

A Study of Psychosocial Factor Related with Relapse in Schizophrenia.

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Abstract

Background: Schizophrenia cause distressing consequences for afflicted patients, their family members, and others involved in their care and support, as well as society at large in terms of lost productivity and cost of providing treatment, housing, and financial assistance.

Aim & objective: To study socio-demographic variables and other psychosocial factors associated with the relapse in schizophrenic patient.

Material and method: The Present study was carried out on 50 patients in both group. After randomization, assessment of Sociodemographic details was done with the help of semi-structured performa.

Statistics: The proposed study was conducted in phased manner observing ethics of voluntary participation and informed consent of the participants were taken.

Results: There was no significant difference was found in both groups in sociodemographic data. There was more substance abuse, poor compliance partial/Incomplete treatment taken and side effect reported in relapse group. Beside this schizophrenic patient had suffered due to social stigma, not supporting by family member and lack of service in community centers.

Keywords: Sociodemographic Profile; Relapse; Remission; Psychosocial factor.

I. Introduction

Schizophrenia is a chronic and disabling illness, with the majority of patients experiencing multiple relapses during the course of the illness [1]. Relapse is the return of ill health after an apparent or partial recovery, and characterized by acute psychotic exacerbation that may have serious implications. For example, there is a risk of patients harming themselves or others, of jeopardizing personal relationships, education or employment status and of further stigmatization of the illness. Additionally, relapse may carry a biological risk [2]. The repeated relapses also cause a burden on family, society and health system. Internationally, the factors commonly associated with relapse include poor adherence to treatment, substance abuse, co-morbid psychiatric illness, a co-morbid medical and/or surgical condition, stressful life events, and the treatment setting [3, 4].

II. Aims And Objective

To study socio-demographic variables and other psychosocial factors associated with relapse in schizophrenic patient.

III. Material And Methodology

After taking proper consents, the study was conducted in the DIMHANS centre of P.B.M. Hospital, Bikaner attached to Sardar Patel Medical College, Bikaner. 50 cases of relapses, which fulfilled the inclusion and exclusion criteria constituted the relapse group of sample of study. Similarly, 50 cases in remission phase, constituted the remission group of sample of study. The selected patients in both groups were extensively evaluated on following Proforma, rating scales and questionnaires prepared for this purpose.

Inclusion criteria:

- Patients of Schizophrenia aged between 18 and 65 years and were accompanied by relatives, spouse or guardians
- Patients who gave informed consent?
- Patients who were able to understand the Questionnaire?

Exclusion criteria:

- Patients who were having organic mental disorder or chronic medical illness?
- Patient who had relapse after fever or some medical illness?

Ethical consideration: Study was approved by research review board & ethical committee of the institution. An informed consent was obtained from the subject prior to participation in the study.

Instruments of this study

- 1) **Consent Form** – This form was formatted in Hindi language & was given to all participants of this study.
- 2) **Screening Proforma**– This Proforma included all exclusion criterions with the Yes / No option before each question.
- 3) **Socio-demographic Profile** – This included name, age sex, father's /husband's name, address, marital status, religion, domicile, education, occupation, type of family and monthly income of the participant.
- 4) **A specially designed semi-structured Proforma**- was used to elicit the factors which responsible for relapse and remission in schizophrenic patients. It has seven sub-groups which contain forty questions. Seven sub-group were following: - 1. Factors influencing the patient 2. Individual factors of the patient 3. Social factors and family perception 4. Societal stigma 5. Religious myth and superstition 6. Gender difference 7. Rehabilitation of patient in the community

The variables were rated on five point Likert scale in which 1= strongly agree, 2= Agree, 3= Uncertain, 4= Disagree and 5= strongly disagree. This proforma was validated by two different psychiatrists.

Statistical analysis

Statistical analysis was done with the help of software 'SPSS 22' Statistical Package for the Social Sciences (Windows version 22.0). Relationship between different measures was computed via Pearson's correlation coefficient.

