

Original Article

## Comparing the current process of schizophrenic patients discharge from psychiatric wards of the Isfahan University of Medical Sciences hospitals and the standard process

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### Abstract

**BACKGROUND:** Discharging from hospital is one of the most complicated issues in health system. This process should follow standard clinical criteria and needs mutual cooperation of the hospital and society. Psychiatric patients, nowadays, are hospitalized only for the severe period of their sickness and after that they are returned to the society. This study compares the current discharge process with the standard process.

**METHODS:** This was a cross-sectional, descriptive-comparative study on 52 schizophrenic patients discharging from hospitals. Samples were selected with convenient method from psychiatric centers during a period of 4 months. Data were collected using a standard checklist and the items considered at the time of discharge. Data were analyzed using SPSS software, by descriptive and inferential statistical methods.

**RESULTS:** The findings showed that in 93.4% of patients hospitalized in the psychiatric wards, the indexes of discharge process were followed to some extent and in 3.6% of cases, the indexes were followed thoroughly. Also, comparison between the mean scores of indexes that followed during discharging schizophrenic patients from psychiatric wards with the standard process showed a significant difference ( $p < 0.005$ ).

**CONCLUSION:** Considering that the standard indexes of discharging process were followed just in a small percentage of patients, it is important to include educational plan in the discharging process on the importance of medications, control of hallucinations and delusions and suicidal thoughts for patients' families and in general acquainting the patients and their families with health center.

**KEY WORDS:** Discharging process, schizophrenia, psychiatric wards.

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According to a variety of studies reported by Rudge and Morse (2004), schizophrenia is one of the main psychological disorders, so that about 1-2% of people are diagnosed for schizophrenia and 25-30% of psychiatric patients have schizophrenia.<sup>1</sup> Schizo-

phrenic patients are hospitalized for the severe period of their disease and then being discharged from hospital and returning to the society. However, lack of social support programs for such a chronic disease leads to a periodical return of the disease and frequent hospitaliza-

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tion of the patients. Studies show that about 1.9% of Americans suffer from schizophrenia and the direct cost of treatment for these patients is estimated to be about 50 billion dollars.<sup>2</sup> Suitable treatments and preventing relapses can reduce these unnecessary economic costs and even prevent serious damages.<sup>3</sup> Suicide is one of the main problems among these patients and studies showed that schizophrenic patients consist 31% suicidal cases among psychological patients.<sup>4</sup> Using anti-dementia drugs to prevent relapse of schizophrenia is well-known, but studies showed that the patient's follow up for taking anti-psychotic drugs is weak and that is the reason for their frequent hospitalization. Kilsing (1994) says that relapse rate decreased by 15% in those patients who take their medicine completely. However, 50% of patients show the symptoms of relapse in a year after recovery due to neglecting their medications. In a study by Gary et al on 132 schizophrenic patients, the severity of symptoms at the time of discharge was the main factor for following the medications.<sup>5</sup> Also, patients who are newly discharged from psychiatric hospitals might show criminal behaviors include attacking, beating up or raping.<sup>6</sup> Discharge from hospital is one of the most problematic issues in health system. The discharge process and plan should be clear based on clinical indexes.<sup>7</sup> Bull and Kane (1996) said that discharge process for psychiatric patients is insufficient and problematic.<sup>8</sup> In a study by Taraborrelli et al (1999) on discharging severe psychiatric patients, the results showed that the process of discharge needs sufficient consideration and a period of time to prepare the patient and arrange the after-discharge care with social workers by providing them with the patients' medical file information and arrangements between the hospital and society and this work needs to be done by a skillful nurse.<sup>9</sup> Simons et al (2002), also in his study on the determination of schizophrenic, schizo-effective and manic-depressive patients' needs concluded that a main needs of these patients includes daily activities, psychological pressure, making food, severe psychiatric symptoms, so-

