10.12740/APP/115090

# Effect of group counseling on the attitude among the family caregivers of patients with mental disorders

Efat Sadeghian, Farnaz Pourmoradi, Farshid Shamsaei, Lily Tapak

## Summary

**Background and Aim:** Incorrect beliefs and negative thinking of society and in the family affect psychiatric patients over the process of treatment, care and recovery. The aim of this study was to investigate the effect of group counseling on the attitude of family caregivers in patients with mental disorders.

**Materials and Methods**: This quasi experimental study was conducted in psychiatric wards of Farshchian Hospital in Hamadan in Iran in 2018. 49 family caregivers were randomly selected to the study. Data were collected using a researcher-made mental attitude questionnaire. At first, family caregivers' attitudes were evaluated; then, they held 4 groups and for each group done 4 sessions of 60 minutes of group counseling. The questionnaire was completed again by the family caregivers immediately after the intervention. Data analysis was done using SPSS software version 16 using descriptive and inferential statistics.

**Results:** The mean of the attitude of the family caregivers before the group counseling was  $(12.59 \pm 13.49)$ . The mean of the attitude score of family caregivers after group counseling was  $(24.45 \pm 8.32)$ . Paired t-test showed that the attitude score of caregivers increased significantly after group counseling (p <0.001).

**Discussion and Conclusion**: The results of the study indicate that group counseling improves the attitude of family caregivers towards mental illness. Therefore, it is recommended that psychiatric nurses use this method to educate families of mental patients.

mounseling, family caregivers, mental disorders, attitude

## INTRODUCTION

The prevalence of mental disorders has increased in recent years, especially in develop-

Correspondence addresses: shamsaei68@yahoo.com.

ing countries [1]. According report of the World Health Organization (WHO) the burden of mental disorders continues to grow with significant impacts on health and major social, human rights and economic consequences in all countries of the world [2]. The prevalence of mental disorders in Iran was reported at 23.44% in 2015 [1]. More than 60% of patients return to their families after discharged from psychiatric centers. Therefore, families are the first and the most important source for the psychiatric care of patients [3]. One in four families has at least one

Efat Sadeghian<sup>1,</sup> Farnaz Pourmoradi<sup>2</sup>, Farshid Shamsaei<sup>3</sup> Lily Tapak<sup>4</sup>: <sup>1</sup>Chronic Diseases (Home Care) Research Centre, Hamadan University of Medical Sciences, Hamadan, Iran; <sup>2</sup>Department of Nursing, Hamadan University of Medical Sciences, Hamadan, Iran; <sup>3</sup>Behavioral Disorders and Substance Abuse Research Center, Hamadan University of Medical sciences, Hamadan, Iran; <sup>4</sup>Biostatistics Department, Hamadan University of Medical Sciences, Hamadan, Iran

member with mental illness and family members often become their primary caregivers [4].

When a family member suffers from a mental disorder, all members are affected by the disease and its consequences. As a result, attention to the families of patients with a mental disorder has been considered as the most important principles in the treatment of patients with mental disorders [5, 6]. Mattoo et al.mention that a family member, who was substance dependence, can affect almost all the aspects of family life, put a heavy burden on caregivers, and create many challenges [7].

Family caregivers, usually prepare physical, emotional, and financial support to their member with chronic illness [4]. Therefore, it is of utmost importance to identify caregivers' needs, provide constant care both for the caregivers and the patients, monitor their mental statue, and offer available services to them [8, 9]. Considering mental health promotion, one of the major aims of the World Health Organization is to reduce the length of stays in hospitals and expansion of social services. In this regard, a great emphasis has been placed on the role of the family in nursing the mentally disordered members as well as constant counseling sessions [10]. In some societies, greater efforts have been made to attract the participation of families and improvement of their level of health and well-being. With this background in mind, it seems that issues related to the attitude of family caregivers in the prevention, treatment, and rehabilitation of mental disorders are ignored in our society [11-13].

