



## Schizophrenia and Marriage, Marital Quality of Life- A Study from Central India

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### ABSTRACT

Schizophrenia is a severe, debilitating psychiatric disorder affecting not only the lives of the patients, but also of their caregivers. And in most adult patients, their caregivers are the spouses. It is a chronic and severe brain disorder that affects approximately one percent of the population worldwide. Our study was a cross-sectional observational study, aims at assessing the Anxiety, Depression and Marital quality in spouses with Schizophrenia, attending the Psychiatry Department at a tertiary care centre, in Central India.

The major chunk of our study population were Males in the age group of 21-40 years belonging to urban backgrounds, with higher secondary educational qualification, coming from a upper lower, lower middle socio-economic class. These individuals were hindu by religion, and most were employed in jobs or had small scale businesses.

Patients included in the study population were mostly females, with most of them having a duration of illness of 16-20 years and were married for >10years. Most of them had arranged marriages and were residing in extended nuclear families, with two or more children.

The assessment of prevalence of anxiety and depression revealed major study population with scores corresponding to mild anxiety and absence of depression. These were negatively related to Increase in age of spouses, male gender, higher educational and socio-economic status as well as the employment status.

Duration of illness and marriage had variable correlations, however Residing in urban areas, in nuclear or extended nuclear families with no children, and single earning member in the family and a comorbid substance use by patients had a positive correlation.

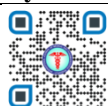
We observed that the scores on the marital quality scale, were positively related to a lower age, female gender, lower educational, and socio economic status, along with employment status of spouses, urban location of residence. These scores were worse for couples in nuclear families with no children and lacking any additional social support

These scores were positively associated with anxiety and depression grades.

However, the 12 factor scores revealed, a high score in affection and understanding but a low score for dissolution potential of the marriage.

An overall improvement in marital quality will not just improve the social functioning of these patients, but will also improve the understanding of their spouses about the psychiatric illnesses. This will indirectly improve the treatment adherence in these patients, as well as will help taking care of the care giver burdens among their spouses.

**Key Words:** Schizophrenia, Marital Quality of Life



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### INTRODUCTION

Schizophrenia is a severe, debilitating psychiatric disorder affecting not only the lives of the patients, but also of their caregivers. And in most adult patients, their caregivers are the spouses. It is a chronic and severe brain disorder that affects approximately one percent of the population worldwide. According to the Global Burden of Disease Study, schizophrenia causes a high degree of disability, which accounts for 1.1% of the total DALYs (disability-adjusted life years) and 2.8% of YLDs (years lived with disability) [1]. In Indian settings, where Marriages are one of the most important life events, and hold utmost significance in society; attitudes, behaviours and mental illnesses in spouses of diagnosed patients becomes a barrier in delivering quality healthcare [2, 3].

During acute phase of illness, it is characterized by either positive psychotic symptoms (hearing of voices, delusions, distorted perceptions, impaired psychomotor activity), or negative symptoms (inability to initiate an act, speech, express emotion or find pleasure in activities that were earlier pleasurable), or disorganization of thoughts (trouble

with logical thinking, bizarre behaviours), or impaired cognition (problems with attention, concentration, judgement and memory) or a variable combination of these. It has a bimodal onset with multiple genetic and environmental factors playing a role in its causation. Symptoms first appear in early adulthood in early 20s to 30s. These patients exhibit a severe degree of disturbance in the overall functioning in terms of psychological and social deficits, thereby hindering the person from achieving academic, occupational progress along with entering or managing social roles, including those of a marriage and a well functioning family life [1]. As schizophrenia tends to become chronic, the functional decline leads to loss of social functioning, alters communication patterns in the family, leads to occupational difficulties, and puts a burden on the caregivers, especially spouses if patients are married.

The spouses have to deal with patients' symptoms, and help patients in daily living activities. They look at several stressors including financial, family structure, and physical health demands among many others [4]. Care giving in schizophrenia could be stressful and in turn lead to the spouses being vulnerable for various mental and physical health issues [4, 5].