cialization, taking care of children and themselves.<sup>7</sup>

The first few days after discharge are very critical for psychiatric patients. Therefore, it is necessary to investigate the details of diagnosis at the time of discharge in order to plan for the post-discharge care.<sup>7</sup> Therefore, insufficient treatment, lack of patients' follow up for taking their medications, lack of daily care centers and lack of patients' follow up by the family and society are the effective factors for frequent hospitalization.<sup>10</sup> This study compares the indexes of schizophrenic patients' discharge process in psychiatric wards with the standard process in order to recommend for improving the patients' quality of life, recovery period, prevention of relapse and terrible events and reduction of economic costs due to frequent hospitalization of these patients.

## Methods

This was a cross-sectional, descriptive-comparative study in which 52 schizophrenic patients were selected by convenient sampling method among patients discharged from psychiatric wards of Noor and Farabi hospitals for a period of 4 months. Data were collected using a checklist of the items checked at the time of discharge. The checklist was prepared using valid scientific sources and the content validity was gained by the opinions of 10 professors and faculty members of psychiatry, social working and psycho-nursing. The checklist was tested on 10 patients who were discharging from hospitals and the reliability was 95% by Pearson correlation test. The index of discharge process to evaluate schizophrenic patients included personal hygiene, being neat, communicating with others, knowledge about anxiety control methods, no hallucinations and delusions, pessimistic, suicide, etc. The checklist included 22 items with answers of none (1 point), to some extent (2 points), and completely (3 points) and the highest score could be 66. These items were checked at the time of discharge by asking questions and observing the patients and their families. Data were analyzed using SPSS software

by descriptive and inferential statistical methods.

The ethical considerations for the research was assured by the permission of the presidency of the Isfahan University of Medical Sciences, the dean of nursing faculty and the head of selected hospitals, as well as considering the patients and their families willing to participate in the study and allow the results to be delivered to the psychiatric centers.

## Results

In this study, 73% of samples were male and 27% were female. The age of the patients was 31-49 years, the frequency of hospitalization was at least 2 times and maximum 5 times. The indexes of discharge process based on the current items are presented in table 1. The results showed that 80% of patients did not receive any

**Table 1.** Distribution of indexes of discharging schizophrenic patients in psychiatric wards

Mean score and frequency distribution of discharge index	None		To some extent		Completely		Mean	Standard deviation
	Percentage (%)	Number (n)	Percentage (%)	Number (n)	Percentage (%)	Number (n)		
1. The patient's care for personal hygiene	5.3	2	6.63	33	7.32	17	29.2	53
2. The patient's care for a neat surrounding	9.1	6	9.5	26	2.38	20	27.2	65
3. The patient's communication with others	20	11	8.61	32	2.18	9	98.1	62
4. The patient responsibility for personal behavior.	4.16	8	3.67	36	4.16	8	2	57
5. The patient's self-consciousness	2.18	9	40	21	8.41	22	23.2	74
6. The patient's agreement with the necessity of treatment continuation	20	12	9.5	26	1.29	15	9.2	70
7. The patient is referred and guided for treatment follow up	9.3	16	4.56	29	7.12	7	81.1	64
8. The patient is taught about the methods of coping with stress	1.69	36	1.29	15	8.1	1	32.1	51
9. The patient is taught about methods of controlling anxiety	80	42	2.18	9	8.1	1	31.1	46
10. The patient knows the importance and necessity of medications	6.34	18	7.52	27	7.12	7	78.1	65
11. The patient knows the side effects of medications and the way to confront them	6.54	28	7.32	17	7.12	7	58.1	71
12. The patients' control over his hallucinations	1.9	5	2.38	20	7.52	27	43.2	66
13. The patients' control over his delusions	3.7	4	3.27	14	5.65	34	58.2	63
14. The patient has no suicidal thoughts	1.9	5	5.14	7	4.76	40	67.2	64
15. The patient has no pessimistic attitude that leads to murder	5.14	8	9.1	6	6.74	38	60.2	73
16. The patient's family is taught about providing a supportive system for him	2.58	30	2.38	20	6.3	2	45.1	57
17. The family is taught about making a safe environment for the patient	6.43	23	1.49	25	3.7	4	63.1	62
18. The family knows psychiatry health centers	6.23	13	60	31	4.16	8	92.1	63
19. The family is taught about the importance and necessity of medications	4.56	29	2.38	20	5.5	3	49.1	60
20. The family is taught about the disease process and its treatments	3.67	35	9.3	16	8.1	1	34.1	51
21. The family is taught about how to deal with the patient in various situations	9.7	37	3.27	14	8.1	1	30.1	50
22. The family knows the symptoms of relapse	9.5	26	8.41	22	3.7	4	56.1	63

