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Original Research Article

Study of Domestic Violence and Psychiatric Morbidityamong Spouses of Patients with Psychiatric Disorders

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Abstract:

Introduction: Domestic violence is the most common and significant public health problem. The World Health Organization defines violence as "the purposeful use of physical force or power, threatened or real, against oneself, another person, a group, or a community, resulting in or likely to result in damage, death, psychological distress,maldevelopment, or deprivation [1]. Domestic violence is described as "any act of force or coercion that significantly compromises the life, body, psychological integrity, or autonomy of a person in a family or kinship." DV is frequently used interchangeably with "intimate partner violence," which is when one spouse or partner abuses the other when they are in a close relationship [5] Violence against women can harm one's mental health in a variety of ways, including behavioral issues, eating and sleepingdisorders, PTSD, depression, anxiety, self-harm and suicide attempts, low self- esteem, and dangerous alcohol and drug usage [2]. Identifying the extent to which certain mental diseases are related to violencetowards a spouse is essential since it will inform violence prevention strategies. Hence our study focused on screening the spousal mental and their experiences of violence by partners with common mental disorders attending tertiary care centers

Aim: To evaluate the presence of an association between domestic violence and psychiatric morbidity among spouses of psychiatric patients

Materials and Methods: A hospital-based Cross-sectional Study was conducted at Government hospital for mental care, Visakhapatnam in 200 Spouses of Psychiatric In patients & Outpatients attending the hospital for One year (August 2021- July 2022). REVISED CONFLICT TACTICS Scale (CTS2) to assess Domestic violence among spouses of psychiatric patients and MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW SCHEDULE toassess psychiatric morbidity among spouses of psychiatric patients.

Results: Out of 200 subjects, the majority 65% (n=130) of spouses experienced domestic violence by their partners. Females 74.4% (n=90) experience more domestic violence than males 50.6% (n=40) Of the 200 spouses, 65% reported experiencing negotiation, mainly emotional violence. This was followed by psychological violence in 54.5% (n = 109), physical violence in 38.5%, and sexual violence in 14%. When compared to male spouses, female spouses had a statistically significant higher likelihood of experiencing psychological aggression. 47.9% (n=58) of females were more likely to experience physical assault when compared to 24.1% (n=19) of males which was statistically significant (p-0.001). 14% (n=28) of study spouses had sexual coercion more in female spouses compared to 6.3% (n=5) of males which was statistically significant ($p<0.05$).

Conclusion: This study had evaluated the prevalence of domestic violence among spouses of psychiatric patients and its impact on their mental health. Domestic violence was highly prevalent among female spouses of alcohol- dependent male partners followed by schizophrenia and bipolar disorder .Most common type of domestic violence experienced by study spouses was emotional followed by psychological, physical and the other types like sexual and injury were less likely in male spouses. Most common type of psychiatric morbidity reported being Major depressivedisorder among both men and women.

Keywords: Domestic Violence, Psychiatric Morbidity.

Introduction

Domestic violence is the most common and significant public health problem. In general, violence is one of the main global causes of death for people between the ages of 15 and 44 and is linked to morbidity in both physical and mental health [1]. Men and women in the general population experience one in five and one in four isolated domestic violence incidents over the course of their lifetimes, respectively. In India, the prevalence of domestic violence has been estimated to be between 18% - 70% [2].

The World Health Organization defines violence as "the purposeful use of physical force or power, threatened or real, against oneself, another person, a group, or a community, resulting in or likely to result in damage, death, psychological distress, maldevelopment, or deprivation [3].

Domestic violence is described as "any act of force or coercion that significantly compromises the life, body, psychological integrity, or autonomy of a person in a family or kinship." Domestic violence is known to be influenced by a variety of factors, including psychological, cultural, mental, and financial problems; education; substance abuse or mental illness in the spouse; a history of domestic violence in childhood and family structure [4].

DV is frequently used interchangeably with "intimate partner violence," which is when one spouse or partner abuses the other when they are in a close relationship [5]. Domestic violence includes violence perpetrated by intimate partners manifested through physical, psychological, sexual, and economic abuse. According to the most recent National Family Health Survey (NFHS-5) statistics, Manipur, Bihar, and Karnataka have the highest rates of marital violence [5].