### **Marriage in Indian Context**

Marriage as per 'The Oxford Dictionary' is defined as a culturally organized formal union between a man and a woman that forms a foundation for a family to begin and is recognized by law. In India, it is considered a sacred event of one's life and of utmost importance [6].<sup>33</sup> Everyone is expected to get married, while the ones who are not till a certain age, bear the related stigma. In such tremendous social pressure to marry, it becomes a difficult task to find a partner if one suffers from a psychiatric illness.

In Indian setting, marriage and mental illness share a very complex and multifaceted relationship. In our society, marriages are mostly an arranged affair between two families with a little scope for personal choices, there exists patriarchal ideology where the husband is considered the head and the sole bread-earner of the family [7].<sup>63</sup>

There is a strong social and moral pressure on the partner to continue the relationship against all the odds. Studies have revealed in most of the marriages in India, the knowledge about mental illness of the partner is kept confidential initially. This results in poor adherence to medications following marriage, thus leading to relapse. Therefore, marriage and the presence of a mental illness also have legal and moral implications attached to them besides influencing the outcome of the one other [8].<sup>65</sup>

### **Marriage and Schizophrenia**

Schizophrenia, which is a disorder associated with considerable disruption of a person's personal, marital, social and occupational functioning leads to reflection of these in marriage. Results from several of these studies have in commonality shown, a low rate of marriage for schizophrenic patients compared with controls and other groups of mentally ill patients, a lower rate in men than women, a poor clinical course and lower socio-economic conditions among the divorced and a clear evidence of schizophrenia among those never married.

### **Marital Quality of life**

Marital quality is defined as a global evaluation of the marriage along various dimensions, including positive and negative aspects of marriage. It also encompasses various attitudes, behaviours and interaction patterns in a marriage. While a high marital quality suggests positive attitudes towards partners, low hostility, disharmony, and other negative attitudes; low marital quality suggests low levels of satisfaction, affection, and high negative attitudes [9].<sup>67</sup>

In view of paucity of Indian studies in this field, arises a need to assess the level of marital quality and prevalence of depression and anxiety among spouses of schizophrenia patients. Madhya Pradesh, having a prevalence of 13.9% of Mental and behavioural disorders, of which schizophrenia forms an important chunk [10]<sup>9</sup>, which is much higher than contemporary states, warrants the need for the current study to be conducted in this region to assess future interventions.

## **MATERIALS AND METHODOLOGY**

**STUDY SETTING**-The study was carried out in the Psychiatry Department at Sri Aurobindo Medical College and PG Institute, Indore after clearance from the institutional ethics committee. Patients were recruited after fulfilling the inclusion criteria.

**STUDY CENTER**- Sri Aurobindo Medical College and PG Institute, Indore (M.P.)

**STUDY DESIGN**-Cross-sectional Analytical Study

**DURATION OF STUDY**-18 months

**SAMPLE SIZE**- Data of 115 spouses of patients of Schizophrenia presenting to the Psychiatry Department of Sri Aurobindo Institute of Medical Sciences.

### **INCLUSION CRITERIA-**

- 1) Spouses of patients with schizophrenia, diagnosed as per DSM 5.(diagnostic and statistical manual)

- 2) Age more than 18 years.

#### EXCLUSION CRITERIA-

- 1) Subjects diagnosed with any mental and behavioral illness diagnosed prior to patient's onset of illness.
- 2) Subjects who were unwilling to participate in the study and unable to complete interview.

#### PROCEDURE PLANNED-

The researcher under the supervision of the guide identified subjects fulfilling the inclusion and exclusion criteria. The procedures for the study were explained to all participants and informed written consent was taken in their local language. Socio-demographic data and clinical information were collected on a semi-structured Performa. Appropriate statistical tests were applied to the data obtained with the assistance of a qualified statistician.

#### DATA COLLECTION-

Subjects fulfilling the inclusion and exclusion criteria were identified by the researcher under the supervision of the guide. The subjects were informed in detail regarding the study and written informed consent was taken in their local language.