Attitudes are shaped within families and societies; however, they can be shaped in a way that empowers the patients to cope with their problems. A realistic attitude toward mental illness can play a significant role for patients with such disorders and may anticipate the success of their rehabilitation and re-entry to their communities [14]. The negative attitude and stigma towards patients with mental disorders originate from the idea that patients with mental disorders are dangerous and have violent and unpredictable behaviors [15]. The obtained results of a study conducted by Rüschet al. showed that knowledge is an effective factor in the caretaking of people with psychological disorders, and can have positive effects on the treatment procedures of such individuals. Realistic attitude toward mental disorders, profound knowledge, and availability of treatment facilities can promote mental health in caregivers [16]. While one of barriers to family caregivers' Coping in Iran is lack of patient and family education [4].

Psychological counseling and education can change attitudes and improve the understanding of families in relation to patients with mental disorders. There are various types of psychological training, including knowledge and information model, group therapy of families, behavioral management, and protective model. In order to alter the attitude of people toward a specific phenomenon, it is essential to provide sufficient information [17]. In this regard, group consultation is an effective method to convey knowledge [11]. Since this method addresses the individuals' social interactions, it empowers members to gain a better insight about their behavioral patterns in the community, learn new experiences, benefit from social protection, and become more successful in their communication. All these issues enhance confidence and self-regulation in individuals. In the counseling centers and/or community, psychiatric nurses can provide direct care and counseling services for people who suffer from physical and mental disabilities [18, 19].

Based on the role of the family in the prevention, treatment, and rehabilitation of patients with mental disorders, participation of the family is considered as the main principle in the treatment program of patients with mental disorders [20, 21]. According to the essential role of family caregivers, their negative attitudes may hinder the procedure of treatment and recovery of patients with mental disorders, whereas the positive attitude may fulfill the patients' needs. Since there are few investigations in this field indicating the lack of attention to family caregivers, the current study aimed to investigate the effect of group counseling on the attitude of family caregivers of patients with mental disorders.

## 2. METHODS

The present study was a semi-experimental study with pre-test and post-test design. The study was conducted on the families of hospitalized patients in psychiatric wards of Farsh-

Archives of Psychiatry and Psychotherapy, 2020; 3: 61-68

chian Hospital, Hamadan, Iran, during 2018. The sample size was determined based on a previous similar study [22].

Given a type 1 error of 5%, a hypothesis test power of 90%, a standard deviation of 2.69, and the fact that difference between the two population are 2, n can be calculated as follows.

Let's suppose that the expect shortfall is 10. Then the obtained n will be equal to 49.

The inclusion criteria for the patients included the definitive diagnosis of mental disorder by a psychiatrist, no mental retardation, and at least 6 months of hospitalization in a psychiatric center. The inclusion criteria for the family caregivers were: 18 years of age or over, Farsi language, over 6 months of care experience of patients with mental disorder, no recognized vision, hearing, and cognitive problems and mental diseases, no experience of participation in training sessions. On the other hand, the exclusion criteria were the absences of caregivers in more than one counseling session and reluctance to continue participating in the study.

The research tools were two researcher-made questionnaires, including: Patient and caregiver's demographic questionnaire (including age, gender, marital status, job status, education of caregiver, urban or rural status, severity of disorder, and time of caretaking) and the attitude toward a patient with mental disorder questionnaire. The second questionnaire, consisting of 43 questions, was designed based on the available questionnaires and existing literature. The questions are scored based on a 3-point Likert scale, ranging from agree (+1) to disagree (-1). Accordingly, the minimum and maximum scores were – 43 and 43, respectively.

After scoring the completed questionnaires, the obtained scores were divided into three levels and three aspects of attitude (positive, neutral, and negative). The attitude questionnaire was provided to 10 faculty members of Hamadan Medical University and several psychiatrists to evaluate the validity of the questionnaire. The obtained comments were applied and the validity of the questionnaire was confirmed. In order to assess the reliability of the questionnaire, 20 subjects were asked to complete the questionnaires. The obtained Cronbach's alpha coefficient was 0.884, indicating a desirable level of reliability.