IV. Result

On Basis of sociodemographic profile both group were comparable. Majority of patients were male in both relapse 34 (68%) and remission group 36 (72%). Marital status shows the most of the patients were married in both group 34 (68%) and 40 (80%) respectively. Forty-four (88%) patients were Hindu in both groups and this was not found statistically significant. Distribution of cases according to their occupation depicts in relapse group fifteen (30%) patients were unemployed however in remission group 18 (36%) patients were skilled worker and this difference was statistically significant. Most of the patients were educated up to upper primary 40% in relapse group while in remission most of the patients were educated up to upper primary 42%. Majority of cases belongs to nuclear family in relapse and remission group 27 (54%) and 31 (62%) respectively. Most of the patients were living in urban area in both group relapse and remission and this was statistically not significant (p value >0.05). (Table 1) According to the results, in relapse group 78% of the respondents do not abuse substance while in remission group 96% do not abuse substance. 62 % of the respondents agree that they always took treatment from psychiatrist in relapse group whereas in remission group 90% of the respondents agree that they always took treatment from psychiatrist. 70 % of the respondents disagree that they are afraid to give treatment when they notice side effects in relapse group and in remission group 92% disagree. 14 % of the respondents indicate that they know what to do when the patient present with signs and symptoms of the side effects in relapse group and in remission group 42% know what to do when the patient present with the side effects. 82 % of the respondents agree that the patient refuses to take treatment in relapse group in comparison to remission group where 92% disagree with the statement. In relapse group 80% agree that patient denied to him/her is suffering from any illness whereas in remission group only 12% agree with the statement. The difference between both groups was statistically highly significant with these statements (p value <0.01). (Table 2)

94 percent of the respondents agree that the mentally ill have poor communication skills while in remission group 90% of the respondents. Ninety-four percent of the respondents agree that mentally ill people have no work skills while in remission group 10% disagree and 88% agree with this. In relapse group eighty-six percent of the respondents agree that the patient has lack of good manner of approach while in remission group 74% agree, 20% disagree. 82% percent of the respondents agree that the patient can't understand medicines when going to the hospital alone in relapse group while in remission group 64% of the respondents can understand medicines when going to the hospital alone and differences were found statistically significant in both groups (p value <0.05). (Table 3)

Thirty-eight percent of the respondents agreed that they know the contents of the discharged card and 44% disagreed in relapse group whereas in remission group 68% of respondents agreed and 16% disagree with the statement. In relapse group 56% of respondents do not know what to do with the discharge-card while in remission group only 24% agreed. 42% percent of the respondents agree that it is difficult to go to the hospital for consultation because of the distance while 68% of the respondents disagree in relapse group and in remission group 86% disagree and only 10% agree with the statement. In relapse group 86% percent of the respondents disagree that public transport cost about Rs.1, 000 to visit the hospital while in remission group 98% disagree. In relapse group 54% agree that costly medicines cannot be purchase by the family members while in remission group 64% disagree with the statement. These all differences were statistically significant (p value <0.05). (Table 4)

Ninety percent of the respondents agree that Societal Stigma is not good to be related to the mentally ill person while in remission group 78% of respondents agree. In relapse group sixty percent of the respondents agree that it is better to hospitalize the mentally ill so that they stay away; 36% of the respondents disagree with the statement about hospitalize the mentally ill so that they stay away and 4% of the respondents are uncertain while in remission group 98% agree and only 2% uncertain. 100% of the respondents agree that community leisure activities are for normal people, not for mentally ill people in relapse group whereas in remission group 86% agree and this was found statistically significant (p value <0.05). (Table 5)

Fifty-four percent of respondents in relapse group agree that they think psychiatric illness due to black shadow or witch craft, while 46% disagree and in remission group 76% disagree and 30% agree with this. 88 % of respondents agree in relapse group that they took their patient at religious place/faith healer when he/she did not respond the medicines while in remission group 68% agree and 32% disagree with it. This difference was statistically significant (p value <0.05). (Table 6)

66 % of the respondents agree that it is normal for men to be hospitalized more frequently than women for psychiatric conditions while in remission group same data 66% agree, 20% disagree and 14% uncertain. In relapse group 48 % of the respondents agree that mentally ill person does not deserve marriage while in remission group 24% agree about it. Statistically significant difference was found in both groups (p value <0.05). (Table 7)

74 % of the respondents agree that resources are not available in the community where mentally ill people can work, only 26% of the respondents disagree with that in relapse group while in remission group 60% agree, 32% disagree and 8% uncertain. Ninety percent of the respondents agree that mentally ill people are not able to comprehend a thing when they are told while in remission group 82% of the respondents agree. 94 % of respondents in relapse group disagree that community people accept and love mentally ill whereas in remission group 14% agree and 76% disagree with the statement and this was statistically significant (p value <0.05). (Table 8)

V. Discussion

In our study, majority of patients in relapse and remission group were male. Male preponderance was also seen by other studies [5-7]. The result shows the number of male more than female may because of the nature of the society and stigma that prevent the female to visit the community mental health clinic and hospital. Marital status of relapse and remission group shows that mostly were married. Similar result found by Abdel-Baki et al., [8]. On the contrary study by San et al., [6] found that majority of patients 73.3% were unmarried and 12.2% divorced. This is may be with cultural background and environment of this area where early and socio-necessity of marriage is prevalent. Majority of hindus were 70 to 80 % in both group may be because it is a hindu rich area Chabungbam et al., [5] also supported same. The result of the study shows that unemployment was more in relapse group may be because the rate of unemployment increased as the disease progressed due to poor social skill and functioning when disease progressed same was reported by other studies [9, 10].