Socio-demographic data and relevant clinical information were collected on a semi-structured proforma which included variables like-

- Age: (of patient and spouse)
- Sex: Male / Female / Other
- Education:
- Occupation: (of subject)
- Residence: Rural Urban
- Religion:
- Socioeconomic Status of the family:(Modified Kuppaswamy's Socioeconomic Status Scale)
- Duration of Illness(of patient):
- Duration of married life
- Type of marriage (love/arranged)
- Type of family: (nuclear/ extended nuclear/joint)
- Children (none/1/2/>2)
- Duration of cohabitation with patient during illness
- Earning member of family
- Substance use by subject
- MQS- score

#### STATISTICAL ANALYSIS PLAN

The data was initially captured in the customized proforma and then transferred to Microsoft Excel for analysis. Statistical Software IBM SPSS Ver. 20.0.0.0 was used for calculating P value. Descriptive statistics was presented in the form of numbers and percentages. Association between two non-parametric variables was seen using Pearson Chi-square test. The comparison of means between two groups was done using Unpaired 't' test. The comparison of means of more than 2 groups was done using One-Way ANOVA. The factor analysis of Marital Quality Scale was done according to the authors guidelines. A p value of <0.05 was taken as statistically significant. The final data was presented in the form of tables and graphs.

#### OBSERVATIONS AND RESULTS

**Table No 1: Distribution according to age of spouse (N=115)**

Age of spouse	Frequency (N)	Percentage (%)
21-40 years	54	47.0
41-60 years	45	39.1
61-80 years	16	13.9
Total	115	100.0

The above table shows the distribution according to age of spouse. 54 (47%) spouses were in the age of group of 21-40 years, 45 (39.1%) spouses were in the age of group 41-60 years and 16 (13.9%) spouses were in the age of group 61-80 years. Majority of the spouses were in the younger age group of 21-40 years.

**Table No 2: Distribution according to sex of spouse (N=115)**

Sex of spouse	Frequency (N)	Percentage (%)
Female	37	32.2
Male	78	67.8
Total	115	100.0

The above table shows the distribution according to sex of spouse. There were 37 (32.2%) female spouses and 78 (67.8%) male spouses in the present study. Male spouses were predominantly more in the study compared to the female spouses.

**Table No 3: Distribution of spouses according to education (N=115)**

Education	Frequency (N)	Percentage (%)
No formal education	8	7.0
Primary	20	17.4
Secondary	32	27.8
Higher secondary	39	33.9
Graduation	10	8.7
Postgraduation	6	5.2
Total	115	100.0

The above table shows the distribution of spouses according to education. 8 (7%) spouses had no formal education, 20 (17.4%) spouses did their primary education, 32 (27.8%) did their secondary education, 39 (33.9%) spouses did their higher secondary education, 10 (8.7%) spouses did their graduation and 6 (5.2%) spouses did their post graduation.

Majority of the spouses did their higher secondary education, followed by secondary education and primary education. Only a few Percentage (%) of the spouses were graduates and above.

**Table No 4: Distribution according to partner's occupation (N=115)**

Partner's occupation	Frequency (N)	Percentage (%)
Homemaker	24	20.0
Unemployed	4	3.5
Job	43	37.4
Business	33	28.7
Retired	8	7.0
Others	4	3.5
Total	115	100.0

The above table shows the distribution according to partner's occupation. 24 (20%) partners were homemakers, 4 (3.5%) partners were unemployed, 43 (37.4%) partners were doing job, 33 (28.7%) partners were doing business, 8 (7%) partners were retired and 4 (3.5%) were doing other types of work.

Majority of the partners were doing job, followed by those doing business.

**Table No 5: Distribution according to residence (N=115)**

Residence	Frequency (N)	Percentage (%)
Rural	47	40.9
Urban	68	59.1
Total	115	100.0

The above table shows the distribution according to residence. 47 (40.9%) were from rural areas and 68 (59.1%) were from urban areas. Majority of them were from urban areas.

**Table No 6: Distribution according to religion (N=115)**

Religion	Frequency (N)	Percentage (%)
Hindu	93	80.9

Muslim	20	17.4
Sikh	2	1.7
Total	115	100.0

The above table shows the distribution according to religion. 93 (80.9%) were Hindus, 20 (17.4%) were Muslims and 2 (1.7%) were Sikhs. Majority of the spouses were Hindus.