education about the method of controlling anxiety, 69.1% had no education about methods of coping with stress, 20% were not able to communicate with others, 76.4% had no suicidal thoughts and 74.6% didn't have murdering thoughts; 54.5% didn't know anything about medication complications and the confronting methods, 5.34% did not know the importance and necessity of medications and 30.9% were not guided about follow up, referring and treatments. Only 29.1% believed that they needed treatments, 52.7% had no hallucinations and in 65.5% delusions were not completely controlled. About 58.2% of families were informed about supportive systems and 43.6% of families did not know about providing patients a safe environment in the family; 56.4% of families did not know the importance of medications, 67.3% did not know about the disease process and its treatment, 70.9% were not taught about how to deal with their patients in different situations and 50.9% of them did not know the symptoms of relapse.

In most cases (96.4%) the standards of discharge were followed to some extents (30-53) and only in 3.6% of cases the standards were followed completely (54-56). Also, comparing the mean of criteria considered in discharging schizophrenic patients with standard criteria showed a significant difference ( $t = -584.30$  and  $p < 0.005$ ).

## Discussion

This study showed that schizophrenic patients at the time of discharge have some problems such as lack of knowledge about anxiety control and coping with stress, how to communicate with others, having suicidal thoughts or attitudes which may lead to murder, lack of knowledge about side effects of medications, not being guided for treatment follow-ups, not accepting the need for treatment follow-up and lack of knowledge about the importance and necessity of medications. Families as the supportive system had not enough knowledge about making a safe environment for their patients, the importance and necessity of medications, the process of disease and its treatments and the symptoms

of relapse. One of the main problems of these patients is lack of education. In a study by Seo et al on the effects of social skill education on the improvement of schizophrenic patients' social skills before discharge, their hypothesis that social skill education can increase social skills and self-respect was supported and the treatment group showed improvement in counseling skills, decisiveness and interpersonal communication and they could receive positive reactions from others which increased their trust and reduced their anxiety. These patients could develop their interpersonal skills and finally could successfully return to the society.<sup>11</sup> Chien et al also reported improvement in counseling skills, decisiveness and interpersonal skills through social educations among chronic schizophrenic patients before their discharge.<sup>12</sup> In a pilot study by Price on 13 schizophrenic patients which aimed to prepare them for returning to the society, in a period of 50 days before and after discharge the patients were called and received education on drug dosage, side effects, medication instructions and alarming behaviors on phone. The results showed a reduction in relapse and re-hospitalization of the patients.<sup>13</sup> Also, the results of a study by Compaty et al on 123 schizophrenic patients showed that anti-psychotic drugs had the most effect on those patients whose discharge process included necessary indexes such as education.<sup>14</sup> Stuart and Laraia showed the rate of relapse in schizophrenic patients in the first years of diagnosis is 60-70% in those who do not follow medications and it is 40% in those who can be trusted for medication follow ups. However, this rate reduces to 15.7% in those who have a collection of medication, educational therapies, group therapies and good supports. In a study on 253 psychological patients on their discharge day, more than 50% did not know the name, dosage or why they should use the prescribed psychiatric medicines; 38% of patients knew the medicine name but just 53% knew when they should take them; it was interesting that all patients were interested in having educational courses during their hospitalization.<sup>15</sup>

