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Is Marriage Solution for Persons with Schizophrenia?

Prakash B Behere[1], **Kiran Verma**[2], **Amit B Nagdive**[3]✉, **Himanshu Mansharamani**[4], **Aniruddh P Behere**[5], **Richa Yadav**[6], **Rouchelle Fernandes**[7]

[1]Former Vice Chancellor, D Y Patil University, Kolhapur (MS); Director Professor,Department of Psychiatry Jawahar Lal Nehru Medical College, Director School of Advanced Studies, Datta Meghe Institute of Medical Sciences (Deemed University), Sawangi, Wardha-442107, (Maharashtra) India. Email: pbbehere@gmail.com

[2]Former Resident , Department of Psychiatry ,Mahatma Gandhi Institute of Medical Sciences ,Sevagram -442102, Wardha, Maharashtra, India; Email: kiransingh179@yahoo.com

[3]Associate Professor, Department of Psychiatry, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences (Deemed University), Wardha –442107, Maharashtra, India; Email: amitnagdive77@gmail.com

[4]Consultant Psychiatrist, Vishesh Hospital, Indore, MP, India; Email: himanshu.mansha@gmail.com

[5]Helen Devos Children's Hospital ,Assistant Professor, Department of Pediatrics and Human Development, Michigan State University College of Human Medicine Grand Rapids MI USA, Adjunct Faculty Datta Meghe Institute of Medical Sciences (Deemed University), Wardha-442107, India; Email: aniruddhbehere@gmail.com

[6]Assistant Professor , Department of Psychiatry and Behavioural Sciences, OU College of Medicine, Oklahoma City, Oklahoma, USA Adjunct Faculty , Datta Meghe Institute of Medical Sciences (Deemed University) , Wardha, India; Email: drrichayadav@gmail.com

[7]Resident, Department of Psychiatry, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences (Deemed University), Wardha –442107, Maharashtra, India. Email: rouchelle795@gmail.com

✉**Corresponding author**
Associate Professor, Department of Psychiatry, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences (Deemed University), Wardha –442107, Maharashtra,
India;
Email: amitnagdive77@gmail.com

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ANALYSIS ARTICLE

ABSTRACT

Context: Marriage is considered as an important life event which not only affects the physical status but also psyche of a person. There is a common belief in our society that marriage can cure mental illness, but this is rather a topic of discussion. *Aims:* Aims and objectives of the study were to assess the effect of marriage on clinical outcome, severity of illness, quality of life and disability among the married patients with schizophrenia and to compare same with never married with schizophrenia. *Setting and Design*: It is a retrospective Case Control study, conducted on outpatients and inpatients of Psychiatry dept. at a tertiary health care centre in rural Central India for a period of 12 months in 2018. *Methods and Material*: A total of 80 subjects (40 cases and 40 controls) by random sampling were included in the study. Assessment was done using Brief Psychiatric Rating Scale (BPRS), Post Graduate Institute (PGI) Quality of Life Scale and Disability Assessment Scale (DAS). *Statistical analysis used*: Statistical analysis was done by using appropriate tools. *Results:* Most of the subjects were suffering with paranoid schizophrenia, were having arranged marriage and did partially disclosed information about the illness to in-laws and spouse before marriage. It was found that there is a common belief in society that marriage can cure mental illness. More relapses were seen in married males with low per capita income, education levels and having positive family history of mental illness. Majority of separations were seen within two years of marriage and among female subjects. Subjects suffering with paranoid schizophrenia had less separation rates than subjects suffering with other types of schizophrenia and having a child was protective factor for separation. *Conclusions:* There is a high need to address the psychological stress due to adjustments in marriage which can be detrimental to the mental health of persons already suffering with a mental illness.

Keywords: Schizophrenia, Marriage, Disability, Separation

1. INTRODUCTION

Marriage is defined as "the state of being united as spouses in a consensual and contractual relationship recognized by law" (Merriam-Webster Dictionary, 2019). Marriage is considered as an important life event which not only affects the physical status but also psyche of a person. While marriage helps person achieve sexual gratification through a socially acceptable way, it also helps to improve personality maturation of an individual. In India, marriage is a social affair as families of both sides are involved and this makes it a union of two families rather than just a union between two individuals (Behere et al., 2011). There is a common belief in Indian society that marriage can cure mental illness, but this is rather a topic of discussion, as on one hand marriage can provide good emotional support which can help in physical and mental well-being of both the individuals, while on the other hand adjustment issues in marriage can cause mental distress. Thus, marriage can have protective as well as debilitating effects on the course of mental illness (Kumar et al., 2019, Behere et al., 2011).

Schizophrenia is a mental disorder characterized by disintegration of thought processes and of emotional responsiveness along with other symptoms. A marriage requires acquiring certain social abilities to be successful, as it is a social process. Schizophrenia usually leads to a reduction of such abilities and is usually diagnosed during late adolescence and early adulthood. It is supposed that once a person is diagnosed with schizophrenia, he /she have to live with the illness for rest of the life, and the illness is said to have a progressively deteriorating course in most of the patients (Walker, 2013). There are reports that rate of marriage in persons suffering from schizophrenia are less than that of general population due to stigma attached with the illness. Also, it is not uncommon that history of psychiatric illness is hidden from the spouse at the time of marriage and medicines are stopped, until after a few months there is relapse of symptoms and the spouse and in-laws realize the presence of mental illness (Thara Kamath, 2015 and Rangaswamy, 2012).