**Table No 7: Distribution according to socioeconomic class (N=115)**

Socioeconomic class	Frequency (N)	Percentage (%)
Lower class	8	7.0
Upper lower class	36	31.3
Lower middle class	53	46.1
Upper middle class	18	15.7
Upper class	0	0.0
Total	115	100.0

The above table shows the distribution according to socioeconomic class. 8 (7%) belonged to lower class, 36 (31.3%) belonged to upper lower class, 53 (46.1%) belonged to lower middle class and 18 (15.7%) belonged to upper middle class.

Majority of the, were from lower middle class, followed by upper lower class

**Table No 8: Distribution of patients according to duration of illness (N=115)**

Duration of illness	Frequency (N)	Percentage (%)
Not known	3	2.6
1-5 years	37	32.2
6-10 years	19	16.5
11-15 years	8	7.0
16-20 years	44	38.3
>20 years	4	3.5
Total	115	100.0

The above table shows the distribution of patients according to duration of illness. 37 (32.2%) patients had duration of illness between 1-5 years, 19 (16.5%) patients had duration of illness between 6-10 years, 8 (7%) patients had duration of illness between 11-15 years, 44 (38.3%) patients had duration of illness between 16-20 years and 4 (3.5%) patients had duration of illness of more than 20 years.

Majority of the patients had duration of illness between 16-20 years, followed by 1-5 years.

**Table No 9: Distribution according to duration of marriage (N=115)**

Duration of marriage	Frequency (N)	Percentage (%)
1-5 years	9	7.8
6-10 years	24	20.9
>10 years	82	71.3
Total	115	100.0

The above table shows the distribution according to duration of marriage. 9 (7.8%) were married for 1-5 years, 24 (20.9%) were married for 6-10 years and 82 (71.3%) were married for more than 10 years.

Majority of them were married for more than 10 years.

**Table No 10: Distribution according to type of family (N=115)**

Type of family	Frequency (N)	Percentage (%)
Nuclear family	33	28.7
Joint family	31	27.0

Extended nuclear family	51	44.3
Total	115	100.0

The above table shows the distribution according to type of family. 33 (28.7%) were from nuclear family, 31 (27%) were from joint family and 51 (44.3%) were from extended nuclear family.

Majority of them were from extended nuclear family.

**Table No 11: Distribution according to number of children (N=115)**

Number of children	Frequency (N)	Percentage (%)
No children	19	16.5
1 child	28	24.3
2 children	27	23.5>
>2 children	41	35.7
Total	115	100.0

The above table shows the distribution according to number of children. 19 (16.5%) had no children, 28 (24.3%) had 1 child, 27 (23.5%) had 2 children and 41 (35.7%) had more than 2 children.

Majority of them had more than >2 children.

**Table No 12: Distribution according to earning member of family (N=115)**

Earning member of family	Frequency (N)	Percentage (%)
Patient	7	6.1
Patient and spouse	14	12.2
Spouse	69	60.0
Others	25	21.7
Total	115	100.0

The above table shows the distribution according to earning member of family. 7 (6.1%) patients were the earning member of the family, 14 (12.2%) patients and their spouse were the earning members, 69 (60%) patients' spouse were the earning member and 25 (21.7%) other members were the earning members of the family.

Majority of the patients' spouses were the earning member of the family.

**Table No 13: Distribution of patients according to substance use (N=115)**

Substance use	Frequency (N)	Percentage (%)
None	79	68.7
Tobacco use	22	19.1
Alcohol use	2	1.7
Alcohol, tobacco use	8	7.0
Alcohol, tobacco, opioid use	4	3.5
Total	115	100.0

The above table shows the distribution of patients according to substance use.

Tobacco use was seen in 22 (19.1%) patients, alcohol use was seen in 2 (1.7%) patients, alcohol and tobacco use was seen in 8 (7%) patients and alcohol, tobacco and opioid use was seen in 4 (3.5%) patients. 79 (68.7%) patients had no history of substance use.

Tobacco use was most commonly seen in these patients.