A total number of 49 hospitalized patients were randomly selected according to the random number table. In doing so, a list of all eligible caregivers of patients with mental disorders was prepared and each individual was assigned with a number. In the next step, a number was selected from a random number table and adapted to the prepared list, which led to the selection of 49 subjects. In order to initiate the group counseling, the researcher first introduced himself and his professional specialties to gain the caregivers' trusts. Both the demographic information and attitude towards patients with mental disorder questionnaires were completed under the supervision of the researcher. Caregivers were divided into groups of 8-10 people. Group counseling consisted of a total of 4 sessions for each group, which were held once a week (each lasted 1 hour) at the amphitheater hall of the Farshchian Psychiatric Center in a lecture, question and answer, group discussion formats by the researcher and under the supervision of the supervisors and advisors. Prior to conducting group counseling, a package of education (booklet and pamphlet) with the approved content by the supervisors and advisors of the current study was provided to caregivers on the basis of extensive studies and review of literature. Sessions were initiated by the explanation of objectives and continued by lecture teaching methods and active teaching methods (question and answer, group discussion, and expression of experiences). At the end of each session, the conclusion of the session was handed out to participants as a booklet, and they were required to share the contents with other family members. Furthermore, participants must be performed their assignments at home. The topics of the group counseling sessions are presented in Table 1. The questionnaire of attitude towards patients with a mental disorder was also completed by participants at the end of the training sessions.

 Table 1. Topics of counseling sessions for the caregivers of patients with mental disorders

Session 1:	Explaining the aims of session, providing information about the time and number
Meet the group members and explain the objectives, rules, and general information about mental disorder	of counseling sessions, making an appropriate communication with caregivers, explaining the educational aims, defining the mental disorders, explaining how to build a healthy relationship with patients
Session 2: Mental disorder treatment and caregivers challenges	Explaining the aims of session, emphasizing on the treatment procedure, nursing the patients with mental disorders, clarifying treatment procedures and treatment period, introducing the challenges of caregivers during the treatment period, answering the questions
Session 3: Communicate with mentally disordered patients	Explaining the aims of session, emphasizing on the patients' family relationship and social relationship, thoughts about patients with mental disorders, conducting a discussion about the subject of session and the shared experience of caregivers, answering the questions
Session 4: Encounter challenges	Explaining the aims of session, emphasizing on the experiences and daily challenges of caregivers, solutions to the challenges, answering the questions

The study was approved by the Ethics Committee of Hamadan University of Medical sciences (IR.UMSHA.REC.1394.528). Informed consents were obtained from research participants. Furthermore, they were assured of their anonymity, privacy, and voluntary engagement before signing a written informed consent form. Data were analyzed using SPSS 16 packet program. The descriptive analysis included absolute and relative frequency distribution, mean, and standard deviation. Moreover, comparison of the mean scores, paired t-test, were utilized for the analytical statistics. The significance was set at  $\alpha = 0.05$ .

# 3. RESULTS

The demographic characteristics of the caregivers showed that most of the caregivers were

male (65.31 %), married (75.51 %), with the educational level of high school or a lower-level degree (61.22 %), unemployed (40.81 %), and relative to patient was siblings (40.81 %). The values related to the mean age of caregivers, mean duration of take care, and mean duration of take care time per week were 38.81±12.7 years, 48.12±6191 months, and45.50±58.95 h respectively (Table 2).

The demographic characteristics of patients revealed that most of the patients were male (63.27 %), with the educational level of high school or a lower-level degree(67.35 %), married (55.10 %), unemployed (69.39 %), more than 36 month of mental disorder (79.50 %). The mean age of the patients was 38.93±14.32 years (Table 2).