Being a disease of age at which decision of marriage is taken, mental health professionals are frequently asked by patients and their relatives regarding questions and advice about the marriage of a person suffering from schizophrenia. The answers of many of

the questions posed by families are unclear; hence this study was carried out as there is limited research data on effect of marriage on persons suffering with schizophrenia.

Aims and objectives

Aims and objectives of the study were to measure the effect of marriage on clinical outcome, severity of illness, quality of life and disability among the married patients with schizophrenia (cases) and to compare the same with never married persons with schizophrenia (controls).

2. MATERIALS AND METHODS

It is a retrospective Case Control study, conducted on outpatients and inpatients admitted in Psychiatry Ward at a tertiary health care centre in Central India. Forty patients (both sexes) of Schizophrenia who got married whilst under treatment and who fulfilled the diagnostic criteria for schizophrenia for age and sex matched patients of schizophrenia on treatment, who were never married were selected as controls were included. A total of 80 subjects (40 cases and 40 controls) by random sampling were included in the study. Institutional ethical clearance was taken before commencing the study and an informed consent was taken from the subject or caregiver before interviewing (WHO, 1992).

Inclusion Criteria

Subjects of either sex fulfilling the diagnostic criteria of schizophrenia according to ICD-10
Subjects or caregivers willing to give informed consent for the study who understood Hindi/English or Marathi
Only subjects those who got married while under treatment follow up were included in the study (Study Sample)
Subjects without any co morbid psychiatric disorder or physical problems

Exclusion Criteria

Subjects not willing to give informed consent
Any individual married but with onset of Schizophrenia after the marriage will be excluded.
Subjects or caregivers who did not understand either Hindi / English or Marathi language
Subjects having a co morbid psychiatric disorder or physical problems

Selection of controls

We selected 1:1 age (± 5 years), and gender matched subjects with schizophrenia ICD-10 (WHO, 1992) Criteria for Research, who are never married as controls. Written informed consent was obtained before participation in study. This study duration was 12 months from the date of inclusion of last patient. The patients with schizophrenia attending Department of psychiatry either as outpatient or in-patients in psychiatry ward belonging to both groups i.e. married and never married were interviewed. One key relative informant of every patient was also interviewed.

Methodology

The subjects diagnosed with schizophrenia as per ICD-10 criteria, which fulfilled inclusion and exclusion criteria for the current study are taken. They were divided into married and never married cohort. All the tools were used which were described in the methodology. Subjects were followed up for six months. The control group comprised of never married cohorts. Whilst on this study, if never married cohort got married, then they were moved from control group to the study group. Then subjects from both cohorts in study were administered various tools as already described and outcome was assessed and described regarding following aspects in terms of marital adjustment, family interaction pattern, family jointness, psychiatric morbidity & quality of life (figure 1 & 2).

Tools used for the study were

A semi-structured proforma to record demographic and socioeconomic variables

It included Name of the patient, occupational status, education, marital status address, informant, diagnosis, duration of illness; relapse, past history, family history, family structure and additional information regarding marriage and divorce of cases.

