme has its own separate methodology, Social work principles and techniques.

Face and content validation: The content and methodology were adopted using a structured questionnaire form that was elicited from quantitative and qualitative remarks on each theme.^[10,24,27-29] The researcher had approached 14 Mental Health Professionals (MHPs) from 3 Universities, 2 Mental Health Institutions and 1 Medical college in Karnataka. Nine of them sent their comments and 5 of them did not respond. The nine experienced Mental Health Professionals, included 4 Psychiatric Social Workers, 1 Psychiatrist, 2 Psychologists, 1 Psychiatric Nurse and 1 Mental Health Educationist. The process of validation and data collection of the intervention program took about 7 months in 2014.

The Mental Health Professionals (MHPs) were given the draft of intervention package about the details of the session and then they evaluated filled out the structured questionnaire, on how applicable the techniques used and contents described (content validation) for each session. For face validation of the programme, the researcher asked each of the MHPs to give their opinion on PSW Intervention through appropriate (Yes) or inappropriate (No) answers. Two rounds of iteration were conducted among the

MHPs, to arrive at a consensus on the contents and methodology of the PSW Interventions programme. The researcher conducted a rigorous in-depth discussion with the experts of MHPs and made the necessary modifications to the content and methodology of the program. Approval of the intervention program was obtained after the nine experts agreed on the contents and methodology of the program.

After seeking the opinion of nine experts a standardized draft of the final version of the PSW intervention was developed. The draft of PSW intervention contains face to face open-ended discussion which follows a semi-structured format. The package included group discussions, therapeutic activities, brainstorming, case vignettes, role plays, and

video clippings on each day's topic. A handout of take-home message of each session was developed in brief in two languages (English and Kannada) for distribution to the caregivers of persons with schizophrenia.

Ethical clearances: This research project was taken forward after seeking the ethical clearance from the Institutional Ethics committee. Reference No. NIMH/DO/SUB-COMMITTEE/2012/SL.NO. 17, Behavioural Sciences, National Institute of Mental Health and Neurosciences (NIMHANS), India. The informed consent was taken from the Mental Health Professionals. The names of the respondents as well as the institutions were kept confidential.

Statistical Analysis: Basic analysis like central tendency and frequency were performed using Statistical Package for Social Sciences for Windows SPSS 21.

Table: 1 on preliminary content of the intervention package

Session no PSW interventions method	Specific intervention	Methodology	Content
1 Intake and pre-assessment session			
2 Social group work	Psycho education	Group discussion and Brain storming	Meaning, facts and myths about schizophrenia
3 Social group work	Psycho education	Pictorial presentation and Discussion	Symptoms and course of schizophrenia and to enhance the understanding on cognitive, behavioural and emotional changing in ill individuals
4 Social group work	Psycho education	Group educative and Brainstorming	Causes of schizophrenia and care for people with schizophrenia
5 Social group work	Summary of session 1 to 3 on psycho education through video presentation	Video presentation and Group discussion	Meaning, facts and myths, symptoms, course, causes, care for people with schizophrenia and expressed emotion
6 Social group work	Psycho education	Group discussion	Education on the relationship among communication, EE, relapse and recovery, common odd behaviours of ill individuals and caregivers
7 Social group work	Communication training	Brain storming and Group discussion	Identifying and discussion Do's and Don'ts for the caregivers in high EE communication and its rules
8 Social group work	Communication training	Role plays and Group discussion	How to reframe high EE communication
9 Social case work	Caregivers Stress Management	Self-disclosure	Identify the caregiver's more stressful situations, causes and Stress management
10 Follow-up and post- intervention assessment session			

RESULTS

The study has attempted to develop the PSW Intervention to reduce Expressed Emotion and to enhance knowledge among the family member who are looking after the individuals with schizophrenia. The quantitative and qualitative data that was acquired at the validation stage, was reflected in the results. The data has been presented in results of the face, content and consensual validation of PSW Intervention programme.

Face and content validation: Nine experts gave their opinion on the utility and suitability of the PSW interventions, as mentioned in Table 2: Comments of Experts on each session's contents of training programme is mentioned below.