Intimate partner violence was identified as the most prevalent type of violence against women. The frequency of Domestic violence in 48 population-based studies from throughout the world, ranging from 10% to 69% of women reported being physically abused by an intimate partner [4]. 40% of participants in the National Family Health Survey, 2007 reported suffering from domestic abuse, and 56% of these women had poor mental health. Violence against women can harm one's mental health in a variety of ways, including behavioral issues, eating and sleeping disorders, PTSD, depression, anxiety, self-harm and suicide attempts, low self- esteem, and dangerous alcohol and drug usage [2]. In an Indian study conducted in five different states, mental stress was reported by 34.1% of the women who had experienced domestic violence, along with depression, sleep disturbances, anxiety, and chronic headaches by 29.3% and 14.4% of the women and 15.1% of the women respectively [3]. Due to the higher risk of serious morbidity for female victims, most prevalence studies have focused on female populations.

In India, the legal system recognized domestic violence against women. However, more males experience harassment and physical and psychological abuse by women. According to National research conducted in India, 98% of Indian males had experienced domestic abuse more than once in their lifetime. [4]

IPV victimization and perpetration are associated with increased mental health symptoms in both men and women [8]. Having a family member who suffers from a mental illness is a significant stressor that might eventually lead to mental and psychological problems in the family members, particularly the spouses. Compared to the general community, spouses of people with psychological disorders are more vulnerable to IPV.

A greater risk of perpetrating violence on others has been associated with mental illness. Schizophrenia and bipolar disorder patients are about twice as likely to inflict violence on others as people without mental illness. [10,11] We are unable to develop effective measures because we lack knowledge about the victims of this violence or the threats presented by those with prevalent mental illnesses. Although it is rare, partner violence happens frequently and not only impacts the couple but also their dependent children. Partner violence can grow into a pattern of abusive, controlling behavior or into a maladaptive method of handling difficult situations in a relationship, indicating a possible indirect link between partner violence and mental illness [12].

Identifying the extent to which certain mental diseases are related to violence towards a spouse is essential since it will inform violence prevention strategies. Hence our study focused on screening the spousal mental and their experiences of violence by partners with common mental disorders attending tertiary care centers

Aim

To evaluate the presence of an association between domestic violence and psychiatric morbidity among spouses of psychiatric patients.

Objectives

- To assess domestic violence among spouses of psychiatric patients To assess psychiatric morbidity among spouses of psychiatric patients
- To evaluate the relationship between domestic violence and psychiatric morbidity among

spouses of psychiatric patients.

Hypothesis

There is an association between domestic violence and psychiatric morbidity among both male and female spouses of psychiatric patients.

Review of Literature

Geetanjali Gupta et al, [13] (2022) used systematic random sampling to carry out a cross-sectional study at a tertiary hospital in Haryana, India, for their study titled "Spectrum of IPV in patients with psychiatric illness: from victimization to perpetration." included 500 married men and women between the ages of 18 and 50 who underwent an IPV assessment using the WHO criteria for IPV victimization and the IPV perpetration scale, MINI 7.0.2, and an ICD-10 confirmation of the diagnosis.

Men were found to be more likely than women to commit IPV than women (11.2% in 1 year and 19.6% in their lifetime), according to research that focused on bidirectional IPV victimization and perpetration in both genders among psychiatric patients.

Furthermore, it was identified that people with psychosis had higher rates of committing IPV than neurotic patients. The exclusion of substance use limited theexploration of the spectrum of IPV.

Abbas Masoudzadeh et al [14] (2015) In their study titled "Spouses of male psychiatric patients are more prone to intimate partner violence," used a spouse violence questionnaire to assess 119 women aged 18 to 49 years whose husbandswere either in or outpatient of the psychiatric clinic at Zari Hospital in Iran for IPV. 100% of women reported mental abuse, 99.2% reported physical abuse, and 81.5% reported sexual abuse.

Researchers concluded that men with psychological disorders have greater rates of IPV than the general population, e 20–78% in Iran.

Yu Rong Qin (2019) [15] Mental disorders and IPV perpetrated by men against women in a population-based longitudinal study conducted in Sweden from 1998 to 2013, the sample size of men with 9 distinct diagnostic psychiatric disorder groups was 9529 with autistic disorders and 88182 with other illnesses and their sibling group for comparison was drawn from national registries. They noticed a higher risk of IPV against women than their unaffected siblings, with substance use disorders as the predominant diagnosis in their spouse, and they conducted a series of sensitivity analyses eliminating history of IPV.

They were followed up foran average of 3.4 to 4.8 years. In comparison to the general population, men withalcohol and drug use disorders were eight to nine times more likely to experience IPV. Comorbid personality disorders further exacerbated this risk.

Nayreen Daruwalla [16] 2020et al. in their study titled "Prevalence of DV against Women in an Informal Setting in Mumbai, India." In a cross-sectional study of slum dwellers, 5122 women between the ages of 18 and 49 were interviewed using the SNEHA-TARA trial questionnaire, the NFHS-4 IFVCS, and data from two international studies (the WHO multi-country study and the International Violence against Family Survey). The study found that while intimate partners were the primary perpetrators of physical and sexual violence against women, marital family members and partners were equally responsible for the emotional abuse ofwomen.