Variable		caregivers	patients
Gender		n (%)	n (%)
	Man	32(65.31)	31(63.27)
	Female	17(34.69)	18(36.73)
Education level	Middle school	30(61.22)	33 (67.35)
	High school and university	19(38.78)	16(32.65)
Marital status	Married	37(75.51)	27(55.1)
	Single	12(24.48)	18 (36.73)
	Divorced and Widowed		4(8.16)
Employment status	Unemployed	20(24.49)	34 (69.39)
	Business	17(79.59)	9(18.37)
	Employed and Retired	12(20.41)	7(14.29)

Table 2. Demographic and cilinical charactrise of family caregivers and patients

Relative to patient	Spouses	11(22.45)	
	Parents	12(24.49)	
	Children	6(12/24)	
	Siblings	20(40.81)	
Age(mean±SD)(years)		(38/81±12/28)	38/93± 14/32
Length of patient s care(mean±SD)(month)		(48/12±61/91)	
Time of patient s care in every week(mean±SD)(hours)		(45/50±58/95(	
Duration of the disorder (month)	1-12		4 (9.1)
	13-36		5 (11.4)
	36<		35(79.5)

The frequency distribution attitudes of the caregivers indicated that the positive attitude of caregivers toward mentally disordered patients before group counseling was 75.5 %, which increased to 98 % after the group counseling. The means and standard deviations of caretakers' attitude toward mentally disordered patients before and after the intervention were 12.59 $\pm$ 13.49 and 24.45 $\pm$ 8.32, respectively, which revealed a significant difference (P<0.001, t=-8.94; Table 3).

 
 Table 3. Comparison of mean scores of attitude before and after intervention

Attitude	Before n=49(%)	After n=49(%)	T test
Negative	10(20.4)	1(2)	
Neutral	2(4.1)	0(0)	t=-8.94
Positive	37(75.5)	48(98)	p<0.001
Mean (SD)	12.59(13.49)	24.45 (8.32)	

# 4. DISCUSSION

The present study aimed to investigate the effects of group counseling on the attitude of the caregivers of patients with mental disorders. Based on the obtained results of the current study, 20% of the caregivers had a negative attitude toward psychological disorders, which was reduced to 2% after the attendance to group counseling. The score of caregivers' attitude increased significantly after group counseling (P<0.05). In other words, the group counseling and provided education to caregivers improved the caregivers' attitude, indicating the positive effect of the performed intervention on

the caregivers. In this regard, Bayrami believed that the negative attitude of the caregivers of patients with schizophrenia led to the belief that they were unable to take care of their patients and felt frustrated [23].

A study conducted by Iseselo et al. investigated the attitudes and problems related to the caregivers of patients with mental disorders. The obtained results revealed that social problems and isolation, fear of judging, discrimination, and unpleasant behaviors were the main factors affecting the attitude of patients' families [24].Shibre et al. believed that the lack of caregivers' information led to the frequent recurrence of disorder, increased care burden, and finally treatment drop-out [25]. The results of a study by Kim et al. demonstrated that the spiritual counseling and improvement of family relationship as the intervention increased the family welfare and enhanced the methods of coping with patients suffering from Alzheimer's disease [26].Olazarn et al. declared that psychosocial interventions may improve the quality of life for patients with dementia and their caregivers despite their high cost and effectiveness [27]. Although there were some differences, including the type of intervention, method of study, and the cultural difference, between the current study and the above-mentioned studies, the findings were similar.

The results of a study entitled "effect of psychological training on stigma in home-caregivers of patients with schizophrenia" by vagheei et al. demonstrated no significant difference between the internal stigma of the control and experimental groups during the pre-test period, whereas the difference was statistically significant after the intervention [28]. In spite of differences between the current study and the mentioned one [methods, experimental groups, educational content, intervention duration), the obtained results were similar.