All the experts who participated in validating the intervention program had an average of 21.8(\pm 7.4) years of work experience (SD), after their formal education. All experts (100%) agreed that the objective of the session and content used for each session was appropriate. Out of nine, seven experts (77.2%) said that duration used for each session was appropriate. Out of nine, eight experts (88.9%) agreed that the methodology used for each session was appropriate. All the experts (100%) agreed that the take home message given for each session was appropriate. Out of nine, eight experts (88.9%) agreed that the order of the session used for programme was appropriate.

Table: 2 Experts' comments on each session of the PSW training program.

Session no Topic	Remarks by Validators
1. Psycho-education on meaning, facts and myths about schizophrenia	Raised the question on "how do you deal explanatory methodology on myths?", whether leaflets can be provided? Use ice break session, 1st and 2nd session can be interchanged, modify the heading of session and increase the duration of session.
2. Psycho-education on symptoms and course of schizophrenia	Use pictorial or video clipping as a methodology, add picture on substance abuse, increase the duration for 15 minutes
3. Psycho-education on causes and care for people with schizophrenia	Reduce the duration of session; not to include dopamine; add academic stress; include occupational therapy and rehabilitation in PS intervention, have separate session for causes and care.
4. Summary of session 1 to 3 on psycho education through video presentation	Give introduction before starting the video session
5. Psycho-education on the relationship among communication or EE, and relapse or/and recovery	Provide take home message through hand out, use group work methodology, include information on over involvement, use role play, give specific activities for engaging the patient, increase the time as the topic is vast; modify the heading,
6. Communication training on Do's and Don'ts for the caregivers with high EE communication	Remove the repeated words in clipping no 5, reduce the length of 3 rd clip, give introduction and explain the characters to participants before starting video clippings, increase the duration of the session
7. Communication training on how to reframe high EE communication	Use appropriate PSW principles and techniques in methodology.
8. Caregivers stress management	Include another family member in intervention, raised a question 'why only two stressful incidents?'

A table 2 gives an overview of the comments given by all nine Mental Health Professionals about the additions or deletions that can be incorporated. It can be observed that the experts have not only given suggestions about the content of the PSW interventions programme but also regarding the methodology and techniques that can be used to deliver the content for a session.

The following is the explanation of overall comments of some of the experts regarding the programme

- ❖ "Very comprehensive PSW programme that incorporates a variety of teaching techniques as well as many examples".
- ❖ "Indeed, this intervention may help caregivers to reduce their high EE"
- ❖ "The intervention package seems to be a very comprehensive one and goes well with the objectives of the study. Most of the methodologies employed here are appropriate to the topics used" and "Nice efforts.... best wishes"

Modification in Psychiatric Social Work interventions programme: The comments given by the experts were reviewed in detail for modifying the PSW interventions programme and incorporating small changes. Some of the major changes that were made are as follows:

- The programme was extended to 10 sessions as some of the experts felt that the introduction and conclusion can be considered as separate sessions. The 1st session focussed predominantly on introduction, developing rapport and completing the pre-assessment. A session was added after the 4th session summarizing the sessions 2 to 4 on psycho-education through a video presentation. The 5th session was provided making the summary of session 2 to 4 on psycho education through video presentation. The 10th session was added which was a recap on all the session and conclusion.
- For 7th session, a video clipping was introduced on communication training about the do's and don'ts for the caregivers with high Expressed Emotion (EE) communication, as experts felt that video would be more effective than just discussion.

- To ensure that all the caregivers participate understand and implement the skills and strategies discussed in the sessions in a better way, irrespective of their language, handouts of each session containing a take home message were prepared both in Kannada and English languages.
- In the 4th session information related to over involvement (high EE) was included. This session focused on understanding the nature of guilt experienced by the caregivers, that family cannot cause illness was educated and concentrated. E.g. A mother believes that because she tried to abort her son with a knitting needle, her son has developed this illness. Hence justifies the behaviour of her son beating her now because of his illness / caregiver will be asked to carry out enjoyable activities outside the home which involve brief trial separations. E.g. visiting temple or shopping, by leaving the ill individual at home / by encouraging the ill individual carrying out a small task in the caregivers' absence e.g. having food, taking bath etc. will help them feel competent.
- Appropriate Social Group Work principles were used in the process of intervention as one of the experts felt that same should come in methodology such as, principle of specific objectives, guided group interaction, democratic group self-determination, evaluation. Etc.
- Session no 6 was on ending the conversation appropriately. Concluding the conversation with proper ending, as one of the experts felt that it was ended abruptly. This was modified appropriately as follows, "With mutual understanding the caregiver would go to the doctor and discuss about her son's problem and get suggestion to bring the ill individual for follow up. The ill individual would agree to meet the doctor".

