

The Effect of Our Own Voice-Family on Stigma in Schizophrenia Patients' Families Hospitalized in Ibn-Sina Psychiatric Hospital of Mashhad

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ABSTRACT

Introduction: Stigma is the most challenging psychiatric pressure for the patients' families. Hence, according to its negative consequences on the psychological health of the family and the important role of the family in psychiatric patients' constant care, it is necessary to reduce Stigma.

objective: Determine the effect of In Our Own Voice-Family on Stigma in schizophrenia patients' families hospitalized in Ibn-Sina psychiatric hospital of Mashhad.

Method: in this clinical trial, 60 persons of the schizophrenia patients' families, hospitalized in Ibn-Sina psychiatric hospital were studied in two groups. By random selection, 30 individuals were involved in each of these groups, named as the control and intervention groups. The intervention group had two 4-hour sessions In Our Own Voice-Family, designed by the National Alliance on Mental Illness. On the other hand, there were no interventions in the control group. Data were collected by means of adjusted Stigma Ritscher et al.'s (2003) questionnaire before and one month after the intervention. The data analysis was done by SPSS 11.5 and independent and Paired T-tests.

Results: The Stigma's average score has decreased in the intervention group ($p < 0.001$). In addition, there was a meaningful decrement in the average Stigma score in various subscales of the alienation, stereotype endorsement, discrimination experience analysis, and the Social Withdrawal ($p < 0.05$).

Conclusion: The In Our Own Voice-Family program can reduce the Stigma in the schizophrenia patients' families.

Key words: In Our Own Voice, stigma, family, Schizophrenia.

INTRODUCTION

Schizophrenia is one of the most serious and weakening psychological problems [1], which begins before the age of 25 and continues in the lifetime. This problem's prevalence is between 0.6 to 1.9 percent in the lifetime [2], which affects various performance domains such as independent life skills, performance in social, job and education, and even the daily stuff in some cases [3]. It also imposes many direct and indirect expenses to the society because of its long-time requirement for social-mental and economical protection besides the frequent hospitalizations in hospitals [4].

From 1963, after deinstitutionalization, the major responsibility of psychological patients was transferred to the families from hospitals, while today, most of these patients are hospitalized by their families after their treatments in hospitals [5]. In addition, the world health organization estimated that there is at least one psychological patient in a quarter of whole families and women form more than 80 percent of the caregivers [6].

Although family care reduce the treatment expenses significantly, it imposes a huge burden for the families [7]. Schizophrenia has the hugest burden for the families between the psychological problems [8]. This burden is mostly related to the family members' low quality of hygiene, limitations in social and recreational activities, disorders in the normal life, and family income reduction in the European countries; however, in Asian countries, because of the close relation types and the family members' individual roles, the psychological problem in a family member causes tension and mental pressure on the whole family [5].

In addition, the families of these patients frequently face the unpredictable tension factors and strange behavior of their patient. On the other hand, the external tension factors such as Stigma, isolation, and emotional failure, such as guilt feeling, loneliness, and inconsistency in the care process [5].

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Tensions and mental pressures of the schizophrenia patients' care puts the mental health of the family caregivers in danger and reduces the quality of care in Iran and also the world [5,8].

The most challenging mental burden that psychological patients' families face is Stigma[5,9]. Stigma is a collection of attitudes, opinions, and negative thinking of the mental patients, which affects the individuals of the society and results in judgmental behaviors (fear from the mental patient, expulsion and avoidance) and discrimination [11]. Schizophrenia forms the most conditions for Stigma besides the most negative advertisements in media and hence negative public images [12].

According to Erving Goffman (1963), individuals who are related to a stigmatized individual share some of the influences of their stigma, named as "sympathetic others" [13]. Therefore, Stigma is transmitted from the mental patients to their families through relationships [14]. This public perception is called courtesy or the Stigma by association [15].

Larson et al. introduced the family Stigma as sum of the stereotypes of blame, shame and contamination, in which the public attitudes blame the family members because of their incompetent, which caused the disease to start or get it worst [16]. The experience of the relation Stigma mainly depends on the general Stigma perception of the society [17] due to the fact that the power of an adjective stigmatization gets back to the social relations; hence, the stigmatized person has the same thoughts about his/her identity as the society has for him/her frequently [18]. The emotional consequences of the family experience about the general stigma consists of the ignorance and disrespect feeling in the society and discrimination experience [14].