**Table No 14: Comparison of Marital Quality Score in relation to age of spouse**

Age of spouse	No.	Mean $\pm$ SD	'F' value	P value
21-40 years	54	129.87 $\pm$ 25.99	33.189	0.001*
41-60 years	45	105.44 $\pm$ 25.10		

61-80 years	16	77.75 ± 4.16		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

**Table No 15: Comparison of Marital Quality Score in relation to sex of spouse**

Sex of spouse	No.	Mean ± SD	't' Value	P value
Female	37	130.14 ± 29.90	4.579, df=113	0.001*
Male	78	104.96 ± 26.37		
Total	115			

*Unpaired 't' test applied. P value = 0.001, Significant*

**Table No 16: Comparison of Marital Quality Score in relation to education of spouse**

Education of spouse	No.	Mean ± SD	'F' value	P value
No formal education	8	81.50 ± 0.53	5.005	0.001*
Primary	20	113.70 ± 29.59		
Secondary	32	129.44 ± 28.37		
Higher secondary	39	110.10 ± 29.91		
Graduation	10	105.80 ± 22.03		
Postgraduation	6	97.00 ± 23.24		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

Distress was higher in spouses who were not well educated.

**Table No 17: Comparison of Marital Quality Score in relation to partner's occupation**

Partner's occupation	No.	Mean ± SD	'F' value	P value
Homemaker	23	120.30 ± 27.13	5.015	0.001*
Unemployed	4	138.00 ± 0.00		
Job	43	119.33 ± 32.69		
Business	33	106.55 ± 25.91		
Retired	8	74.00 ± 2.14		
Others	4	111.00 ± 0.00		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

Distress was lowest in spouses whose partners were retired.

**Table No 18: Comparison of Marital Quality Score in relation to residence**

Residence	No.	Mean ± SD	't' value	P value
Rural	47	106.47 ± 28.24	-1.994, df=113	0.049*
Urban	68	117.62 ± 30.29		
Total	115			

*Unpaired 't' test applied. P value = 0.049, Significant*

**Table No 54: Comparison of Marital Quality Score in relation to religion**

Religion	No.	Mean ± SD	'F' value	P value
Hindu	93	114.73 ± 29.59	2.062	0.132, NS
Muslim	20	102.80 ± 30.34		
Sikh	2	138.00 ± 0.00		
Total	115			

*One-Way ANOVA test applied. P value = 0.132, Not Significant*

**Table No 19: Comparison of Marital Quality Score in relation to socioeconomic class**

Socioeconomic class	No.	Mean ± SD	'F' value	P value
Lower class	8	107.50 ± 28.33	29.418	0.001*



Upper lower class	36	140.22 ± 19.75		
Lower middle class	53	105.25 ± 25.15		
Upper middle class	18	84.22 ± 16.16		
Upper class	-	-		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

**Table No 20: Comparison of Marital Quality Score in relation to duration of illness**

Duration of illness	No.	Mean ± SD	'F' value	P value
Not known	3	94.00 ± 17.58	6.598	0.001*
1-5 years	37	113.32 ± 28.73		
6-10 years	19	100.47 ± 22.34		
11-15 years	8	153.50 ± 11.23		
16-20 years	44	115.77 ± 29.66		
>20 years	4	74.00 ± 0.00		
Total	115			

**Table No 21: Comparison of Marital Quality Score in relation to duration of marriage**

Duration of marriage	No.	Mean ± SD	'F' value	P value
1-5 years	9	115.67 ± 28.38	0.712	0.493, NS
6-10 years	24	119.08 ± 25.41		
>10 years	82	111.01 ± 31.24		
Total	115			

*One-Way ANOVA test applied. P value = 0.493, Not Significant*

**Table No 22: Comparison of Marital Quality Score in relation to type of marriage**

Type of marriage	No.	Mean ± SD	't' value	P value
Arranged	108	115.18 ± 29.59	3.094, df=113	0.002*
Love	7	80.43 ± 2.37		
Total	115			

*Unpaired 't' test applied. P value = 0.002, Significant*

**Table No 23: Comparison of Marital Quality Score in relation to type of family**

Type of family	No.	Mean ± SD	'F' value	P value
Nuclear	33	118.52 ± 25.91	6.769	0.002*
Joint	31	97.00 ± 28.17		
Extended nuclear	51	119.29 ± 30.13		
Total	115			