Consensual validation: Two rounds of recapitulation were done among the MHPs for obtaining consensual validation of the PSW interventions programme. The changes to the programme were made based on comments given by the MHPs. The modified changes were presented again to these same experts for their additional inputs on the revised intervention package. The pilot study was done on 10 caregivers of persons with schizophrenia and result shows that the

standardized psychiatric social work intervention programme was found to be effective among the caregivers of persons with schizophrenia. However, there were no changes made after pilot study in the intervention programme

DISCUSSION

The care givers dealing with a relative suffering from schizophrenia face various and extensive challenges.^[16,30] Most of the interventions offered to caregivers of people with schizophrenia have been developed in western countries. These interventions are designed to help them deal with the expressed emotion and to enhance their knowledge about schizophrenia^(18, 20, 29, 31). This study has attempted to elaborate on the phases of programme development and content, face validation of the PSW intervention package.^[13,19,27,32,33]

The Psycho-Social intervention is usually given in one or two sessions without any structural programme or social work method, whereas the Psychiatric Social Work intervention will be provided through professional social work methods, principles and techniques. It is also a ten-session structural intervention package which will exclusively focus on addressing and handling expressed emotion.

The psycho-social programme combined specific programs like support group meetings and psychoeducation,^[16,20,26] instead PSW programme exclusively focuses on skill development. The PSW program was inspired by the need based multi skills interventions that was developed by Jagannathan et al. to help caregivers cope with the burden of care giving and found the intervention to be useful.^[10] Thus, this PSW intervention program has attempted to incorporate varied approaches to deal with different aspects of high expressed emotion of the caregivers.

Majority of the validators commented that, the PSW intervention package would overall achieve its objectives in helping family to reduce high EE and enhance care giver's knowledge on schizophrenia. A critique of this programme is that it requires a lot of time for caregivers to assimilate the skills given in all sessions and implement it in their daily life. The level of education of the caregiver may

determine the effectiveness of the intervention., this can become one of the drawbacks of this intervention. This problem can be solved by making a homogenous sample of caregivers who are matched with respect to their level of education. Another disadvantage would be that the above programme is too lengthy and is time consuming to empower the family members to acquire the capability of implementing in day-to-day practice. However, most of the mental health professionals would argue that a ten day's training programme is required to enable the caregivers to implement their skills.

As per the available literature, it was found that there were no exclusive packages for psycho-social intervention on expressed emotion among the care givers of persons with schizophrenia in India. Hence acknowledging and incorporating the significant cultural differences between the Western countries and India in the development of a culturally suitable intervention package for caregivers' becomes very essential.^[11, 15, 34] The strong community, family systems and social support available in India helps the ill individual to rehabilitate early into the community.^[35, 36] Hence ethnically appropriate models in the Indian background needs mental health professionals to include the family as significant partners in the treatment course to achieve speedy recovery of individuals of with schizophrenia.^[10] The study further highlighted the requirement for developing a culturally relevant models according the needs and available resources of that particular culture.