These consequences get worst if the family accepts the society stigma [9] and gets affected by the negative society thoughts. This situation is called the self-stigma[19], which results in the identity changes besides losing the previous identity values and stigma viewpoint self-acceptance [20].

According to Larson et al., the process of self-stigma consists of three stages: self-stereotype (consciousness of imagery stereotypes), self-prejudice (confirmation of the society stereotypes), and self-discrimination (the implementation of the stereotypes about him/her self) [16]. This process causes cognitive (lower qualification and value perception in contrast to the similar individuals), emotional (the feeling of shame and embarrassment), and behavior (isolation from the society and self-denigration) consequences. Mak and Cheung introduced this process as affiliate stigma [19]. The consequences of these three stages are self-esteem reduction, depression, guilty feeling and self-blaming, fidget and internal turmoil, life quality and well-being reduction, sleep disorders and chronic fatigue [17,19].

When the majority of the society keep their negative viewpoints on the psychiatric patients' family members, the family hides its patient's illness, delays the therapy, and ignores the services for the patient according to the society limitations [21]. Stigma is known as the most important and the biggest obstacle in the treatment search and continuation besides the rehabilitation process in many researches [22].

Since the stigma of psychological illnesses has a long history, the suggested solutions such as "public education" are not easy and fast to overcome this problem, because it is a universal phenomenon, which has a variety of examples from a country to another country and from a city to another one [23]. Therefore, the stigma reduction in the family is probably the easiest solution [24].

The culture has a direct relation to the tasks, associated with the psychiatric illness, therapy search, and its stigma due to the fact that the norms and the cultural values are different in various societies [25,26]. Papadopoulos et al. showed that the individualistic cultures (the culture of USA, Germany, Australia) have less stigmatic viewpoints of the psychiatric patients in contrast to the collectivism cultures (the culture of Asia, Africa, and Arabs) [26].

The majority of the family members' anxieties in collectivism cultures is about the reflections and effects of the psychiatric individual on the other family members' fate and social relations. In fact, honor, privilege, and family esteem preservation is one of the main motivations in behavior direction in the collectivism cultures [27].

In Iran (a collectivism cultural country), as the family members' assessment of their self, focused on the negative aspects, such as being worthless and incompetent increases and this condition becomes a self-criticism experience, the probability of a patient family member criticism and emotional problems increases [27].

The stigma is a reality, which exists even in Iran with its extended society thoughts about holy Quran besides the psychiatric mental health services [10]. Hence, according to the negative consequences of the stigma on the families' mental health and the importance of the family in hospitalization, consistency, and treatment continuation of the psychiatric patients, this phenomenon is known as a basic and crucial subject, which is related to the mental health field [24]. Nurses are one of the key members in health caregiver groups [28]. It is necessary that they percept the stigma phenomenon of the patient and his/her family members and do some actions to reduce this problem [14]. On the other hand, according to the obvious effect of the cultural conditions on stigma, they should implement the emotional methods from the cultural point of view to percept the caregivers' experience and stigma relief [29].

In recent decades, there has been a considerable increment in the self-help groups, in which the families conform their relationship to the patient without any shame. In addition, these groups increased the social protection by source facilitation and confronting strategies. They also struggle opposing the prejudice and discrimination [30]. In 1996, the In Our Own Voice program has been designed by the National Alliance Mental Illness (NAMI) association as an anti-stigma program for psychiatric patients, which includes the discussions among the mental health services consumers (psychiatric patients or their families) for more perception of the psychiatric illnesses. An anti-stigma program based on the society was implemented for the educational purposes in the administrative centers, schools and universities [31,32]. This program, which was designed based on the peer education and self-narration [31,33] includes a standard presentation for the listeners. In this program, the mental health services consumers (the patient or his/her family) use their own stories in order to interact with the listeners to decrease the stigma and fictions about the mental illness [16].

The standard format of the In Our Own Voice program is a 5-stage check list, which includes: 1- The dark days (difficult and exhausting moments of living with the psychiatric patient), 2- Acceptance (confirming the psychiatric patient and living with him/her), 3- Treatment (the implementation of the treatment interventions), 4- Adaptive strategies (the implementation of the emotional and behavioral confronting techniques with the psychiatric patient), 5- Success (hopes and dreams) [16,31]. This program is represented in three sections, which are the video, short story and group discussion excitation [34].