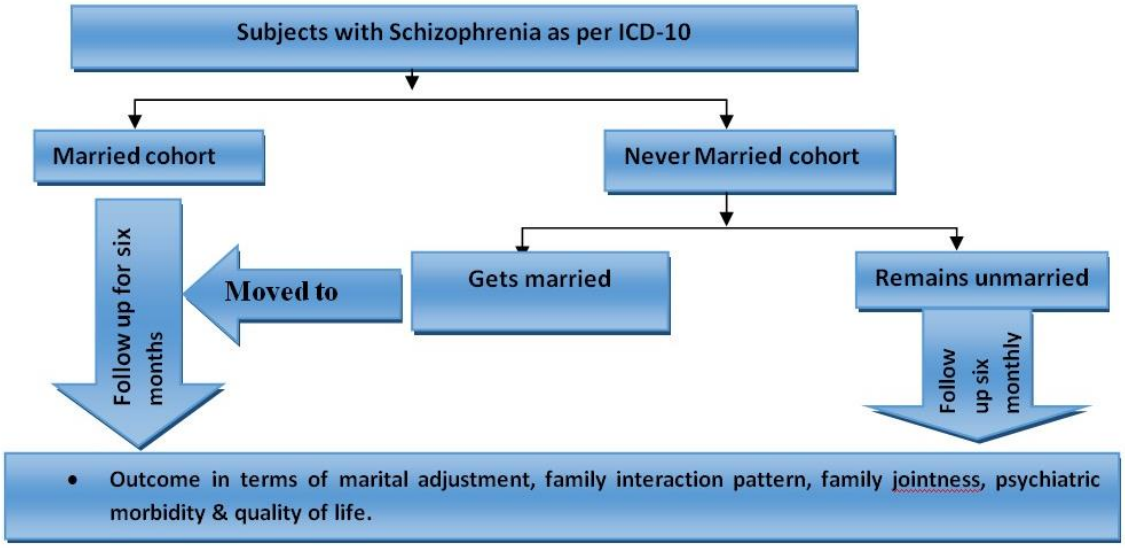

Figure 1 Depicts flowchart of the study methodology

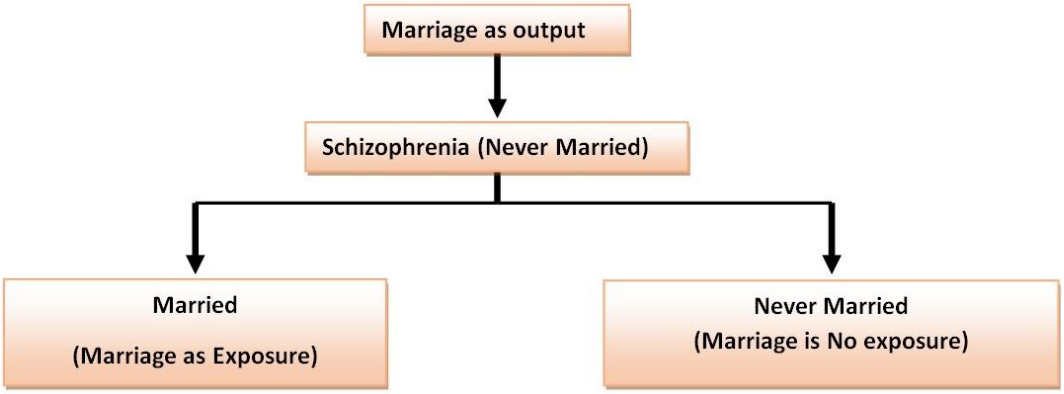

Figure 2 Marriage as output and exposure:

Brief Psychiatric Rating Scale [BPRS] (Overall and Gorham, 1988).

BPRS is rating scale first published in 1962 for use by clinician or researcher to measure psychiatric symptoms such as depression, anxiety, hallucinations and unusual behavior.

PGI Quality of Life Scale (Moudgil et al., 1986)

Hindi version of P.G.I (Post Graduate Institute) Quality of life is developed by Moudgil et al. (1986). The scale is a standardized, brief, reliable and valid scale. This is not affected by age, education, socio-economic status and social desirability response set. This test comprises of 26 statements. Each statement has 5 alternatives or 5 levels of responses ranging from low to high degree. Both divergent and convergent validities of the scale are well established. High score on the scale is indicative of high level of quality of life on an individual.

Disability Assessment Scale [DAS] (Behere and Tiwari, 1991)

Disability Assessment scale (DAS) is a standardized scale developed by Dr. P. B. Behere and Dr. K. Tiwari (1991). It measures the level of disability covering five areas of disability viz. Personal, social, occupational, physical, and general.

Design and population

Study population was individuals suffering from Schizophrenia with onset prior to the marriage. Any individual married but with onset of Schizophrenia after the marriage are excluded. All patients with Schizophrenia as per criteria of ICD-10 (WHO 1992) attended psychiatry clinic were included in the study over a period of 12 months and were subsequently followed up for a period of six months. Depending upon previous experience and pilot study we recruited 80 subjects (40 subjects each in case and control groups respectively) in the study.

Statistical Analysis

Statistical analysis was done by using descriptive and inferential statistics using Chi-square test, odds ratio, EPI-INFO 6.0 version and $p<0.05$ is considered as level of significance; p value less than 0.01 was considered as statistically very significant and; p value of less than 0.001 was considered as statistically extremely significant.

3. RESULTS

We interviewed 80 subjects (40 cases and 40 controls) with diagnosis of schizophrenia, equally distributed in both groups; married (cases) and rest half (controls) never married. Both in and out patients were included. Table 1 reveals status of the socio demographic characteristics viz. age, sex, educational, employment status, socio-economic status, family structure, per capita income and total duration of illness, residence, religion and diagnosis of both cases and controls. No significant difference was found between both the groups.

Table 1 Socio-demographic characteristics of the cases & controls

Variables		Cases(n=40)	Controls(n=40)	p value
Age	<30 yrs	23 (57.5%)	29 (72.5%)	p >0.05
	>31 yrs	17 (42.5%)	11 (27.5%)	
Sex	Male	21 (52.5)	21 (52.5)	p >0.05
	Female	19 (47.5)	19 (47.5)	
Education	Illiterate	2 (5.0)	2 (5.0)	p >0.05
	<10th standard	11 (27.5)	12 (30.0)	
	>10th standard	27(67.5)	26 (65.0)	
Occupation	Job/business	4(10.0)	9 (22.5)	p >0.05
	Farmer/daily labourer	19(47.5)	10(25.0)	
	Housewife	14(35)	14(35)	
	Not working	3 (7.5)	7(17.5)	
Family structure	Joint	24(60.0)	21(52.5)	p >0.05
	Nuclear	16(40.0)	19 (47.5)	
Per capita income per month	<1000 rupees	11(27.5)	14 (35.0)	p >0.05
	1001-2000 rupees	20(50.0)	22 (55.0)	
	>2001 rupees	9(22.5)	4 (10.0)	
Duration of illness	Up to 5 yrs	13(32.5)	21 (52.5)	p >0.05
	6-10 yrs	20(50.0)	14 (35.0)	
	>11 yrs	7(17.5)	5 (12.5)	
Residence	Rural	28(70)	25(62.5)	
	Urban	12(30)	15(37.5)	
Religion	Hindu	39(97.5)	38(95.0)	p >0.05
	Muslim	1(2.5)	2(5.0)	
Diagnosis	Paranoid	32(80)	37(92.5)	P >0.05
	Others	8(20)	3(7.5)	