*One-Way ANOVA test applied. P value = 0.002, Significant*

**Table No 24: Comparison of Marital Quality Score in relation to number of children**

Number of children	No.	Mean ± SD	'F' value	P value
No children	19	129.21 ± 23.78	14.334	0.001*
1 child	28	130.79 ± 26.24		
2 children	27	111.96 ± 25.34		
>2 children	41	94.19 ± 26.36		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

**Table No 25: Comparison of Marital Quality Score in relation to earning member of family**

Earning member of family	No.	Mean ± SD	'F' value	P value
Patient	7	122.14 ± 37.31	9.752	0.001*
Patient and spouse	14	142.14 ± 28.81		
Spouse	69	113.03 ± 26.15		



Others	25	94.32 ± 24.83		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

**Table No 26: Comparison of Marital Quality Score in relation to substance use by the patient**

Substance use by the patient	No.	Mean ± SD	'F' value	P value
None	79	105.09 ± 26.77	7.725	0.001*
Tobacco use	22	120.82 ± 33.29		
Alcohol use	2	127.00 ± 0.00		
Alcohol, tobacco use	8	147.50 ± 4.81		
Alcohol, tobacco, opioid use	4	152.00 ± 0.00		
Total	115			

*One-Way ANOVA test applied. P value = 0.001, Significant*

**Table No 27: Factor Wise Mean Marital Quality Scale Score (N=115)**

Factor	No. of Items.	Mean Value
Understanding	7	13.6 ± 5.6
Rejection	9	25.4 ± 4.5
Satisfaction	5	8.9 ± 3.3
Affection	6	13.9 ± 4.5
Despair	2	5.3 ± 1.2
Decision making	6	10.8 ± 4.0
Discontent	2	5.9 ± 0.8
Dissolution potential	1	2.3 ± 0.8
Dominance	2	6.1 ± 0.7
Self-disclosure	3	6.6 ± 2.3
Trust	1	1.9 ± 0.9
Role-functioning	4	7.6 ± 3.1
Total	48	

The above table shows the mean value with respect to 12 factors of Marital Quality Scale Score.

The mean marital quality score for 'Understanding' was 13.6 ± 4.6, for 'Rejection' was 25.4 ± 4.5, for 'Satisfaction' was 8.9 ± 3.3, for 'Affection' was 13.9 ± 4.5, for 'Despair' was 5.3 ± 1.2, for 'Decision Making' was 10.8 ± 4.0, for 'Discontent' was 5.9 ± 0.8, for 'Dissolution Potential' was 2.3 ± 0.8, for 'Dominance' was 6.1 ± 0.7, for 'Self-Disclosure' was 6.6 ± 2.3, for 'Trust' was 1.9 ± 0.9 and for 'Role-Functioning' was 7.6 ± 3.1.

The maximum mean marital quality score was highest in 'Rejection', followed by 'Affection' and 'Understanding' and lowest score was seen in 'Trust'.

## DISCUSSION

The study population comprised of maximum subjects; 54 (47%) in the age of group of 21-40 years, 45 (39.1%) in the age of group 41-60 years whereas a meagre 16 (13.9%) in the age of group 61-80 years. Most of the subjects were belonging to younger age group.

There were 37 (32.2%) female subjects and 78 (67.8%) male subjects, and this could be explained by the regional and cultural belief of women not taking part in consultations, and visiting healthcare settings with families.

Among the study population, majority had an education of Secondary and higher secondary level, i.e., 27.8 % and 33.9% respectively. Very few subjects were graduates and above, and this reflects the literacy scenario in the state. 47 (40.9%) of the subjects were from rural areas and 68 (59.1%) were from urban areas. Majority of them were from urban areas and reflect the population seeking healthcare at our institute and can also be explained by the urban location of the centre and ease of access.

A majority of the subjects, (80.9%) were Hindu by religion, 17.4% were Muslims and 1.7% patients were Sikhs- which is in accordance with the regional demographics. As most of the study population included female patients, in accordance with cultural and regional beliefs, majority (54.8%) were homemakers, followed by those in (24.3%) jobs, both skilled and unskilled.

As major chunk of spouses were males, and they usually take the role of breadwinner in society, our study population revealed 43 (37.4%) partners were doing job, 33 (28.7%) partners were doing business followed by those that were unemployed.