In fact, the In Our Own Voice program causes an increment in the knowledge, which results in a change in the viewpoint by effect expression of both of the circumferential and biological factors from the peer individuals in the In Our Own Voice-Family program and also from the recovered patients [31]. On the other hand, according to the narrative paradigm Walter Fisher, narrative stories are able to challenge and change the present viewpoints because they help the listener to achieve human experience [31,33]. In Perlick et al.'s research, the In Our Own Voice-Family caused more decrement in the emotional stigma of the schizophrenia patients' families [34]. Also, Corrigan et al. showed that the implementation of this method in 30-minute and 90-minute sessions reduced stigma in comparison with the educational method and also caused more positive thoughts of the psychiatric patients in the student [35]. However, the Pinto-foltz et al.'s research this method was not effective on stigma but it resulted in an increment in the health knowledge in psychological illnesses field [33]. Since the stigma discussion are open in the patients' families, especially the patients with schizophrenia, who occupy more than half of the psychiatric hospitals' beds, recognition and consistency is necessary for stigma. Consequently, since the stigma is related to the culture and there is neither such interventional study about the stigma in Iran and nor any specific educational program such as the In Our Own Voice programs in this field, we have decided to study the effect of family therapy on stigma in the schizophrenia patients' families, whose patients are hospitalized in Ibn-Sina hospital of Mashhad

Method:

This clinical trial study includes two groups (before test and after test). The study was conducted by the permission of the ethics community of medical university of Mashhad in winter, 2014 in Ibn-Sina psychiatric hospital on the schizophrenia patients' families, whose patients were hospitalized in this hospital. The criterions to enter this research included the criterions for the family of the patient and the criterions for the patient.

The criterions for the family consist of the following: willing to participate in the study, being the immediate family members of the patient or the patient's caregiver in the house, having at least the junior school diploma, being Mashhad city and Iran resident, having at least 18 and at most 60 years old, having no disabilities in the body, ears and eyes, not suffering from any known mental illnesses and not any drug consumption, no criminal records, take the social fear tests (Social Phobia Inventory (SPIN) by Connor) and get a score of less than 50, and no experiences of the tensions such as divorcement, one of their dear one's death in the last six months.

The criterions for the patient's entrance in the study are as follows: the schizophrenia confirmation by a psychologist, the illness is known for at least six months, having no chronic illnesses related to the body, no cognitive disorders, and not being addicted at the same time, the mental illness is not associated with being veteran or not related to the war, having at least one session of hospitalization in the psychiatric hospital. The criterions for the patient's family exit from the study are: if the patient's family are not willing to present in the sessions anymore, the main caregiver of the patient experience a "major stress" after the education program and before the after test or participate in another educational program during this study in this field, having an academic degree in the medical fields (medical science, nursing, anesthesia, health, etc.).

Sampling was first done by the easy non-probabilistic method between the families of the schizophrenia patients, hospitalized in the Ibn-Sina hospital of Mashhad. First, the patients' files were investigated according to the entrance criterions. After that, the social worker made contact with the patient's families and their main caregivers. They were invited to participate in the study if they were willing to and also had the entrance criterions besides the

testimonial. Based on the initial studies, the volume of the sample was calculated about 28 individuals. Including 15% sample volume decrement, 32 individuals (total number of 64 individuals) in each group were considered in this study. Finally, by considering the study units decrement, 60 individuals (30 individuals in the test group and 30 individuals in the control group) participated in this research. The implemented tools in this study included the demographic characteristic form and adjusted questionnaire for the Internalized stigma of mental illness the Ritscher *et al.* (2003) [20].