Majority of the cases were married for 5 years (70%) and 97.5 % were arranged marriages as compared to 2.5% love marriages. Only 20% patients informed their spouses and in-laws about their illness prior to marriage. Out of these 37.5% gave detailed information that they were having major psychiatric illness and rest did not give detailed information, instead they informed that they were getting medication for sleep disturbances and mental tension, etc. Separation was seen in 42.5% of cases, out of these majority (70%) separated within 2 years of marriage, 23.52% in 3-5 years and rest in more than 6 years of marriage. This suggests separation occurs early in the marriage in persons suffering with schizophrenia.

Thirty seven percentage cases had good marital adjustment with partners, whilst 20% were having satisfactory marital life and majority of cases were married once (92.5%), whilst only 7.5% married twice. Married subjects with schizophrenia (70%) had higher relapse rate as compared to never married controls (57.5%). It seems that marriage acts as a stressor for relapses of schizophrenia, but the findings are statistically not significant ($p>0.05$). Married subjects with schizophrenia showed more relapses (1-2 episodes) i.e. 92.8% as compared to never married but when numbers of relapses were more than 3 than it was higher (21.73%) in never married schizophrenia. Among married 35% were having family history of psychoses as compared to never married (32.5%).

Among cases 60% males had relapse as compared to 50% among females. Relapses were 2.75 times more common among married men as compared to never married men; though the association is statistically not significant. In females relapses were equal among married and never married females. Overall there was no significant difference between relapse rates among married and never married persons with schizophrenia (table 2).

Table 2 Relapses of Schizophrenia among cases & controls

Variables		Cases	Controls	p-value
Relapse of symptoms (n=40)	Yes	28(70.0%)	23(57.5%)	p >0.05
	No	12(30.0)	17 (42.5)	
Frequency of relapse (n=28 for cases) (n=23 for controls)	Up to 2	26(92.8)	18 (78.26)	p >0.05
	>3	2 (7.14)	5 (21.73)	
Family history (n=40)	Yes	14 (35.0)	13 (32.5)	p >0.05
	No	26 (65.0)	27 (67.5)	

When the onset of schizophrenia was in less than 20 years of age, then relapses were 1.14 times more in married schizophrenics. If the onset of schizophrenia was in age group between 21-25 years, relapses were 2.18 times more and when the onset was above 26 years of age relapses were 3 times higher in married persons with schizophrenia. So late onset of schizophrenia showed more relapses but the findings are statistically not significant. Relapses were 4 times higher in married subjects suffering with schizophrenia as compared to never married subjects with schizophrenia if the education level was less than 10^{th} standard. For education level above 10^{th} standard relapses were almost equal in both groups. Although education affects relapse rate, the findings are statistically not significant. 63.2% cases had relapses that had a positive family history of psychoses as compared to 36.85% in controls. Relapse rates were equal (50%) in both groups if there was no family history of psychoses. There was five times more chance of relapses in married persons with schizophrenia if family history was positive, but this was statistically not significant. Relapses were found to be higher (53.33%) in cases with per capita income < 2000 rupees as compared to controls (46.66%). The odds of having relapses were 2.45 times more in cases if the per capita income was < 2000 rupees. Per capita income of >2001 rupees seemed to have protective effect for cases in terms of relapses as there was less chance of having relapses (odds=0.8) as compared to controls, but the findings were statistically not significant.

The odds of having relapses were 3.5 times in other schizophrenia (non-paranoid) while 1.45 times in paranoid schizophrenia in married cases but the findings are statistically not significant (Table 3).

Married persons with schizophrenia with positive family history (35%), were having much higher separation rates (64.28%) as compared to subjects not having family history of psychosis (30.76%). Findings in our study suggests that there were 4 times more chance of having separation if there was positive family history of psychoses, hence there was association between family history and separation as the findings are statistically significant.

When patients were asked about their perception whether marriage can cure mental disease like schizophrenia, 52.53% patient who were married said yes to the old saying that "marriage can cure mental illness", 30% said that there is no relationship between marriage and mental illness and rest 17.5% had no idea about the relationship between both (figure 3).