Pushpanathan et al 2022 [17] in their study titled “a study to assess the severity of alcohol dependence in male patients and find the prevalence of psychiatric comorbidities in their spouses “found that Psychiatric morbidities as per the MINI PLUS scale seen in 60.7 of spouses. Most common being Major Depressive Disorder (29.3%), Dysthymia (11.3), adjustment disorder (6%), Generalized Anxiety Disorder (4%), Mixed Anxiety and Depression (4%), Somatization Disorder (4%) and Panic Disorder (2%).

Akhilesh et al 2021 in their study [18]Cross-sectional study on the burden and psychiatric morbidity in the caregivers of patients of major psychiatric illness in a tertiary health center” using MINI structured diagnostic interview observed that several care givers) had psychiatric morbidities with Generalized Anxiety Disorder (56.9%) being most commonly reported. This was followed by a Major Depressive episode, current at 22.5%, and dysthymia at 17.4%.

Mary Ellsberg et al. (2008) [5] "IPV and women's physical and mental health in a WHO multi-country study on women's health and DV," A population-based observational survey of women aged 15–49 years using a self-reported questionnaire for IPV and the WHO's SRQ-20 for screening mental health found a significant association between experience of physical violence and injury rates ranging from 19% to 55% among women who had been physically abused by theirpartner.

Ehrensaft et al. (2006) [19] in their study titled "Is Domestic Violence Followed by an Increased Risk of Psychiatric Disorders among Women but Not among Men?" A Longitudinal Cohort Study." used data from assessments at ages 18 (N = 930) and 26 (N = 980) years to track a birth cohort prospectively.

Psychiatric illnesses were diagnosed using the

DSM-III-R at the age of 18 and the DSM-IV at the age of 26, with a reporting period of the previous 12 months. The Partner Conflict Calendar was used to identify individuals in abusive relationships, and the study found that women in clinically abusive relationships were more likely than males to have effects such as depression, marijuana use, and, in particular, PTSD.

Tjaden et al. 2000 [20] in their study titled "Prevalence and consequences of male to female and female to male partner violence as measured by the National Violence against Women Survey," used simple random sampling to conduct a telephonic survey of 8000 men and women's experiences of violent victimization who were spouses or cohabiting partners, using behaviorally specific questions adapted from the CTS scale, considering the period 12 months before the survey. Violence against women by male partners was found to cost society more in terms of lost productivity and utilization of mental and medical health services than violence against men by female partners.

In their study titled "Domestic violence against men: prevalence and risk factors," a review of studies conducted by Verena Kolbe et al. [21] in 2020 found prevalence rates ranging from 3.4% to 20.3% for domestic physical abuse against males. 10.4–40% reported being mistreated or maltreated as children, with the outcomes ranging from minor physical injuries to decreased physical health, mental health issues such as anxiety or a disruptive disorder, and higher usage of alcohol and/or illicit substances. 70–80% of children who see violence against a parent require special assistance for a variety of behavioral or mental problems.

Kumar et al. (2005) [22] used random sampling to conduct a household survey of 9938 women aged 15-49 years from rural, urban, non-slum, and slum populations in seven locations in India for their study titled "Domestic violence and its mental health correlate in India." According to the Self-Report Questionnaire, a structured questionnaire elicited marital experiences of violence, and 40% reported poor mental health.

Jeffrey and colleagues (2006) [23]A National Study of Violent Behavior in Schizophrenia Patients: The MacArthur Community Violence Interview was used on 1410 schizophrenia patients who were assessed about violent behavior in the past six months.

The data comprise baseline evaluations of individuals who participated in the National Institute of Mental Health Clinical Antipsychotic Trials of Intervention Effectiveness. Adult patients with DSM IV-diagnosed schizophrenia were enrolled at 56 locations across the United States. The 6-month prevalence ofany violence was 19.1%, with 3.6% reporting significant aggressive conduct. Specific clusters of symptoms in persons with schizophrenia may increase or decrease the likelihood of violence.

Kristin Carbone et al 2006 [24] in their study titled "Patterns of Intimate Partner Violence and Their Associations with Physical Health, Psychological Distress, and Substance Use" using the CTS Scale and SF -36 Health survey hypothesized that IPV experiences have stronger and broader associations with negative health outcomes among women, owing to differences in the severity of violence experienced by men and woman.

Methodology

Study Design: A hospital-based Cross-sectional Study

Study Site: Government hospital for mental care, Visakhapatnam.