The demographic characteristic questionnaire included 13 questions in two sections: the individual and job information of the family (6 questions) and the patient (7 questions), which were conducted according to the research's goals and based on the latest references and papers. The adjusted questionnaire for the Internalized stigma of mental illness the Ritscher *et al.* (2003), included 17 questions, which investigated the stigma level in 4 criterions: Alienation subscale (4 questions), Stereotype Endorsement subscale (4 questions), Discrimination Experience subscale (4 questions), and Social Withdrawal subscale (5 questions). Each of the questions' scoring was conducted by the "I strongly agree" (4 scores), "I agree" (3 scores), "I disagree" (2 scores), and "I strongly disagree" (1 scores) phrases. In this criterion, the minimum and maximum stigma scores are 17 and 68, respectively. The higher scores show more stigma. The content reliability of this questionnaire was confirmed by seven professors of the medical university of Mashhad. The stability of the Persian version of this questionnaire in psychiatric patients is confirmed by Ghanean with Cronbach's alpha of 0.87 [36] and also by Lars Jacobsson in Iran [37]. In this study, the stability of the questionnaire was calculated by the internal consistency method, where the Cronbach's alpha was calculated 0.86. The data collection has been done at the same time for the two groups in two stages of before test (exactly before the study) and one month after the intervention.

In the first step, before the intervention and after receiving the agreement from the ethics community of the medical university of Mashhad, one of the main caregivers of the patients, who had good communication skills was invited to record the video film. The video was conducted in 5 sequences, each of which in 5 minutes (1-the dark days, 2-acceptance, 3- treatment, 4-adaptive strategies 5- success) after the education to organize the personal story based on these steps and very clear. After making the video, the intervention (the In Our Own Voice-Family program) has been performed in two groups of 15 individuals in two 4-hour sessions every other days (in such a way that the first three initial stages were conducted in the first and the last two stages were presented in the second session). In the first session, after the introduction, the first sequence of the video (the dark days) has been shown. Next, the participants were asked to talk about the darks days similar to the video and the researcher facilitated the group discussion. The sessions were held by a Ph.D. in clinical psychologist. No interventions were conducted in the control group.

The SPSS 11.5 software was implemented in order to process the data. The Kolmogorov- Smirnov and Shapiro Wilk tests were used to investigate the normal distribution of the quantitative data. The homogeneity of the variables were studied by the Chi-Square, exact fisher, Mann Witney and independent t-tests and covariance analysis was used to omit the non-homogeneous variable. The independent t-test was used to compare the two groups beside the Paired t-test for the comparison in the groups. The reliability and the meaning level were assumed to be 95% and 0.05 respectively.

RESULTS

By comparing the control and the intervention groups, there were no meaningful differences in the demographic information of the patients' main caregivers except for the marriage conditions ($P > 0.05$) and the two groups were homogeneous in the other variables except for the patient's marriage conditions (Table 1). Therefore, the covariance analysis was implemented to investigate this variable's effect on the stigma variations; the results revealed that the variations in the stigma score in the schizophrenia patients' families has been only affected by the group variable ($p < 0.001$) and the patient's marriage condition variable did not have a negative effect on the stigma score variation ($p = 0.12$) (Table 3). Most of the demographic information frequency of the main caregiver in the intervention group related to the females (76.7%), with junior school diploma (43.3%), and very low economic level (53.3%), housekeeper (70%), the patient's mother (33.3%), with an average age of 49.7 ± 11.2 . Also, most of the patient's demographic information frequency in the male intervention group (93.3%) had junior school diploma (33.3%), were single (60%) and jobless (80%) with the average age of 39.6 ± 9.7 , the average illness duration of 12.1 ± 9.4 and average hospitalization frequency of 8.1 ± 8.3 .

Most of the demographic information frequency of the main caregiver in the control group related to the females (76.7%), with junior school diploma (63.3%), and very low economic level (63.3%), housekeeper (60%), the patient's mother (33.3%), with an average age of 47.1 ± 12.6 . Also, most of the patient's demographic information frequency in the male control group (83.3%) had junior school diploma (33.3%), were single (73.3%) and jobless (83.3%) with the average age of 36.7 ± 8.7 , the average illness duration of 10.2 ± 6.1 and average hospitalization frequency of 9.3 ± 9.1 (Table 1).

The independent t-test results in the two groups comparison demonstrated that the average score of the stigma's Alienation subscale did not have a meaningful variation from the statistical point of view ($P=0.50$); however, the average score variation level of the loneliness dimension in the intervention group after the intervention (2.1 ± 1.7) meaningfully was more than the control group (1.9 ± 0.1) ($P<0.001$). In the internal group comparison of the average score of the stigma's Alienation subscale, the Paired t-test results showed that the mentioned score has been decreased in a meaningful manner in the intervention group after the intervention ($P<0.001$); however, there were no meaningful differences in the control group before and after the intervention ($P=0.71$) (Table 2).