Table 3 Type of schizophrenia and relapse						
Type of schizophrenia	Relapses	Cases	Controls	Total	Odds ratio	P value
Paranoid	Yes	21 50%	21 50%	42 100%	1.45	0.45
	No	11 40.74%	16 59.25%	27 100%		
Others	Yes	7 77.77%	2 22.22%	9 100%	3.50	0.42
	No	1 50%	1 50%	2 100%		
		40	40	80 100%		

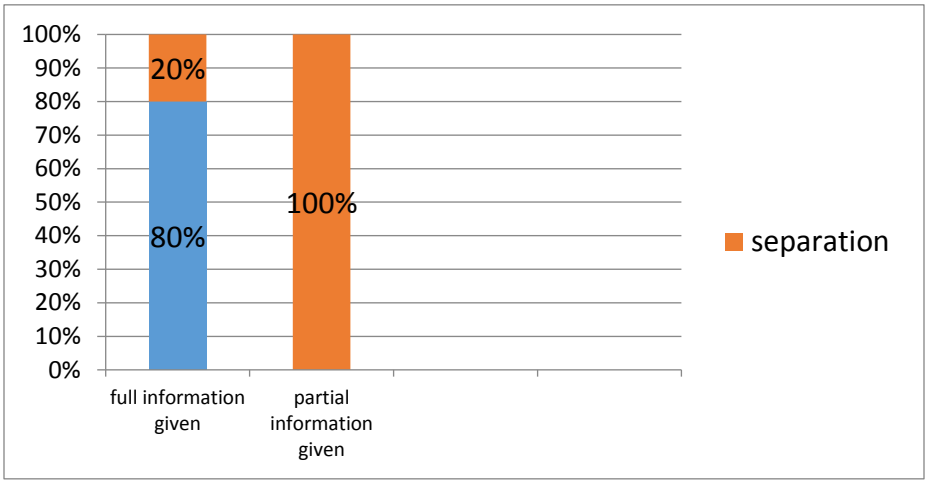

Figure 3 Association between prior information about mental illness and separation

In those who believed that marriage can cure mental illness, separation was found in 14% cases only as compared to 83.33% in those who denied such relationship. The findings are statistically not significant (figure 4).

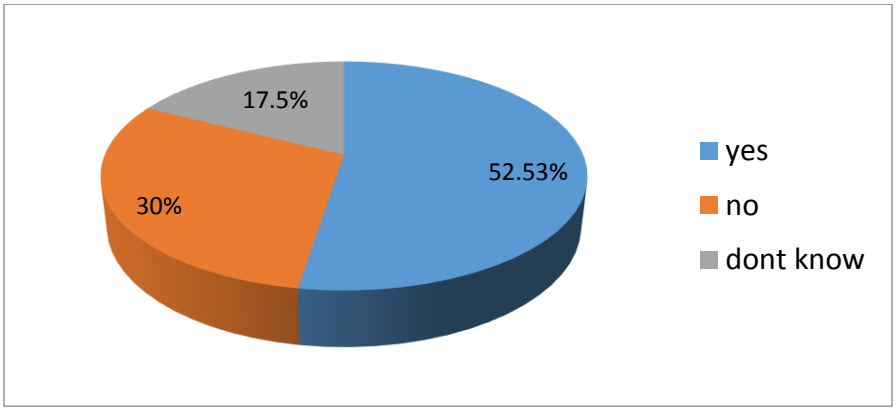

Figure 4 patient perceptions whether marriage can cure mental illness

Out of 20% who gave prior information to their spouse and in-laws, separation was found to be 50% which was equal to those who did not inform, but separation was more in cases where partial information was given as compared to those who gave full information about their illness The finding was statistically not significant (figure 5).

Having children seemed to be protective factor as 72.2% cases who were having children did not separate. The odds of separation were three times more in those who did not have children, but the findings were statistically not significant (table 4).

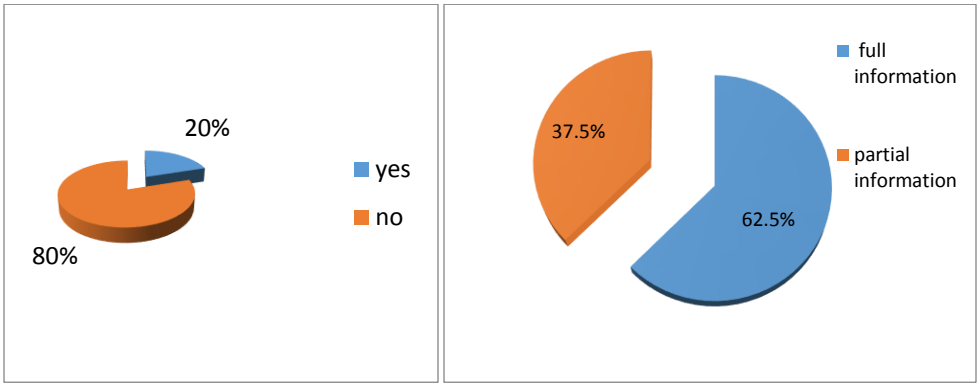

Figure 5 Prior information disclosed.

Table 4 Association of having children and separation among cases

Children	Separation			Odds ratio	P value
	No	Yes	total		
Yes	13 72.2%	5 27.8%	18 100%		
No	10 45.5%	12 54.5%	22 100%		
Total	23 57.5%	17 42.5%	40 100%	3.12	0.05

In cases of paranoid schizophrenia separation was in only 34% of cases, as compared to patients with other type of schizophrenia (hebephrenic and undifferentiated) in whom 75% cases got divorced. It suggests that type of schizophrenia and separation has statistically significant relations (p>0.05)

Table 5 Association of type of schizophrenia and separation

Type of schizophrenia	Separation		Total	Odds ratio	P value
	Yes	No			
Paranoid schizophrenia (N=32)	11 34.4%	21 65.6%	32 100%		
Other schizophrenia (N=8)	6 75%	2 25%	8 100%	5.72	0.02

The mean score of Brief Psychiatry Rating Scale was 31.0 (SD=6.2) in married persons with schizophrenia and 31.9 (SD=9.3) in never married persons with schizophrenia. No significant difference was found between both groups in severity of mental illness. The mean score of Quality of life scale 81.7(SD=14.4) in married persons with schizophrenia and 78.0 (SD=14.8) in never married persons with schizophrenia. As no statistically significant difference was found it suggests that there was no difference in the quality of life among the two groups (table 5).