According to the results of our study relapse group have more abusing substances than remission group. A study that was done by Turkington et al., [11] in Northern Ireland found that there were higher relapse rates among schizophrenic participants who were persistently misusing substance (56.3%) than in those who had stopped misusing substances (32.9%). One study conducted by Hall & Degenhardt, [12] showed that cannabis use may exacerbate symptoms of schizophrenia by reducing compliance with treatment or by interfering with the effects of the neuroleptic drugs used to treat its symptoms. We found most of patients in remission group took treatment from psychiatrist. Uys LR, [13] found that approximately 40% of the psychiatric patients attending the clinic for follow-up care were regularly readmitted to psychiatric institutions each year. Beebe L.H. [14] points out that psychiatric medication can cause uncomfortable side effects as we found in our study. Adverse effects of psychotropic drugs such as weight gain, risk of heart disease, vascular disease, and diabetes cited as some factors that led to psychiatric patients' non-adherence to treatment. The risk of non-adherence leads to a risk of relapse. Our study has contrary result may be due to affected by lack of literacy or knowledge about illness. Grayet al., [15] stated that relapse rates have been shown to be five times higher in people with schizophrenia who are non-adherent to medication compared with adherent persons resulting in a significant economic burden. Our result matched with Ascher-Svanum H et al., [16] study has shown that cases were less likely to have insight and more likely to be violent. This could be due to the nature of the illness as has already been said on diagnosis that mental disorders have a tendency to relapse especially those with a more severe illness like schizophrenia as also supported by other studies.

Lysaker et al., [17] did a study and results indicate that subjects with initially impaired social skills had significantly higher levels of negative symptoms as we find in our study. Weret ZS & Mukherjee R, [18] describe that more of the patients unemployed due to poor social skill or no work skill. A similar study of Moritz S & Woodward TS, [19] showed that reasoning in schizophrenic patients become impaired. So our study is inference, that schizophrenic patients doing work without any appropriate explanations or reason. In relapse group most of the respondents agree that the patient has lack of good manner of approach and can't understand

medicines when going to the hospital alone. So it is important that patient and there relative understood well how and when to take medicine for better compliance.

Most of the respondents agree what mentally ill people should be allocated tasks to perform at home. The present study matched with Sagduyu et al., [20] who stated that 72.2% of the sample held the opinion that people with schizophrenia are dangerous and 91.8% believed that these patients could not take responsibility for their own lives. Morken et al., [21] studied that was done to assess the effect of psycho-education to the patient and the family, the conclusion was that education to the family led to decreased relapse. Penn et al., [22] found that distance would make the patients fail to go for follow up care especially for those living far from the hospital. This is also a major reason, that patients is taking their medicines continue as we found in our study. However most of the respondents disagree that they sometimes forget to remind the patient about his/her follow up dates. Ascher-Svanum et al., [16] study also associated with high psychiatric hospitalization with higher costs of inpatient services as well as outpatient services that include medication and individual therapy services. So it is difficult for them continue their follow-up treatment. Am et al., [23] did a study, who stated that relapses often cause a high economic burden on society. Or we can say due to high economic burden relapses are occurring. So it is important that we should start community based treatment to reduce cost of treatment.

Huxley & Thornicroft, [24] pointed out that the nature of mental illness, health problems and discrimination against them could cause interpersonal relationships to deteriorate, leading to reduced social contacts. They are unlikely to have any close friends and many may have no one to turn to for help. 100% of the respondents in our study agree that community leisure activities are for normal people, not for mentally ill people while in remission group 86% agree. Otsman&Kjellin, [25] found in their study of stigma by association and psychological factors in relatives of people with mental illness, that 83% of relatives are burdened by one of the psychological factors; 72% of women thought the sick relative would have been better off dead; 33% wished that the patient or they themselves had never been born; spouses did not believe that the patient would be better off dead; 51% of relatives and 47% of the spouses reported that the patient's mental illness had Affected them negatively and they could not have company of their own. It also affected the mental health of relatives. On the contrary evidenced by Magliano et al., [26] showed that relatives seemed to believe that mental hospitals are not appropriate places in which to treat their loved ones, even though most of them felt that they were alone in coping with the burden of their ill relative's disease.