The Paired t-test results of the Stereotype Endorsement subscale average score in the groups comparison revealed that there were no meaningful differences between the intervention (10.0 ± 2.5) and the control group (10.2 ± 2.3) before the intervention ($P=0.71$). However, the variations level of the Stereotype Endorsement subscale average score after the intervention in the intervention group (10.2 ± 2.3) was meaningfully more than the control group (1.6 ± 2.1) ($P<0.001$). The Paired t-test of the internal comparison of the Stereotype Endorsement subscale in the groups showed that the mentioned score has been decreased after the intervention ($P=0.10$) (Table 2).

In the groups comparison, the average score of Discrimination Experience subscale of the Paired t-test showed that there were no meaningful differences between the intervention (10.2 ± 2.6) and the control group (10.8 ± 2.7) ($P=0.33$) but there was a meaningful difference between the intervention (3.4 ± 2.2) and the control group (0.6 ± 2.3) after the intervention ($P<0.001$). Although there were no meaningful differences for the mentioned score in the control group before and after the intervention ($P=0.12$).

In the groups comparison, the average score of Social Withdrawal subscale of the Paired t-test showed that there were no meaningful differences between the intervention (12.8 ± 3.8) and the control group (12.7 ± 3.3) ($P=0.97$) but there was a meaningful difference between the intervention (5.0 ± 3.0) and the control group (0.2 ± 2.5) after the intervention ($P<0.001$). Although there were no meaningful differences for the mentioned score in the control group before and after the intervention ($P=0.72$) (Table 2).

In the groups comparison, the average total stigma score there were no meaningful differences between the intervention (8.8 ± 1.6) and the control group (43.8 ± 9.7) ($P=0.63$) but there was a meaningful difference between the intervention (5.8 ± 1.2) and the control group (0.3 ± 5.8) after the intervention ($P<0.001$).

The average total stigma score of the groups internal comparison results of the Paired t-test showed that the mentioned score has been decreased meaningfully in the intervention group after the intervention ($P<0.001$); however, there were no meaningful differences between the average mentioned score before and after the intervention in the control group ($P=0.75$) (Table 2).

Table 1: Distribution of the schizophrenia patients' family members based on the demographic indicators of the patient and his/her main caregiver for the intervention and control group

Test result	control	intervention	group
	N (%)	N (%)	variable
			Main caregiver
			sex
*P-value=1/0	7(23/3)	7(23/3)	Male
	23(76/7)	23(76/7)	female
			Education level
**P-value=0/43	19(63/3)	13(43/3)	Junior school diploma
	5(16/7)	9(30/0)	diploma
	6(20/0)	8(26/7)	Academic education
			Income level
**P-value=0/61	0(0/0)	0(0/0)	Lower than enough
	27(90/0)	29(96/7)	enough
	3(10/0)	1(3/3)	Higher than enough
			job
P-value=0/53	19(63/3)	16(53/3)	Have a job
	11(36/7)	12(40/0)	housekeeper
	0(0/0)	2(6/7)	jobless
			Relation to the patient
**P-value=0/41	1(3/4)	2(6/9)	mother
	1(3/3)	0(0/0)	father
	1(3/4)	1(3/3)	spouse
	18(62/1)	21(70/0)	sister
	2(6/9)	1(3/3)	Brother

¹ - Missing(1)

	1(3/4)	0(0/0)	child
	2(6/9)	0(0/0)	other
****P-value=0/36 Z= 0/91	average± standard deviation		Age of the main caregiver
	47/1 ± 12/6	48/8±13/1	
			patient
			sex
*P-value=0/35	25(83/3)	22(73/3)	male
	5(16/7)	8(26/7)	female
			Education level
**P-value=0/21	4(13/3)	0(0/0)	Junior school diploma
	6(20/0)	7(23/3)	diploma
	10(33/3)	11(36/7)	Academic education
			job
**P-value=1/0	9(30/0)	8(26/7)	Government employee
	0(0/0)	3(10/0)	Jobless
	1(3/3)	1(3/3)	free
			Marriage status
**P-value= 0/03	2(6/7)	2(6/7)	single
	(2583/3)	26(86/7)	married
	3(10/0)	2(6/7)	Divorced
	average± standard deviation		Patient's age
*** P-value= 0/23	36/7± 8/7	34/6± 7/8	
****P-value=0/75 Z=0/32	10/2±6/2	9/3±6/1	Illness duration
P-value=0/54 Z=0/61	9/3±9/1	7/0±8/3	Frequency of hospitalization