No statistical significant difference was found on Disability Assessment Scale among the married and never married persons with schizophrenia irrespective of the disability in all the five areas of Scale.

4. DISCUSSION

Assessment of demographic characteristics of the subjects under study revealed that 57.5% of subjects and in controls 72.5% of subjects belonged to the age group of less than 30 years. No significant difference was found among both groups with respect to

age. Though there was no significant difference between the gender distributions of both the groups, male predominance was seen among both the groups. This male preponderance was noticed in other studies as well (Thara and Srinivasan, 1997; Kulhara and Wig, 1978). Overall Schizophrenia has equal prevalence in both sexes. It is possible that stigma associated with mental illness may have resulted in less number females brought to hospitals for receiving medical help (Deegan, 1990). Furthermore previous studies have shown that men require a higher number of re-hospitalizations (Goldstein, 1988) and that men have a poorer outcome to treatment (Angermeyer et al., 1990). Around 66% of the subjects came from the rural areas and rest came from the urban areas. The fact that the study was conducted in a rural medical college, having a predominantly rural catchment area, could have resulted in more number of subjects from rural areas as compared to urban areas.

Education level of more than 10th standard was found in 67.5% of subject in cases and 65% subjects in controls. Five percent of subjects in both groups were illiterate and rests were educated till 10th standard. There was no statistically significant difference in rural-urban distribution and literacy rate among the married group and the never married group. Majority of subjects in cases (77.5%) and controls (90%) were having per capita income of less than 2000 rupees. As there were no significant differences between the socioeconomic status of the married and the never married group, the groups can be considered as comparable. Most of the study subjects were farmers/ daily wage laborers (92.5%) by profession. As most of the study subjects belonged to the rural areas where farming and agricultural work are the main profession, it explains the above figures. Hindus formed the majority of the subjects (97.5%). The differences in the occupational status and religion among the subjects in two groups were not significant. There was a predominance of paranoid subtype of schizophrenia comprising 82.5% in cases and 92.5% in controls that was similar to the findings of Kulhara et al., who also found maximum number of paranoid schizophrenia patient in their study.

In our study we found that there were more relapses (70%) in married subjects as compared to never married subjects (57.5%). If we divide frequency of relapses in two groups as up to 2, and more than 3 then we observed 92.8% of married schizophrenic had up to 2 relapses as compared to other group (78.26%). But more than 3 relapses were found in majority (21.73%) in never married subject as compared to 7.14 in married subjects. Findings of our study are similar with a study done by Kulhara et al. (Kulhara et al., 1998) which also suggests that married subjects have more relapses. Hence, life events may be factor for relapses in married schizophrenia however we did not take this variable in our study. Our findings are in contrast with some studies which found that relapse rates were higher in single or never married subjects (Thara, Srinivasan, 1997 and Odegard 1953). In association with gender, we observed that married males had more relapses (60%) as compared to never married males (40%), and we found equal relapses in females of both the groups (50%). We also observed that odds of having relapses were 2.75 times higher in married subjects with schizophrenia. Our study findings are in contrast with the study done by Farina (Farina et al., 1963) which concluded that relapses were more in single subjects of schizophrenia.

We also found that relapses were more in single females (68.4%) than single males (47.6%), and that relapses were equal in females of both groups which are unrelated to their marital status. Our findings are in concordance with the study done by Cochrane et al., (Cochrane and Stopes, 1981) who also found that Women report more psychological symptoms than men, and in contrast with the findings of study done by Watt et al. (Watt and Szulecka, 1979) which suggested that that single males were more frequently admitted than single females. We found that 87.5% of married schizophrenic had total duration of illness within 10 years of marriage. It means marriage occurred in these patients of schizophrenia within 10 years of onset of illness, this finding correlates with the finding of the study done by Thara et al., in which they found 70% of schizophrenic patient got married within 10 years of first break of illness.

In our study we found that having child was a protective factor for separation as 72.2% of patients with schizophrenia who had children, did not separate. Thara et al., similarly to our findings also found that more women had broken marriages especially if they were childless. The reason could be that presence of child could place some obligation on couples to stay together (Behere 2019). Findings are in concordance with the study done by Thara et al., 1997 which also observed more broken marriages in females than in male subjects, as it is an acceptable practice in the society for men to endorse separation or divorce due to wife's mental illness but not vice versa as it raises a social disapproval that the women was not caring enough and decided to leave the husband. Also, most of the females were not legally separated and did not receive any financial support from their respective husbands (Behere, 2019 and Hailemariam, 2019). It has been observed that marriage outcomes are worst in persons suffering with schizophrenia than any other mental illness (Shaily Mina, 2019 and Ashish Srivastava, 2013). Relapses were more in other subtypes of schizophrenia than in paranoid schizophrenia in our study. The results are in contrast with the study done by Das et al., (Das et al., 1997 and Deshmukh et al., 2000), who found that relapses were more in subjects suffering with paranoid schizophrenia.