Miller et al., [27] stated that increased the chances of relapse with high personal importance of religion/spirituality compared with those who did not report a high personal importance of religion/spirituality. It has rightly been pointed out that the beliefs in Supernatural causes of mental disorders are more widely held and traditional sources of help, such as spiritual healers, are preferred over medical advice for a range of mental health problems in developing countries [28].

Our result in the line with Beebe, [14] (2002) Shean GD, [29] Vijayalakshmi P & Math SB, [30] who maintained that generally men have a more severe and a relapsing form of schizophrenia, male patients with paranoid hallucinatory symptoms were more likely to develop complications characterized by severe impairments. Men were hospitalized more often than women, which could account for social difficulties encountered by men in various social services. The present study supported by Magliano et al., [26]; Vimala et al., [31], they described that most of the relatives agreed that people who have schizophrenia should have appeared to have a stricter attitude toward affective rights, such as the patient's right to get married and have children, and tended to perceive their loved ones as being subject to social discrimination.

Uys LR, [13] also studied on availability of resources in community and rehabilitation of patient in the community and he found that only 4.12% schizophrenic patients were utilizing the resources in line with our study. Most of the respondents agree that mentally ill people are not able to comprehend a thing when they are told.

VI. Conclusion

The study examined factors influencing relapse among schizophrenia patients. The findings and recommendations should serve to improve the role of the family in caring for the patients, and in all respects and new strategies should be developed to improve the referral system between the psychiatric institutions where patients were admitted and the clinic/society where follow up will take place.

Limitation

1. This study is hospital based and all the patients may not be reaching to hospital data cannot be generalized.
2. It is a cross sectional study.

Table 1: Comparisons of Socio-Demographic Profiles of Both Groups

| | GROUP | | | | X ² | d/f | p-value |
|---------------------------|-----------------|----|-------------------|----|----------------|-----|---------|
| | Relapse (N= 50) | | Remission (N= 50) | | | | |
| | N | % | N | % | | | |
| Gender | 34 | 68 | 36 | 72 | 0.19 | 1 | 0.66 |
| Male | | | | | | | |
| Female | 16 | 32 | 14 | 28 | | | |
| Marital Status | 34 | 68 | 40 | 80 | 5.21 | 3 | 0.15 |
| Married | | | | | | | |
| Unmarried | 13 | 26 | 09 | 18 | | | |
| Widow/Widower | 00 | 00 | 01 | 02 | | | |
| Separated/divorced | 03 | 06 | 00 | 00 | | | |
| Religion | 44 | 88 | 44 | 88 | 0.44 | 2 | 0.80 |
| Hindu | | | | | | | |
| Muslim | 04 | 8 | 05 | 10 | | | |
| Sikh | 02 | 04 | 01 | 02 | | | |
| Occupation | 12 | 24 | 18 | 36 | 9.66 | 4 | 0.046* |
| Skilled worker | | | | | | | |
| Unskilled worker | 08 | 16 | 17 | 34 | | | |
| Student | 03 | 06 | 01 | 02 | | | |
| House wife | 12 | 24 | 07 | 14 | | | |
| Unemployed | 15 | 30 | 07 | 14 | | | |
| Education | 12 | 24 | 16 | 32 | 1.40 | 3 | 0.70 |
| Illiterate | | | | | | | |
| Up To middle | 20 | 40 | 21 | 42 | | | |
| Sec. & higher secondary | 11 | 22 | 08 | 16 | | | |
| Graduate & Post Graduate | 07 | 14 | 05 | 10 | | | |
| Family Type | 23 | 46 | 19 | 38 | 0.65 | 1 | 0.41 |
| Joint | | | | | | | |
| Nuclear& Extended Nuclear | 27 | 54 | 31 | 62 | | | |
| Area Of Living | 28 | 56 | 31 | 62 | 0.37 | 1 | 0.54 |
| Urban | | | | | | | |
| Rural | 22 | 44 | 19 | 38 | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 2: Comparisons of Factors Influencing the Patient in Relapse & Remission Group.