*Chi-Square test results ** Exact Fisher test result *** Independent t-test **** Mann Witney

Table 2: The comparison of the average and standard deviation of the stigma's total score and its subscales in the schizophrenia patients' families, studied before and after intervention in the intervention and control group

Difference between before and after intervention (Paired t-test)	Evaluation stage difference		After intervention		Before intervention		n	Subscale
	Mean± SD		*Mean± SD		Mean± SD			
t=6/5 P-value<0/001	2/1±1/7		7/4±2/2		9/5±2/8		30	Alienation
t=0/38 P-value=0/71	0/1 ±1/9		9/9±3/1		10/0±3/3		30	In Our Own Voice-Family group
	t=4/08 P-value<0/001		t=3/49 P-value<0/001		t=0/68 P-value=0/50			Control group
								independent t-test results
								Stereotype Endorsement
t=4/31 P-value<0/001	1/6 ± 2/1		8/4 ± 2/5		10/0 ± 2/5		30	In Our Own Voice-Family group
t=1/69 P-value=0/10	0/6 ± 1/8		10/8 ±3/0		10/2 ± 2/3		30	Control group
	t=4/35 P-value<0/001		t=3/38 P-value<0/001		t=0/38 P-value=0/71			independent t-test results
								Discrimination Experience
t= 8/42 P-value< 0/001	3/4 ± 2/2		6/8 ± 2/7		10/2 ± 2/6		30	In Our Own Voice-Family group
t= 1/62 P-value= 0/12	0/6 ± 2/0		10/2 ± 3/0		10/8 ± 2/7		30	Control group
	t=0/98 P-value < 0/001		t=4/59 P-value < 0/001		t=0/98 P-value = 0/33			independent t-test results
								Social Withdrawal
t=9/10 P-value<0/001	5/0 ± 3/0		7/8 ± 2/5		12/3 ± 3/2		30	In Our Own Voice-Family group
t= 0/37 P-value= 0/72	0/2 ± 2/5		12/6 ± 3/4		12/7 ± 3/3		30	Control group
	t=6/76 P-value < 0/001		t=6/22 P-value = 0/001		t=0/04 P-value = 0/97			independent t-test results
								Total stigma
t=11/49 P-value < 0/001	12/3 ± 5/8		30/4 ± 6/2		42/7 ± 8/8		30	In Our Own Voice-Family group
t=0/32 P-value = 0/75	0/3 ± 5/8		43/5 ±11/2		43/8 ± 9/7		30	Control group
	t=7/96 P-value < 0/001		t=5/61 P-value < 0/001		t=0/49 P-value = 0/63			independent t-test results

*Mean= average

Table 3: average and standard deviation of the stigma score variation based on the marriage status of the patient in the studied schizophrenia patients' families and the covariance analysis test for the effect of patient's marriage status variable

ANOVA test results	Stigma score variations before and after intervention			Patient's marriage status
	average± standard deviation	number		
f=0/97 p=0/41	5/6 ± 8/2	46		single
	6/1 ± 10/2	26		married
	19/0 ± 0/0	8		widowed
		10		divorced
Reciprocal effect P=0/73	patient's marriage status effect p=0/12	Group's effect P<0/001		Covariance analysis results

DISCUSSION

The main goal of this research was to determine the effect of the In Our Own Voice-Family program effect on stigma in the schizophrenia patients' families, hospitalized in the Ibn-Sina hospital of Mashhad. According to the results, after performing the In Our Own Voice-Family program, the average total score of stigma, the average score of the various Alienation subscale, Stereotype Endorsement, discrimination experience and Social Withdrawal has been reduced meaningfully in comparison with the control group. This shows the effect of the In Our Own Voice-Family program and its various subscales in the schizophrenia patients' families.