Eisner et al. evaluated the effects of psychological education on the family of patients with bipolar disorder on the basis of the admission approach. The participants (28 families) received different psychological training sessions based on their acceptance in one or two sessions. The expressed emotional components of the families were assessed a week after the training sessions. Although the family information and attitudes toward bipolar disorder significantly altered, there were no significant changes in the levels of anger, blame, and degree of criticism [29]. It seems that the discrepancies in the obtained results may be related to the differences in the applied instrument, method, and sample size. In line with the current study, shamsaei et al. demonstrated that stigma-based educational interventions could reduce the level of stigma in patients with mental disorders [30]. Moreover, the effect of counseling and education on the attitudes of the caregivers of patients with different mental disorders indicated positive effects of nursing intervention on improving the caregivers' attitude. Barzajhe Atri et al. assessed the effects of educational intervention on the nursing attitude and behavior of family – caregivers of children with mental retardation. The findings showed positive effects of educational intervention on the attitude and behavior of family - caregivers [31]. Tong et al. investigations in 2008 and 2013 demonstrated that the caregivers of hemodialysis patients required to learn more knowledge about nursing patients and skills to adapt with their role, as well as sympathy, counseling with other families, and psychological support. Therefore, empathy, counseling, and shared experiences were provided for hemodialysis patients [32, 33]

According to the obtained results of the current study, it can be concluded that family – caregivers' conceptions about mental disorder may be reformed by modifying the family misconceptions and beliefs about the dangerous and untreatable nature of these patients. Moreover, group counseling can help families to understand their patients better than the past. It would be possible to make a protective network for patients and their families to decrease stresses, pressures, and isolation. The positive atmosphere of families encourages the improvement of the patients and inhibits its recurrence. Therefore, similar educational plans can reform families' attitude and caregivers, increase their protection, and have a remarkable impact on the disease procedure. Appropriate educational methods for the family caregivers of patients admitted to psychiatric centers can be effective in raising their level of knowledge. Accordingly, studies on the caregivers' attitude and effective intervention provide an appropriate opportunity for mental caregivers to mentor, educate, and model the proper behaviors of family - caregivers, which may lead to a better functionality of treatment, family, workplace, and community.

Although this study provided a profound insight, it suffered from some shortcoming, including short-term educational training courses, no follow-up, limited participants, and onegroup study design. In this regard, it is suggested to conduct a study addressing the positive effects of psychological education on family attitude toward patients with mental disorders during long-term educational plans and follow-ups. It is also recommended to perform a study on family caregivers in outpatients as well as a similar study accompanied by a control group.

## 5. CONCLUSIONS

The obtained results of the current study demonstrated that the group counseling of family caregivers modified their attitude toward patients with mental disorders. Since family plays an important role in the treatment of patients, especially after they are discharged from a hospital, group counseling by mental caretakers may improve the involvement of family, which can in turn lead to the positive effects of treatment and decrease of disease recurrence and hospitalization.

#### **Consent for publication** *Not applicable.*

#### **Conflict of interest**

The authors declare no conflict of interest, financial or otherwise.

#### Acknowledgements

This article is result from a master degree dissertation in nursing which approved by deputy of the research of Hamadan University of Medical Sciences(9607254643).

Archives of Psychiatry and Psychotherapy, 2020; 3: 61-68

Hereby, we extend our gratitude to the respected Research deputy and members of the Faculty of Nursing of Hamadan University of Medical Sciences. We also appreciate the staff of Farshchian Hospital and the patients participating in this research.