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|--|-----------|------------------------|-----------|------------------------------|----------------|-----|----------|
| | | N (%) | N (%) | N (%) | | | |
| He/she abuse substance | Relapse | 11 (22) | 0 (0) | 39 (78) | 7.16 | 1 | 0.007** |
| | Remission | 02 (4) | 0 (0) | 48 (96) | | | |
| I think substance abuse influence treatment | Relapse | 49 (98) | 0 (0) | 01 (2) | 0 | 1 | 1 |
| | Remission | 49 (98) | 0 (0) | 01 (2) | | | |
| Always treatment take from psychiatrist | Relapse | 31 (62) | 05 (10) | 14 (28) | 13.95 | 2 | .0009*** |
| | Remission | 45 (90) | 04 (8) | 01 (2) | | | |
| How often does he/she have signs and symptoms of side effects? | Relapse | 13 (26) | 0 (0) | 37 (74) | 4.89 | 2 | 0.086 |
| | Remission | 06 (12) | 02 (4) | 42 (84) | | | |
| We are afraid to give him treatment when we notice signs of side-effects | Relapse | 13 (26) | 02 (4) | 35 (70) | 9.56 | 2 | 0.008** |
| | Remission | 02 (4) | 02 (4) | 46 (92) | | | |
| I know what to do when he/she presents with signs and symptoms of side-effects | Relapse | 07 (14) | 15 (30) | 28 (56) | 15.99 | 2 | .0003*** |
| | Remission | 21 (42) | 19 (38) | 10 (20) | | | |
| He/she refuses to take treatment at times | Relapse | 44 (88) | 0 (0) | 06 (12) | 64.10 | 1 | .0001*** |
| | Remission | 04 (8) | 0 (0) | 46 (92) | | | |
| He/she denies to himself/herself as a patient | Relapse | 40 (80) | 03 (6) | 07 (14) | 50.33 | 2 | .0001*** |
| | Remission | 06 (12) | 02 (4) | 42 (84) | | | |
| At times and forget to remind him/her to take treatment | Relapse | 04 (8) | 08 (16) | 38 (76) | 4.2 | 2 | 0.12 |
| | Remission | 06 (12) | 02 (4) | 42 (84) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 3: Comparisons of Individual Factors of the Patient in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|----------|
| | | N (%) | N (%) | N (%) | | | |
| Mentally ill people do not have communication skills, i.e. do not communicate effectively | Relapse | 47 (94) | 01 (2) | 02 (4) | 0.57 | 2 | 0.74 |
| | Remission | 45 (90) | 02 (4) | 03 (6) | | | |
| Mentally ill people have no work skills, for example, cannot wash themselves | Relapse | 47 (94) | 01 (2) | 02 (4) | 1.38 | 2 | 0.50 |
| | Remission | 44 (88) | 01 (2) | 05 (10) | | | |
| Mentally ill people do not reason well | Relapse | 43 (86) | 03 (6) | 04 (8) | 2.23 | 2 | 0.32 |
| | Remission | 38 (76) | 03 (6) | 09 (18) | | | |
| He/she has a lack of good manner of approach when talking to others | Relapse | 43 (86) | 03 (6) | 04 (8) | 3.02 | 2 | 0.22 |
| | Remission | 37 (74) | 03 (6) | 10 (20) | | | |
| He/she cannot understand medicines when going to the hospital alone | Relapse | 36 (72) | 04 (8) | 10 (20) | 21.20 | 2 | .0001*** |
| | Remission | 14 (28) | 04 (8) | 32 (64) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 4: Comparison of Social Factors and Family Perception in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|----------|
| | | N (%) | N (%) | N (%) | | | |
| I think mentally ill should be allocated tasks to perform at home | Relapse | 45 (90) | 02 (4) | 03 (6) | 3.17 | 2 | 0.20 |
| | Remission | 49 (98) | 0 (0) | 01 (2) | | | |
| I think he/she should not be left alone because he/she will hurt him-/herself | Relapse | 40 (80) | 01 (2) | 09 (18) | 2.95 | 2 | 0.22 |
| | Remission | 41 (82) | 04 (8) | 05 (10) | | | |
| He/she is discharged with a discharge-card from psychiatric hospital | Relapse | 48 (96) | 02 (4) | 0 (0) | 0.34 | 1 | 0.55 |
| | Remission | 49 (98) | 01 (2) | 0 (0) | | | |
| I know the contents of the discharge-card | Relapse | 19 (38) | 09 (18) | 22 (44) | 10.8 | 2 | 0.004** |
| | Remission | 34 (68) | 08 (16) | 08 (16) | | | |
| I do not know what to do with the discharge-card | Relapse | 28 (56) | 13 (26) | 09 (18) | 10.9 | 2 | 0.004** |