Majority of our study population was belonging to the lower middle class, followed by upper lower class, depicted by 46.1% and 31.3% respectively.

This is accordance with a study conducted by Trani et al [10] and represent both the increased incidence of disease in the lower socio-economic status and also, the repercussions of Schizophrenia, as it leads to reduced opportunities at education, skill training and employment, hence indirectly leading to lower socio economic status.

Meagre representation of 7% from lower classes, depicts the minimal opportunities to seek healthcare and importance given to same in the group.

Majority of the patients had duration of illness between 16-20 years, followed by 1-5 years, i.e. , 38.3% and 32.2% respectively followed by, those having a duration of 6-10years.

Most caregivers have a delay in seeking care due to multiple reasons, unawareness being the principle one, but on the other hand, with marriage, illness maybe precipitated early on and hence lead to earlier caregiving. The above is in accordance with a study conducted by Dutta et al in India, and Franz et al [11,12] elsewhere, and reported this pattern of caregiving.

Majority; 82 (71.3%) were married for more than 10 years and 24 (20.9%) were married for 6-10 years and 7.8% between 1-5 years. The above coincides with our results of a duration of illness of >10 years, and lesser marriages are expected with longer duration of illness,

Majority, i.e., 93.9% of them had arranged marriages and this in accordance with various studies done by Thara et al [13, 14] and Behere et al [15], which have depicted loss of social abilities and hence poorer opportunities of building and maintaining relationships, especially, romantic relationships ; resulting in fewer patients with love marriages.

Majority of the study population was hailing from Extended nuclear families (44.2%), whereas, 28.7% were from nuclear and 27% from joint families. In accordance with cultural shift of joint families breaking up, however members of the family, especially older parents or siblings cohabitating, and also aiding in care giving.

Amongst our study group, 41 (35.7%) had more than 2 children, followed by 28 (24.3%) had 1 child, 27 (23.5%) had 2 children, and 16.5% had no children. Culturally, couples usually have more number of children in hope of a male offspring, to propagate the family lineage and also aid in family's financial resources.

When assessed for the primary earning members among the study population, it was observed that amongst most families, a massive result was that 60% of the spouses were the primary earning members, and this in accordance with most studies done in similar settings.

This further adds to the burden on the spouses and impacts their financial , mental and physical health[10,16,17]. Also, as most patients recruited in our study were females, it is in congruence the traditional role of men to be the breadwinners of the family.

As most of our study population had female patients, and keeping in mind the low prevalence of substance use in females, followed by stigma attached to acceptance of same, majority of the population, i.e., 68.7% had no substance use followed by 19% having tobacco as the major substance use.

In our study we aimed at assessing the marital quality of life amongst spouses of patients with schizophrenia and assess correlation with sociodemographic and illness variables, if any. For the above, we used the Marital Quality Scale (MQS) by Dr. Anisha Shah. The scale is 50 question scale. The interpretation of the scores is as follows, higher the score, poorer the marital quality.

Amongst the study population, the mean scores observed were **113 +/- 29.86**, with a minimum score of 50 and maximum of 200.

Previous studies done with objective of burden and distress assessment among families of patients with schizophrenia have consistently reported that patients have a better life when married, however the reverse is not true for the caregivers. While assessing the correlation of marital quality of life with various socio-demographic variables, we took multiple previous studies into account, however very few studies used the scale as our study.

When effects of psychosis and married lives are studied on each other, they were observed to be two way. In individuals, psychosis is seen to be worsened by marriage and in other group, psychosis worsens the married life. Observation of correlation of Age and Sex with the scores on marital quality of life revealed that marital quality is poorer, i.e., higher scores observed in younger age group(highest between 21-40years), and in female gender.

This is in accordance with previous studies done by Thara et al [14], Ahemed et al. [18] and can be explained by better cognitive and emotional maturity with age and improved coping skills of the individual. Increasing age was also related to lesser negative caregiving, probably due to better awareness of the disease and lesser element of surprises in the patient's behaviour.

On similar lines, it was observed that scores are higher and marital quality poorer in spouses with lower education levels, with unemployed partners, and higher in the lower socio-economic status. All of these are interlinked and ultimately lead to lesser opportunities at seeking healthcare and maintaining compliance on treatment, and also be able to hire assisted care.