# REFERENCES

- Noorbala AA, Faghihzadeh S, Kamali K, Bagheri Yazdi SA, Hajebi A, Mousavi MT, et al. Mental Health Survey of the Iranian Adult Population in 2015. Arch Iran Med. 2017; 20(3): 128-134. doi: 0172003/AIM.003.
- Organization WH. Mental disorders: World Health Organization; 2018 cited 2019.. Available from: https://www.who. int/news-room/fact-sheets/detail/mental-disorders.
- Nejad ZK, Aghdam AM, Hassankhani H, Sanaat ZJIRCMJ. The effects of a patient-caregiver education and follow-up program on the breast cancer caregiver strain index. Iran Red Cresent Med. 2016; 18(3): e21627.
- Ebrahimi H, Seyedfatemi N, Namdar Areshtanab H, Ranjbar F, Thornicroft G, Whitehead B, et al. Barriers to Family Caregivers' Coping With Patients With Severe Mental Illness in Iran. Qual Health Res. 2018; 28(6): 987-1001. doi: 10.1177/1049732318758644
- Abayomi O, Akinhanmi AO, Adelufosi AOJJoc-cg. Psychiatric morbidity and subjective burden among carers of outpatients of a psychogeriatric clinic in Southwestern Nigeria. J Cross Cult Gerontol. 2015; 30(4): 439-50.
- Zablotsky B, Bradshaw CP, Stuart EAJJoa, disorders d. The association between mental health, stress, and coping supports in mothers of children with autism spectrum disorders. J Autism Dev Disord. 2013; 43(6): 1380-93. doi: 10.1007/s10803-012-1693-7.
- Mattoo SK, Nebhinani N, Kumar BA, Basu D, Kulhara PJTIjomr. Family burden with substance dependence: a study from India. Indian J Med Res. 2013;137(4):704-11.
- Chadda RK. Caring for the family caregivers of persons with mental illness. Indian J Psychiatry. 2014; 56(3): 221– 227. doi:10.4103/0019-5545.140616
- Oshodi Y, Adeyemi J, Aina O, Suleiman T, Erinfolami A, Umeh CJAjop. Burden and psychological effects: caregiver experiences in a psychiatric outpatient unit in Lagos, Nigeria. fr J Psychiatry (Johannesbg). 2012; 15(2):99-105. doi: http://dx.doi.org/10.4314/ajpsy.v15i2.13.
- Sadeghian E, Afshar Mogadam F. Determination of factors affecting the medication compliance in patients admitted to psychiatric wards. The Journal Of Qazvin University Of Medical Science. 2005; 9(3): 26-33.
- Visser A, Prins JB, Jansen L, Radema SA, Schlooz MS, van Dalen T, et al. Group medical consultations (GMCs) and tablet-based online support group sessions in the follow-up of breast cancer: A multicenter randomized controlled trial. Breast. 2018; 181-188. doi: 10.1016/j. breast.2018.05.012
- Archives of Psychiatry and Psychotherapy, 2020; 3: 61-68

- Labrum T, Solomon PJH, work s. Safety fears held by caregivers about relatives with psychiatric disorders. Health & Social Work.2018;43(3):165-74. https://doi.org/10.1093/ hsw/hly013
- Inogbo CF, Olotu SO, James BO, Nna EOJPAMJ. Burden of care amongst caregivers who are first degree relatives of patients with schizophrenia. The Pan African Medical Journal. 2017; 28: 284. doi:10.11604/ pamj.2017.28.284.11574
- Evagelou H, Adali E, Koukia E, Katostaras F, Priami M, Toulia GJINWJ. The influence of education of nursing students on the formation of attitudes toward psychiatric illness. ICUS and Nursing Web Journal. 2005; 23: 1-8.
- BECERİKLİ S, BOZKURT NJSS, Perspective HAG. Media portrayals of people with mental disability: A resersch on journalism ethics in TURKEY.9.
- Rüsch N, Evans-Lacko SE, Henderson C, Flach C, Thornicroft GJPS. Knowledge and attitudes as predictors of intentions to seek help for and disclose a mental illness. Psychiatr Serv. 2011; 62(6): 675-8.
- Bhattacharjee D, Rai AK, Singh NK, Kumar P, Munda SK, Das BJDPJ. Psychoeducation: A measure to strengthen psychiatric treatment. Delhi Psychiatry Journal. 2011; 14(1): 33-9.
- Sin J, Henderson C, Spain D, Cornelius V, Chen T, Gillard S. eHealth interventions for family carers of people with long term illness: A promising approach? Clin Psychol Rev. 2018; 60: 109-125. doi: 10.1016/j.cpr.2018.01.008.
- Berry L, Dieterle B. Group consultations: Developing dedicated, technological spaces for collaborative writing and learning. Computers and Composition. 2016; 41: 18-31. https://doi.org/10.1016/j.compcom.2016.04.004
- Švab V. Stigma in mental disorders: What is psychiatry able to do? Psychiatr Danub. 2018; 30(Suppl 4): 172-174.
- Chan KKS, Lam CB. The impact of familial expressed emotion on clinical and personal recovery among patients with psychiatric disorders: The mediating roles of self-stigma content and process. Am J Orthopsychiatry. 2018; 88(6): 626-635. doi: 10.1037/ort0000327
- Rahmani F, Ranjbar F, Ebrahimi H, Hosseinzadeh M. T The Effects of Group Psychoeducational Programme on Attitude toward Mental Illness in Families of Patients with Schizophrenia, 2014. Journal of Caring Sciences. 2015; 4(3):243-251. doi:10.15171/jcs.2015.025.
- Chadda RK, Deb KS. Indian family systems, collectivistic society and psychotherapy. Indian Journal Of Psychiatry. 2013; 55(Suppl 2): S299. DOI: 10.4103/0019-5545.105555
- Iseselo MK, Kajula L, Yahya-Malima KI. The psychosocial problems of families caring for relatives with mental illnesses and their coping strategies: a qualitative urban based study in Dar es Salaam, Tanzania. BMC Psychiatry. 2016; 16(1): 146. DOI 10.1186/s12888-016-0857-y