The methods of Social Work were used in PSW intervention for the families of schizophrenia.^[27, 28] By giving this additional intervention through different training techniques such as role plays, video clippings, participatory method, take home messages, group discussions, pictures and demonstrations, the intervention will be more effective for reducing high expressed emotion and for gaining better knowledge on the illness.^[10, 17, 18]

CONCLUSION

The present study was intended to dissect the high EE among caregivers of persons with schizophrenia, and develop a customized therapeutic intervention module which may help in improving the partnership of family

members. The development and validation of this PSW intervention package was done in 4 phases, and is one of the first study in India to focus exclusively on high EE. The development of this model used methods, principles, skills, and techniques of professional social work, and also made use of brainstorming, case vignettes, role plays, and video clippings. It has been analysed at various levels by experts, and the face and content validity of the same had been found to be efficient and effective. The model may be used in future researches to further test and explore the efficacy and generalizability of this package by incorporating a bigger sample, so that this program can be included as part of psycho-social intervention to help caregivers of persons with schizophrenia.

Conflicting Interests: None

Financial Support: None

Ethical Clearances: Ethical clearance taken from the Institutional Ethics committee No. NIMH/DO/SUB-COMMITTEE/2012/SL.NO.

REFERENCES

1. Barrowclough C, Hooley JM. Attributions and expressed emotion: a review. *Clin Psychol Rev.* 2003;23(6):849-80.
2. Cassidy E, Hill S, O'Callaghan E. Efficacy of a psychoeducational intervention in improving relatives' knowledge about schizophrenia and reducing rehospitalisation. *Eur Psychiatry.* 2001;16(8):446-50.
3. Tseng WS, Asai M, Liu JQ, Wibulswasdi P, Suryani LK, Wen JK, et al. Multi-cultural study of minor psychiatric disorders in Asia: symptom manifestations. *Int J Soc Psychiatry.* 1990;36(4):252-64.
4. Patterson P, Birchwood M, Cochrane R. Expressed emotion as an adaptation to loss: prospective study in first-episode psychosis. *Br J Psychiatry Suppl.* 2005;48:s59-64.
5. Breitborde NJ, Lopez SR, Chang C, Kopelowicz A, Zarate R. Emotional over-involvement can be deleterious for caregivers' health: Mexican Americans caring for a relative with schizophrenia. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(9):716-23.
6. Raune D, Kuipers E, Bebbington PE. Expressed emotion at first-episode psychosis: investigating a carer appraisal model. *Br J Psychiatry.* 2004;184:321-6.
7. Hooley JM, Parker HA. Measuring expressed emotion: an evaluation of the shortcuts. *J Fam Psychol.* 2006;20(3):386-96.
8. Leff, Kuipers, Berkowitz, Eberlein-Vries, Sturgeon. A controlled trial of social intervention in the families of schizophrenic patients. *Br J Psychiatry.* 1982;141:121-34.
9. Li Z, Arthur D. Family education for people with schizophrenia in Beijing, China: randomised controlled trial. *Br J Psychiatry.* 2005;187:339-45.
10. Jagannathan A, Hamza A, Thirthalli J, Nagendra HR, Gangadhar BN. Development and feasibility of need-based psychosocial training programme for family caregivers of in-patients with schizophrenia in India. *Asian J Psychiatr.* 2011;4(2):113-8.
11. Bhugra D, McKenzie K. Expressed emotion across cultures. *Advances in Psychiatric treatment.* 2003(9):342-8
12. Manjula. Relationship of expressed emotion with symptoms in schizophrenia. [M.SC, Dissertation] Rajiv Gandhi National University of Health Sciences, Bangaluru.
13. Devaramane V, Pai NB, Vella SL. The effect of a brief family intervention on primary carer's functioning and their schizophrenic relatives levels of psychopathology in India. *Asian J Psychiatr.* 2011;4(3):183-7.
14. Nirmala BP, Vranda MN, Reddy S. Expressed emotion and caregiver burden in patients with schizophrenia. *Indian J Psychol Med.* 2011;33(2):119-22.
15. Amaresha AC, Venkatasubramanian G. Expressed emotion in schizophrenia: an overview. *Indian J Psychol Med.* 2012;34(1):12-20.
16. Chen LF, Liu J, Zhang J, Lu XQ. Non-pharmacological interventions for caregivers of patients with schizophrenia: A meta-analysis. *Psychiatry Res.* 2016;235:123-7.
17. Crawford MJ, Killaspy H, Barnes TR, Barrett B, Byford S, Clayton K, et al. Group art therapy as an adjunctive treatment for people with schizophrenia: a