In our study we found that only 20% patients and their family disclosed about the ailment prior to the marriage and out of these 20% only 37.5% gave full information and rest gave partial information. Equal separation (50%) was found in both the group who gave information and who did not informed, but separation was more when partial information (Anxiety, sleep disturbance etc.) was

given as compared to those who were fully informed about illness (Schizophrenia). The findings of our study are in concordance with the study done by Deshmukh et al., which also suggested that marriages were better when spouse and his/her family were informed about the illness prior to marriage and on the other hand divorce rates were high in cases where spouse or the family were kept in dark about the ailment. Regarding the association of family history of schizophrenia and relapses in patients of schizophrenia we observed that there were five times more chances of having relapses in married persons with schizophrenia if there is positive family history, but the findings are not statistically significant. The findings are in concordance with the study done by Ganguli (Ganguli, 2000) which also suggested that the relapse of functional psychoses was not found to be related to the genetic loading.

In our study the mean score of Quality of life of married subjects was 81 and mean score of QOL of never married subject was 78; it shows that there was no significant difference in the Quality of life in both the groups. The findings of our study are in contrast with the study done by Nyer (Nyer et al., 2010) on patients of schizophrenia spectrum disorder, which concluded that married participants enjoyed a higher quality of life than those who were single in-patients. In our study we compared the disability in various area of life viz; personal, social, occupational, physical and general among the married and never married subjects suffering with schizophrenia and we found no significant difference in disability among the two groups. There is paucity of research in the literature on this topic. But, we all know that schizophrenia is a disease with considerable disability. Available studies in recent literature suggest that, it is the type of mental disorder which decides the number of individuals who are disabled and the severity of disability and among all mental illnesses Schizophrenia was found to be the ``most severely disabling disorder (Bassett et al., 1998; Bij and Ravelli, 2000; Kessler and Frank, 1997; Spitzer et al., 1995; Olfson et al., 1997 and Andrews et al., 1998).

Limitations

This study has certain limitations like Small sample size because it was a time bound study to be finished. As study was conducted in a rural medical School, a larger multicenter study is worth doing. In this study there was only six months follow-up due to being time bound in nature, long term study with duration of five years is worth doing

5. CONCLUSION

Thus, the findings in our study suggests that the relapses were more after marriage; Regarding gender, more male patients experienced relapses after marriage as compared to single males; Marriage does not increase relapse rate in females after marriage; Marriage does not seem to affect quality of life in married subjects as there is no difference between QOL among married and never married persons suffering with schizophrenia and that married or un-married the disability due to schizophrenia was same among subjects of both the groups. There is a high need to address the psychological stress due to adjustments in marriage which can be detrimental to the mental health of persons already suffering with a mental illness.

Declaration

Scientific Responsibility Statement The authors declare that they are responsible for the article's scientific content including study design, data collection, analysis and interpretation, writing, some of the main line, or all of the preparation and scientific review of the contents and approval of the final version of the article.

Animal and human rights statement

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. No animal or human studies were carried out by the authors for this article.

Informed consent

Informed consent was obtained from all individual participants included in the study. Additional informed consent was obtained from Key Relatives of patients.

Ethical approval

The study was approved by the Medical Ethics Committee of Institute of Medical Sciences, Sewagram, Wardha, Maharashtra, India.

Contribution

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Abbreviations

BPRS – Brief Psychiatric Rating Scale
DAS – Disability Assessment Scale
ICD 10- International Classification of Diseases
PGI -Post Graduate Institute

Conflicts of interests

The authors declare that there are no conflicts of interests.