| | Remission | 12 (24) | 25 (50) | 13 (26) | | | |
| I sometimes forget to remind him/her about follow up dates | Relapse | 05 (10) | 08 (16) | 37 (74) | 4.05 | 2 | 0.13 |
| | Remission | 05 (10) | 02 (4) | 43 (86) | | | |
| Mentally ill patient show more reaction when they face any problem | Relapse | 45 (90) | 03 (6) | 02 (4) | .47 | 2 | 0.78 |
| | Remission | 45 (90) | 04 (8) | 01 (2) | | | |
| It is difficult to go to the clinic for consultation because of distance | Relapse | 21 (42) | 0 (0) | 29 (58) | 14.5 | 2 | .0006*** |
| | Remission | 05 (10) | 02 (4) | 43 (86) | | | |
| Public transport cost about Rs.1,000 to visit the hospital | Relapse | 07 (14) | 0 (0) | 43 (86) | 4.89 | 1 | 0.02* |
| | Remission | 01 (2) | 0 (0) | 49 (98) | | | |
| I think the clinic should be open over weekends and public holidays | Relapse | 49 (98) | 01 (2) | 0 (0) | 3.09 | 2 | 0.21 |
| | Remission | 46 (92) | 01 (2) | 03 (6) | | | |
| Costly medicines cannot be purchase by the family members | Relapse | 27 (54) | 01 (2) | 22 (44) | 6.28 | 2 | 0.04* |
| | Remission | 15 (30) | 03 (6) | 32 (64) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 5: Comparisons of Societal Stigma in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|---------|
| | | N (%) | N (%) | N (%) | | | |
| It is not good to be related to a mentally ill person | Relapse | 45 (90) | 0 (0) | 05 (10) | 3.57 | 2 | 0.16 |
| | Remission | 39 (78) | 02 (4) | 09 (18) | | | |
| It is better to hospitalize him/her so that he/she is away | Relapse | 30 (60) | 02 (4) | 18 (36) | 2.48 | 2 | 0.28 |
| | Remission | 25 (50) | 06 (12) | 19 (38) | | | |
| Community members do not want to associate with a mentally ill person | Relapse | 50 (100) | 0 (0) | 0 (0) | 1.01 | 1 | 0.31 |
| | Remission | 49 (98) | 01 (2) | 0 (0) | | | |
| Community leisure activities are for normal people, not for mentally ill people | Relapse | 50 (100) | 0 (0) | 0 (0) | 7.52 | 2 | 0.02* |
| | Remission | 43 (86) | 05 (10) | 02 (4) | | | |
| I do respect mentally ill persons as individuals | Relapse | 49 (98) | 0 (0) | 01 (2) | 2 | 2 | 0.36 |
| | Remission | 49 (98) | 01 (2) | 0 (0) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 6: Comparisons of Religious Myth and Superstition in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|---------|
| | | N (%) | N (%) | N (%) | | | |
| Do you think psychiatric illness due to black shadow or witch craft | Relapse | 27 (54) | 0 (0) | 23 (46) | 7.21 | 2 | 0.02* |
| | Remission | 15 (30) | 02 (4) | 33 (66) | | | |
| Do you think the treatment of psychiatric illness possible at religious place/faith healer | Relapse | 10 (20) | 03 (6) | 37 (74) | 3.37 | 2 | 0.18 |
| | Remission | 04 (8) | 02 (4) | 44 (88) | | | |
| Did you take your patient at religious place/faith healer when he/she not respond the medicines | Relapse | 44 (88) | 0 (0) | 06 (12) | 5.82 | 1 | 0.01** |
| | Remission | 34 (68) | 0 (0) | 16 (32) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 7: Comparisons of Gender Difference in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|---------|
| | | N (%) | N (%) | N (%) | | | |
| It is normal for men to be hospitalized more frequently than women for psychiatric conditions | Relapse | 33 (66) | 05 (10) | 12 (24) | 0.51 | 2 | 0.77 |
| | Remission | 33 (66) | 07 (14) | 10 (20) | | | |
| I think a mentally ill person does not deserve marriage | Relapse | 24 (48) | 02 (4) | 24 (48) | 7.14 | 2 | 0.02* |
| | Remission | 12 (24) | 06 (12) | 32 (64) | | | |
| Male mentally ill people do not care about their lives because they abuse substances | Relapse | 50 (100) | 0 (0) | 0 (0) | 2.94 | 2 | 0.36 |
| | Remission | 48 (96) | 01 (2) | 01 (2) | | | |
| Female mentally ill persons care a lot about their appearance | Relapse | 48 (96) | 0 (0) | 02 (4) | 2.04 | 2 | 0.36 |
| | Remission | 46 (92) | 02 (4) | 02 (4) | | | |