Another problem of the patients in the present study is the suicidal and murdering thoughts. In a study on the suicidal risk factors immediately after discharge on all the patients discharged from Hong Kong hospitals (1997-1998) the results showed that in the first 60 days after discharge, 97 cases of suicide occurred, which was the highest prevalence in schizophrenic patients with a history of self-injury, accepting self-injury, living alone, accepting to be attacked, having job stress and having no relation with others.<sup>16</sup> Another problem of these patients in the present study is delusions. Isaacs (2001) said that patients at the end of treatment should show a decrease or control in delusions or comprehensive mistakes.<sup>17</sup> Therefore, during the treatment period, encouraging delusions should be avoided and their anxiety should be decreased by actions such as distracting their thoughts, the incidence of delusions should be stopped by finding the relation between anxiety and the delusion times, their trust must be increased and a sincere relation must be developed among patients and other people around them which lead the patients toward accepting the realities. Also, at the end of treatment, patients should be able to avoid hallucinations if they occurred.<sup>18</sup> However, the patients who participated in this study had hallucinations. Therefore, during the treatment period, patients should be focused on the facts and realities and strengthen their concentration and use situations and real events to change the direction of their wrong and repetitive believes. Isaacs (2001) said that patients at the time of discharge should be able to control hallucinations.<sup>17</sup> Based on the results of the present study, teaching social skills is one of the main psychological and social interventions for schizophrenic patients and it should be done before their discharge. Also educating the families is one of the main pillars of treatment. Family education is part of treatment and should be used along with medications.<sup>19</sup> Education should emphasize on preventing relapse and managing the symptoms by involving patients in a healthy life style. One of the key points to prevent relapse is determination of primary symptoms and using strategies

to manage them. During the hospitalization of patients, the treatment team should teach communication methods and hold group sessions to increase the patients' ability for communication. And since the patients, to some extent, accept the responsibility for their personal behavior at the time of discharge, during the hospitalization, they should be encouraged to do their personal work and when they accept the responsibility for their behavior, a reinforcing reaction should be given to them. Since knowledge and awareness toward one's disease is very important in seeking treatments, it is necessary to increase the knowledge and awareness of patients by treatment team. Since patients were not familiar with psychiatric centers for referral and seeking treatments, it is necessary to teach them about psychiatric centers during their hospitalization. Moreover, since patients didn't have enough knowledge of coping with stress and since stress has a role in severity of the disease and relapse, educational programs on this regard are necessary. Also, information regarding decreasing and controlling anxiety should be given to the patients. Furthermore, knowing about side effects of their medicines before consumption, increase the patients' cooperation and decrease their anxiety and worries.<sup>20</sup> Therefore, the treatment team should provide the patients and their families all the information related to drugs and their side effects (extrapyramidal and neuroleptic malignant syndrome) and educate them about the importance of continuation of medication and not stopping medication without doctor's prescription. Studies show that stopping medication cause relapse and patients don't know the importance and necessity of medications.<sup>2</sup>

Interventions are necessary to educate patients' family in order to provide them with a supportive system; because schizophrenic patients more than others need to feel secure. Part of this need is provided by drugs, and the rest come from supports given by family and society.<sup>20</sup> Families should have enough education about providing a safe environment for their patients because lack of feeling secure leads to anxiety and severity of the disease. Also, fami-

lies should know various health centers and how to access them in critical situations, as well as the importance and necessity of medications, the process of disease (relapse), the treatments for schizophrenia symptoms, the symptoms of relapse and how to make a healthy relationship with the patients and provide them comfortable conditions and atmosphere. Finally, in nursing interventions, primary symptoms, techniques for managing symptoms, coping strategies,

supportive systems and facilitating family interactions should be considered.

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