One of the most important consequences of the family stigma is the isolation of the family and also missing the social support as a result. While the social support of the family is a useful strategy in reducing the caregiving burden relief of these patients' families [5]. The In Our Own Voice-Family program has provided the social support by participating the similar families with the same problem and results in receiving the social support from the other families. Moreover, it provides such a situation for families to make connections with the other psychiatric patients' families and confirm their close relations with the patient obviously. Also, these interactions of the families, enables them to use the others experiences, talk about their problems shamelessly with sympathy and empathy.

On the other hand, the culture affects the serious psychiatric patients' family members' needs expression. In European countries, they encourage the open emotional and needs expression; but in the Asian countries, there are some believes based on hiding some of the family problems (which is a shame for the family name) and are known as the family secret [5]. Also, there is no exception for the Iranian society. Even hiding the task that are against the Islamic point of view (including the strange behavior of the schizophrenia patients) have much more importance according to the importance of the regard to the Islamic values. The In Our Own Voice-Family program provides an in-competent situation and narrates an Iranian story with a similar problem who talks about his/her experiences and successes in adapting with his/her patient family member without any shame. This program not only gives information about the schizophrenia patients and their treatment, but also presents some solutions for the appropriate behavior with these patients, adaption, and its stigma. This excites the families to narrate their stories besides their knowledge improvement. In addition, the presence in a group with a similar problem abandons hiding and facilitates the self-narration, because the individual is not worried about the judgmental prejudice of the others.

In fact, in the In Our Own Voice-Family program, the families reconstruct their wasted social identity and increase their self-esteem by social comparison with the individual, shown in the video, who was successful in adapting with the schizophrenia and also the other families who have implemented other useful adaptation methods; because of the fact that according to the social comparison theory of Festinger, when self is classified in the group level and another individual is also classified in that group as a partner, self is classified in the social identity and takes distance from a weak individual [38].

The results of this research confirms the Perlick et al.'s study, which showed that the In Our Own Voice-Family program has a minor and medium effect on the internal stigma reduction of the schizophrenia patients' families[34]. The difference is that in this study, the individuals with social phobia have been removed from the research. Other researches also were conducted studies on the effect of negotiation program on the public stigma. For example, Rusch et al. showed that the In Our Own Voice program reduced stigma in comparison with the mental education in the psychology students[39]. Also, Corrigan et al. showed that the 30-minute and 90-minute In Our Own Voice programs have the same effect on reducing the stigmatic viewpoints about the psychiatric patients in the university students[39]. Wood and Wahl showed that this program causes more positive effects in the knowledge and viewpoints of the psychiatric patients in the university students[40]. These studies all confirm the results of the current research.

The results of Pinto-Foltz et al. also confirms our results because it demonstrated that the In Our Own Voice program reduces stigma and improves the mental health knowledge in the students immediately after the intervention[33]. However, unlike the Pinto-Foltz results, it was shown that the consistency in the first, fourth and the eighth weeks reduce the stigma not only the mental health knowledge; although the two studies after tests were conducted one month after the intervention. The reason can be the early age of the research units (13-17 years) besides the social-cultural differences in the Pinto-Foltz et al.'s study, which affects their viewpoints of the psychiatric patient. Moreover, in this study, the program has been conducted in two sessions, which may be effective for a month.

The limitations of this study were the various signs of the schizophrenia patients and different illness stages, which could affect the emotional expressions to adapt with stigma and self-narration. This was controlled by random selection of the samples to some extent. On the other hand, since the program has been conducted in two sessions, and the after test has also been taken one month after the intervention, there is a probability of the families' connections, information exchange and emotional expressions with each other, which affects the results. Hence, they

have been asked to avoid these connections. However, this may have happened rarely which was out of control. On the other hand, since this study has been done on the patients, hospitalized in the hospital, their family may have been more relaxed and this could have affected their responses to the questions. Therefore, it is suggested to continue this study to investigate about the stigma reduction continuation after the hospitalization.

Conclusions

The results of this study shows that the In Our Own Voice-Family program is effective in stigma reduction. Hence, according to the importance of the stigma in the consistency, treatment and rehabilitation of the psychiatric patients, the results of the current research can be implemented by self-help groups' formation, including the psychiatric patients' families in the hospital and teaching the negotiation program to the psychiatric nurses, working in the psychiatric hospitals to reduce stigma.

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