*p<0.05, **p<0.01, ***p<0.001

Table 8: Comparisons of Rehabilitation of Patient in the Community in Relapse & Remission Group

| Statements | | Strongly Agree & Agree | Uncertain | Strongly Disagree & Disagree | X ² | d/f | p-value |
|---|-----------|------------------------|-----------|------------------------------|----------------|-----|---------|
| | | N (%) | N (%) | N (%) | | | |
| Resources are not available in the community where mentally ill people can work | Relapse | 37 (74) | 0 (0) | 13 (26) | 5.04 | 2 | 0.08 |
| | Remission | 30 (60) | 04 (8) | 16 (32) | | | |
| Mentally ill people are not able to comprehend a thing when they are told | Relapse | 45 (90) | 05 (10) | 0 (0) | 2.51 | 2 | 0.28 |
| | Remission | 41 (82) | 07 (14) | 02 (4) | | | |
| Community members accept and love mentally ill | Relapse | 03 (6) | 0 (0) | 47 (94) | 7.55 | 2 | 0.02* |
| | Remission | 07 (14) | 05 (10) | 38 (76) | | | |

*p<0.05, **p<0.01, ***p<0.001

References

- [1]. D. Robinson, M. G. Woerner, J. M. Alvir, R. Bilder, R. Goldman, S. Geisler, A. Koreen, B. Sheitman, M. Chakos, D. Mayerhoff and J. A. Lieberman, "Predictors of relapse following response from a first episode of schizophrenia or schizoaffective disorder," *Arch Gen Psychiatry*, vol. 56, no. 3, pp. 241-247, 1999.
- [2]. J. M. Kane, "Treatment strategies to prevent relapse and encourage remission," *J Clin Psychiatry*, vol. 68 Suppl 14, pp. 27-30, 2007.
- [3]. M. G. Harris, L. P. Henry, S. M. Harrigan, R. Purcell, O. S. Schwartz, S. E. Farrelly, A. L. Prosser, H. J. Jackson and P. D. McGorry, "The relationship between duration of untreated psychosis and outcome: an eight-year prospective study," *Schizophr Res*, vol. 79, no. 1, pp. 85-93, 2005.
- [4]. A. American Psychiatric, A. American Psychiatric and D.-I. Task Force on, *Diagnostic and statistical manual of mental disorders : DSM-IV-TR*, American Psychiatric Association, Washington, DC, 2000.
- [5]. G. Chabungbam, A. Avasthi and P. Sharan, "Sociodemographic and clinical factors associated with relapse in schizophrenia," *Psychiatry Clin Neurosci*, vol. 61, no. 6, pp. 587-593, 2007.
- [6]. L. San, M. Bernardo, A. Gomez and M. Pena, "Factors associated with relapse in patients with schizophrenia," *Int J Psychiatry Clin Pract*, vol. 17, no. 1, pp. 2-9, 2013.
- [7]. A. E. Sariah, A. H. Outwater and K. I. Malima, "Risk and protective factors for relapse among individuals with schizophrenia: a qualitative study in Dar es Salaam, Tanzania," *BMC Psychiatry*, vol. 14, pp. 240, 2014.
- [8]. A. Abdel-Baki, A. Lesage, L. Nicole, M. Cossette, E. Salvat and P. Lalonde, "Schizophrenia, an illness with bad outcome: myth or reality?," *Can J Psychiatry*, vol. 56, no. 2, pp. 92-101, 2011.
- [9]. M. Girón and M. Gómez-Beneyto, "Relationship Between Empathic Family Attitude and Relapse in Schizophrenia: A 2-Year Followup Prospective Study," *Schizophrenia Bulletin*, vol. 24, no. 4, pp. 619-627, 1998.
- [10]. D. O. Perkins, "Predictors of noncompliance in patients with schizophrenia," *J Clin Psychiatry*, vol. 63, no. 12, pp. 1121-1128, 2002.
- [11]. A. Turkington, C. C. Mulholland, T. M. Rushe, R. Anderson, R. McCaul, S. L. Barrett, R. S. Barr and S. J. Cooper, "Impact of persistent substance misuse on 1-year outcome in first-episode psychosis," *Br J Psychiatry*, vol. 195, no. 3, pp. 242-248, 2009.
- [12]. W. Hall and L. Degenhardt, "Cannabis use and psychosis: a review of clinical and epidemiological evidence," *Aust N Z J Psychiatry*, vol. 34, no. 1, pp. 26-34, 2000.
- [13]. L. R. Uys, "A theoretical framework for psychiatric rehabilitation," *Curationis*, vol. 14, no. 3, pp. 1-5, 1991.