- Shibre T, Medhin G, Teferra S, Wakwoya A, Berhanu E, Abdulahi A, et al. Predictors of carer-burden in schizophrenia: a five-year follow-up study in Butajira, Ethiopia. Ethiopian Medical Journal. 2012; 50(2): 125-33.
- Kim SS, Reed PG, Hayward RD, Kang Y, Koenig HG. Spirituality and psychological well<sup>®</sup>being: Testing a theory of family interdependence among family caregivers and their elders. Res Nurs Health. 2011; 34(2):103-15. doi: 10.1002/ nur.20425.
- Olazarán J, Reisberg B, Clare L, Cruz I, Peña-Casanova J, Del Ser T, et al. Nonpharmacological therapies in Alzheimer's disease: a systematic review of efficacy. Dement Geriatr Cogn Disord. 2010; 30(2): 161-78. doi: 10.1159/000316119.
- Vaghee S, Salarhaji A, Asgharipour N, Chamanzari H. Effects of psychoeducation on stigma in family caregivers of patients with schizophrenia: A clinical trial.Evidence Based Care Journal. 2015; 5(3): 63-76. 10.22038/ EBCJ.2015.5159
- 29. Eisner LR, Johnson SL. An acceptance-based psychoeducation intervention to reduce expressed emotion in rela-

tives of bipolar patients. Behav Ther. 2008; 39(4): 375–385. doi:10.1016/j.beth.2007.11.001

- Shamsaei F, Nazari F, Sadeghian E. The effect of training interventions of stigma associated with mental illness on family caregivers: a quasi-experimental study. Annals of General Psychiatry 2018; 17: 48. https://doi.org/10.1186/ s12991-018-0218-y
- Barzajhe Atri Sh, Abdollahi H, Arshadi Bostanabad M, Asghari Jafarabadi M. The effect of educational intervention on the attitudes and behaviors of family caregivers caring for children with intellectual disability.Journal of Nursing Education. 2015; 3(4): 1-10.
- Tong A, Sainsbury P, Craig JC. Support interventions for caregivers of people with chronic kidney disease: a systematic review. Nephrol Dial Transplant. 2008; 23(12): 3960-5. doi: 10.1093/ndt/gfn415
- Tong A, Palmer S, Manns B, Craig JC, Ruospo M, Gargano L, et al. The beliefs and expectations of patients and caregivers about home haemodialysis: an interview study. BMJ Open. 2013 ; 24: 3(1). pii: e002148. doi: 10.1136/bmjopen-2012-002148.

68