While observation of correlation with residence was made, the scores were higher, quality poorer in urban areas. This is however discordant to previous studies done by Mohanty et al [19], and Arun R. [20] that have revealed that rural residence pre disposes to poverty and poorer healthcare facilities and hence a higher burden and poorer marital quality. During our study, the difference could be attributed to the major chunk of the population belonging to urban areas due to the location of the tertiary care centre.

As mentioned above, scores were found to be higher in lower socio-economic status spouses. While studying the correlation of religion with the marital quality scores, appropriate comments could not be made as the sample was skewed towards a hindu representation, however as per our data, the scores were highest, and the quality worse in Sikhs. Considering the duration of marriage and the duration of illness as variables being correlated with scores on the marital quality scale, following results were observed.

Maximum population was in the group with a duration of illness of 16-20 years, however the highest scores were found in the population with duration of illness between 11-15 years.

Studies done by Vadher et al [21],<sup>58</sup> previously while assessment of burden of care revealed higher burdens within initial stages of duration of illness, and this can be attributed to acute episodes, unawareness of illness and inability to cope in the earlier years.

On similar lines, highest scores, i.e., a poorer marital quality was revealed in the early years of marriage with highest scores in the duration of married life between, 6-10 years. Correlation with type of marriages, was difficult, as with a diagnosis of psychotic illness like schizophrenia, chances of a love marriage are scarce [14] and the same was visible in our study population, however, in those that did have love marriages, the scores were lower.

Previously, in studies conducted by Arun R.[21] and others, it was revealed that family type has an impact on the quality of life and burden experienced by the caregivers, especially the spouses, and in our study when correlation between type of family and marital quality scores were made, a higher score was observed for nuclear and extended nuclear families. Along with this, those couples who had a single child or no children, showed higher scores, and hence a poorer quality of marital life.

Comorbid use of various substances like alcohol, tobacco and opioids by patients, predispose the spouses to higher distress and burden and hence a poorer quality of marital life.

While studying the scores on various factors on the marital quality scale, the following observations were made, The maximum mean marital quality score was highest in 'Rejection', followed by 'Affection' and 'Understanding' domains.

However, the values on 'Dissolution potential', were as low as,  $2.3 \pm 0.8$ , representing the expectations from couples to stay married even with poor marital quality, and moreover, the stigma associated with a separation or a divorce.

## CONCLUSION

Our study reveals how a chronic illness like schizophrenia, affects not just the patient, but also grievously impair the physical, mental, emotional and social well being of caregivers, especially spouses involved. In most previous studies, the study population incorporated caregivers as an umbrella term and included kin as well as next of kin, directly or indirectly involved in caregiving.

The aim of choice of this research study was decided after looking at the scarcity of data in the domain of spousal distress with a common disorder like schizophrenia, and with an even lower data in central India. During the course of the study, we encountered few limitations, with regard to and unequal representation in gender, residence and religion, and appropriate measures were taken.

The need of the hour is to consider a holistic approach at providing healthcare to patients with Schizophrenia, and involve their families and provide them supportive therapy. The policy makers need to appreciate that these spouses, in our country, form an extension of the healthcare delivery system, and they need to be provided with adequate emotional, as well as financial support, and we need to train the healthcare providers to work on rehabilitation of patients once the acute exacerbation of the illness is controlled.

Conflict of Interest- None

Sponsorship- None

Ethical Declaration

The study was started after taking approval from the Institute Ethics committee for research on human subjects. Throughout the study, ethical considerations were strictly followed. Confidentiality was ensured. The patients were enrolled after written Informed consent was obtained from the patient in their local language. The patient was informed about the purpose of the study. The consent was taken in English or Hindi language (Local language) whichever was familiar to the patient. Subjects who did not give consent to participate were not included in the study. Before entry into the study, the investigator explained to the subjects about the aims, method and reasonably anticipated benefits. Patients were informed that their participation was voluntary and that they could withdraw consent to participate at any time. They were informed that choosing not to participate would not affect their care and the subjects would receive the treatment of his/her disease. The subjects were given sufficient time to read the informed consent form and the opportunity to ask questions.

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