- [14]. L. H. Beebe, "Problems in community living identified by people with schizophrenia," *J Psychosoc Nurs Ment Health Serv*, vol. 40, no. 2, pp. 38-45, 2002.
- [15]. R. Gray, M. Leese, J. Bindman, T. Becker, L. Burti, A. David, K. Gournay, M. Kikkert, M. Koeter, B. Puschner, A. Schene, G. Thornicroft and M. Tansella, "Adherence therapy for people with schizophrenia. European multicentre randomised controlled trial," *Br J Psychiatry*, vol. 189, pp. 508-514, 2006.
- [16]. H. Ascher-Svanum, D. E. Faries, B. Zhu, F. R. Ernst, M. S. Swartz and J. W. Swanson, "Medication adherence and long-term functional outcomes in the treatment of schizophrenia in usual care," *J Clin Psychiatry*, vol. 67, no. 3, pp. 453-460, 2006.
- [17]. P. H. Lysaker, M. D. Bell, W. S. Zito and S. M. Bioty, "Social skills at work. Deficits and predictors of improvement in schizophrenia," *J Nerv Ment Dis*, vol. 183, no. 11, pp. 688-692, 1995.
- [18]. Z. S. Weret and R. Mukherjee, "Prevalence of Relapse and Associated Factors in Patient with Schizophrenia at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia: Institution Based Cross Sectional Study."
- [19]. S. Moritz and T. S. Woodward, "Jumping to conclusions in delusional and non-delusional schizophrenic patients," *Br J Clin Psychol*, vol. 44, no. Pt 2, pp. 193-207, 2005.
- [20]. A. Sagduyu, T. Aker, E. Ozmen, S. Uguz, K. Ogel and D. Tamar, "[Relatives' beliefs and attitudes towards schizophrenia: an epidemiological investigation]," *Turk Psikiyatri Derg*, vol. 14, no. 3, pp. 203-212, 2003.
- [21]. G. Morken, J. H. Widen and R. W. Grawe, "Non-adherence to antipsychotic medication, relapse and rehospitalisation in recent-onset schizophrenia," *BMC Psychiatry*, vol. 8, pp. 32, 2008.
- [22]. D. L. Penn, S. Kommana, M. Mansfield and B. G. Link, "Dispelling the stigma of schizophrenia: II. The impact of information on dangerousness," *Schizophr Bull*, vol. 25, no. 3, pp. 437-446, 1999.
- [23]. D. H. Lam, "Psychosocial family intervention in schizophrenia: a review of empirical studies," *Psychol Med*, vol. 21, no. 2, pp. 423-441, 1991.
- [24]. P. Huxley and G. Thornicroft, "Social inclusion, social quality and mental illness," *Br J Psychiatry*, vol. 182, pp. 289-290, 2003.
- [25]. M. Ostman and L. Kjellin, "Stigma by association: psychological factors in relatives of people with mental illness," *Br J Psychiatry*, vol. 181, pp. 494-498, 2002.
- [26]. L. Magliano, M. Guarneri, A. Fiorillo, C. Marasco, C. Malangone and M. Maj, "A multicenter Italian study of patients' relatives' beliefs about schizophrenia," *Psychiatr Serv*, vol. 52, no. 11, pp. 1528-1530, 2001.

- [27]. B. J. Miller, C. Bodenheimer and K. Crittenden, "Second-generation antipsychotic discontinuation in first episode psychosis: an updated review," *Clin Psychopharmacol Neurosci*, vol. 9, no. 2, pp. 45-53, 2011.
- [28]. M. H. Mubbashar and S. Farooq, "Mental health literacy in developing countries," *Br J Psychiatry*, vol. 179, pp. 75, 2001.
- [29]. G. Shean, *Understanding and treating schizophrenia : contemporary research, theory, and practice*, Haworth Clinical Practice Press, New York, 2004.
- [30]. P. Vijayalakshmi and S. B. Math, "Gender differences in mental health literacy of family caregivers of persons with mental illness: an Indian perspective," *International Journal of Mental Health Promotion*, vol. 15, no. 2, pp. 93-104, 2013.
- [31]. D. Vimala, A. K. Rajan, R. Siva and D. Braganza, "A study to assess the knowledge, attitude and practices of family members of clients with mental illness," *Nurs J India*, vol. 94, no. 10, pp. 223-224, 2003.