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REFERENCE

1. Akshata NM, Behere PB. Effect of marriage on women with schizophrenia: a preliminary study. J DMIMSU. 2016; 11(1):24–8.
2. Andrews G, Sanderson K, Beard J. Burden of disease: methods for calculating disability from mental disorder. British Journal of Psychiatry. 1998;173:123-131
3. Angermeyer MC, Kuhn L, Goldstein JM. Gender in the Course of Schizophrenia: Differences in Treated Outcomes. Schizophrenia Bulletin 1990; 16:293- 306.
4. Ashish Srivastava. Marriage as a perceived panacea to mental illness in India: Reality check. Indian Journal of Psychiatry. January 2013. 55 (Suppl 2):S239-42
5. Bassett SS, Chase GA, Folstein MF et al. Disability and psychiatric disorders in an urban community: measurement, prevalence, and outcomes. Psychological Medicine 1998;28:509-517
6. Behere PB, Rao TSS &Verma K. Guest Editorial The effect of marriage on pre-existing psychoses. Indian Jn. Psychiatry 2011; 53(4):287-288
7. Behere PB. Effect of marriage on pre-existing psychoses. Indian J Soc Psychiatry, 2019; 35:10-2.
8. Behre PB, Tiwari K. Manual for disabilty assessment schedule. Varanasi: Rupa Psychological Center; 1991.
9. Bij RV, Ravelli A. Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Psychological Medicine 2000;30:657-668
10. Cochrane R, Stopes M. Women, marriage, employment and mental health. The British Journal of Psychiatry 1981; 139: 373-381
11. Deegan P.E. Spirit breaking: When the helping professions hurt. Humanistic Psychologist 1990; 18: 301-313.
12. Deshmukh V, Bhagat A, Shah N, Sonavane S, Desousa AA. Factors affecting marriage in schizophrenia: A cross-sectional Study. J Mental Health Hum Behav 2016; 21:122-4.
13. Farina, Amerigo, Garmezy, Norman, Barry, Herber et al. Relationship of Marital Status to Incidence and Prognosis of Schizophrenia. The Journal of Abnormal and Social Psychology 1963; 67(6): 624-630.
14. Ganguli HC: Epidemiological findings on prevalence of mental disorders in India. Indian Journal of Psychiatry 2000; 42 (1): 14-20
15. Goldstein J.M. Gender Differences in the Course of Schizophrenia. American Journal of Psychiatry 1988; 145:684-689.
16. Hailemariam M, Ghebrehiwet S, Baul T, Restivo JL, Shibre T, Henderson DC, Girma E, Fekadu A, Teferra S, Hanlon C, Johnson JE, Borba CPC. "He can send her to her parents": The interaction between marriageability, gender and serious mental illness in rural Ethiopia. BMC Psychiatry. 2019 Oct 26; 19(1):315.
17. Kessler RC, Frank RG. The impact of psychiatric disorders on work loss days. Psychological Medicine 1997;27:861-873
18. Kulhara, P, Wig NN. The chronicity of schizophrenia in North West India: results of a follow-up study. British Journal of Psychiatry. 1978; 132:186– 190.
19. Kumar P, Sharma N, Ghai S, Grover S. Perception about Marriage among Caregivers of Patients with Schizophrenia and Bipolar Disorder. Indian J Psychol Med. 2019 Sep 5; 41(5):440-447.
20. Merriam-Webster Dictionary: Marriage; 2019. p.1. Available from:https://www.merriam-webster.com/dictionary/marriage
21. MK Das, PL Kulhara, SK Verma. Life Events Preceding Relapse of Schizophrenia. March 1997. Volume: 43 issue: 1, page(s): 56-63
22. Moudgil AC, Verma SK, Kaur Kuldip. P.G.I. Quality of Life Scale (Revised Form). Indian J. Clinical Psychology. 1986; 13: 175-184
23. Nyer M, Kasckow J, Fellows I, Lawrence EC, Golshan S, Solorzano E, Zisook S. The relationship of marital status and clinical characteristics in middle-aged and older patients with schizophrenia and depressive symptoms. Ann Clin Psychiatry. 2010 Aug; 22(3):172-9.

24. Odegard O. New Data on Marriage and Mental Disease: The Incidence of Psychoses in the Widowed and the Divorced. The British Journal of Psychiatry. 1953; 99: 778-785
25. Olfson M, Fireman B, Weissman MM. Mental disorders and disability among patients in a primary care group practice. American Journal of Psychiatry. 1997;154:1734-1740
26. Overall JE, Gorham D R. The brief psychiatric rating scale (BPRS): Recent developments in ascertainment and scaling. Psychopharmacology Bulletin. 1988; 24: 97-99.
27. ParmanandKulhara, AjitAvasthi, Nitin Gupta, Mrigendra K. Das, Ritu Nehra, Shekhar A. Rao, and Gagandeep Singh Life Events And Social Support In Married Schizophrenics. Indian J Psychiatry. 1998 Oct-Dec; 40(4): 376–382.
28. Rangaswamy T. Twenty-five years of schizophrenia: The Madras longitudinal study. Indian J Psychiatry. 2012;54:134-7
29. Shaily Mina. Predictors of Marriage in Psychiatric Illness: A Review of Literature. Journal of Psychiatry and Psychiatric Disorders 3 (2019): 014-022.
30. Sharma I, Pandit B, Pathak A, Sharma R. Hinduism, marriage and mental illness. Indian J Psychiatry 2013; 55 Suppl 2:S243-9.
31. Spitzer RL, Kroenke J, Linzer M et al. Health-related quality of life in primary care patients with mental disorders. JAMA. 1995;274:1511-1517
32. Thara R et al. Women with Schizophrenia and Broken Marriages - Doubly Disadvantaged? Part I: Patient Perspective Int J Soc Psychiatry. September 2003. 49: 225-232
33. Thara R, Kamath S. Women and schizophrenia. Indian J Psychiatry 2015; 57 Suppl 2:S246-51.
34. Thara R, Srinivasan TN. Outcome of marriage in schizophrenia. Social Psychiatry and Psychiatric Epidemiology 1997; 32: 416– 420.
35. Thara R, TN Srinivasan. Marriage and Gender in Schizophrenia. Indian Journal of Psychiatry. 1997; 39(1): 64-69
36. The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines. Geneva: World Health Organization. 1992
37. Walker EF. Schizophrenia: A Life-Course Developmental Perspective. New York: Academic Press; 2013.
38. Watt DC, Szulecka TK. The effect of sex, marriage and age at first admission on the hospitalization of schizophrenics during 2 years following discharge. Psychol Med 1979; 9(3):529-39.