- randomised controlled trial. *BMJ* 2012;344:e846
18. Gonzalez-Blanch C, Martin-Munoz V, Pardo-Garcia G, Martinez-Garcia O, Alvarez-Jimenez M, Rodriguez-Sanchez JM, et al. Effects of family psychoeducation on expressed emotion and burden of care in first-episode psychosis: a prospective observational study. *Span J Psychol.* 2010;13(1):389-95.
 19. Mathew Varghese, Shah A, Kumar U, Murali, Isabel. Family intervention and support in schizophrenia, Manual on Family Intervention For The Mental Health Professional. Bangalore: NIMHANS; 2002.
 20. Shimodera S, Inoue S, Mino Y, Tanaka S, Kii M, Motoki Y. Expressed emotion and psychoeducational intervention for relatives of patients with schizophrenia: a randomized controlled study in Japan. *Psychiatry Res.* 2000;96(2):141-8.
 21. Moxon AM. Effectiveness of a brief psycho educational intervention for people with Schizophrenia and their families. Palmerston north: Massey university; 2009.
 22. Xia.J, Merinder.LB, Belgamwar.MR. Psycho education for schizophrenia - Review. The Cochrane Collaboration, Wiley. 2013.
 23. McFarlane WR, Dixon L, Lukens E, Lucksted A. Family psychoeducation and schizophrenia: a review of the literature. *J Marital Fam Ther.* 2003;29(2):223-45.
 24. Ponnuchamy L, Mathew BK, Mathew S, Udayakumar GS, Kalyanasundaram S, Ramprasad D. Family support group in psychosocial rehabilitation. *Indian J Psychiatry.* 2005;47(3):160-3.
 25. Vaughan K, Doyle M, McConaghy N, Blaszczyński A, Fox A, Tarrier N. The Sydney intervention trial: a controlled trial of relatives' counselling to reduce schizophrenic relapse. *Soc Psychiatry Psychiatr Epidemiol.* 1992;27(1):16-21.
 26. Worakul P, Thavichachart N, Lueboonthavatchai P. Effects of psycho-educational program on knowledge and attitude upon schizophrenia of schizophrenic patients' caregivers. *J Med Assoc Thai.* 2007;90(6):1199-204.
 27. Sadath A, Muralidhar, Varambally S. Impact of social group work intervention in caregivers of persons with first episode psychosis [Ph.D thesis]. Bangalore: NIMHANS; 2014.
 28. Trecker HB. Social group work: principles and practices. Chicago: Follett publishing company; 1972. 350
 29. Yalom. The theory and practice of group psychotherapy 4th ed. New York: Basic Books; 1995.
 30. Aggarwal M, Avasthi A, Kumar S, Grover S. Experience of caregiving in schizophrenia: a study from India. *Int J Soc Psychiatry.* 2011;57(3):224-36.
 31. Wuerker. Communication patterns and expressed emotion in families of persons with mental disorders. *Schizophr Bull.* 1996;22(4):671-90.
 32. Chakrabarti S. Family interventions in schizophrenia: Issues of relevance for Asian countries. *World J Psychiatry.* 2011;1(1):4-7.
 33. Srinivasan TN, Thara R. Beliefs about causation of schizophrenia: do Indian families believe in supernatural causes? *Soc Psychiatry Psychiatr Epidemiol.* 2001;36(3):134-40.
 34. Wig NN, Menon DK, Bedi H, Ghosh A, Kuipers L, Leff J, et al. Expressed emotion and schizophrenia in north India. I. Cross-cultural transfer of ratings of relatives' expressed emotion. *Br J Psychiatry.* 1987;151:156-60.
 35. Gopinath PS, Rao K. Rehabilitation in psychiatry: an overview. *Indian J Psychiatry.* 1994;36(2):49-60.
 36. Thara R, Eaton WW. Outcome of schizophrenia: the Madras longitudinal study. *Aust N Z J Psychiatry.* 1996;30(4):516-22.
- Submitted on:** 03-11-2020
Revised on: 05-02-2021
Accepted on: 05-03-2021
Published on: 07-07-2021