Study Population: Spouses of Psychiatric In patients & Outpatients visiting Govt. Hospital for Mental Care, Visakhapatnam.

Study Duration: One year (August 2021- July 2022).

Sampling Technique: Convenient sampling

Sample Size: 200.

Inclusion Criteria:

1. Inpatients and outpatients meeting the criteria for common psychiatric disorders according to the International classification of diseases 10th revision (ICD-10)
2. Spouses of diagnosed psychiatric disorder patients aged between 18-50 yrs.
3. Marital life of couple for at least 1 year & staying under the same roof.
4. Subjects who will give informed consent to participate in the study.

Exclusion Criteria

1. Subjects who are not willing to give valid consent to participate in the study.
2. Subjects with serious medical/ physical illness.
3. Spouses of diagnosed psychiatric disorder patients with mental retardation.
4. Married couple who are temporarily or permanently separated.

Study instruments:

1. Consent form
2. General information sheet
3. International classification of diseases ICD-10 diagnostic research criteria
4. Revised Conflict Tactics Scale (CTS2) to assess Domestic violence among spouses of psychiatric patients
5. Mini International Neuropsychiatric

Interview Schedule to assess psychiatric morbidity among spouses of psychiatric patients.

Operational Procedure:

The study was conducted after obtaining institutional ethics committee clearance and approval from respective authorities.

200 psychiatric patients and their spouses were selected from IPD & OPD of GHMC, VSKP. After explaining the purpose and procedure of the study, and the confidentiality of details, subjects who were satisfying the inclusion & exclusion criteria were taken up for the study after getting informed consent.

Partners who fulfilled the criteria of common psychiatric disorders according to ICD -10 were taken up for the study and their spouses who visited the hospital along with them were assessed.

1. Socio-demographic details of the spouses were taken.
2. Family characteristics such as type of family, type of marriage, duration of the marriage, no of children, and family history of psychiatric illness.
3. Clinical variables in a partner such as type of psychiatric illness diagnosed according to ICD-10 and duration of psychiatric illness.
4. Spouses of psychiatric patients were assessed for Domestic violence usingRevised Conflict tactics scale 2 by maintaining confidentiality.
5. Spouses of psychiatric patients were assessed for Psychiatric morbidity using MINI 7.0.2 International Psychiatric Interview schedule.

Informed Consent Form

It was a self-designed consent form that explained the nature of the study.

Contents of the study were read out and explained in the local language to the patients and their spouses (study subjects).Signature of the patients and their spouses were obtained after considering their willingness to participate instudy.

General Information Sheet

It was a self-designed form to collect personal and socio-demographic details of the study subjects which include age, sex, education, occupation, religion, domicile, socioeconomic status, type of family, type of marriage, duration of marriage, no of children. It also contains the clinical variables of the partner like the type of psychiatric illness and duration of psychiatric illness.

Revised Conflict Tactics Scale 2:

The conflict tactics scale is invented by Murray A. Straus in 1979. The modified tactics scale is the expanded and revised version of the conflict tactics scale. It is used for research on family violence or conflict. The modified scale has 39 items and there are 2 questions for each item making a total of 78 questions.

It has 5 items categorized into 2 components.

1. Negotiation - Cognitive -Emotional
2. Psychological aggression - Minor -Severe
3. Physical assault - Minor -Severe
4. Sexual coercion - Minor -Severe
5. Injury - Minor -Severe

The original Conflict tactics scale doesn't include the sexual coercion and injury scale. The increased number of items added in the modified version enhances thereliability and validity of the scale. The internal consistency or reliability ranges from0.75 to 0.95.

The time period asked is what happened in the past 1 year or else it can be modified to since the relationship started or what has happened for the last 6 months. The score is 0-7 (0=never happened, 1=once in the past year, 2 = twice in the past year, 3=3-5 times in the past year,4= 6-10 times,5=11-20 times, 6= > 20 times, 7= not in the past year but did happen before). These questions are asked to both partners or they can be used for a single partner also. It takes around10-15 minutes to complete.

Mini International Neuropsychiatric Interview 7.0.2

MINI 7.0.2 is a brief structured diagnostic interview designed by psychiatrists in 1990 and updated with ICD-10 and DSM-5. It assesses the 17 most prevalent mental health conditions. The world's most widely used tool, administered by mental health practitioners and health organizations in over 100 nations.

Over 70 languages have been translated and validated for MINI. Reliability and validation studies compared to SCID and CIDI (developed by WHO) yielded comparable results and can be administered in much less time (median time 15 minutes).

Statistical Analysis

Data were analyzed using a statistical package for social sciences (SPSS) for windows version 20.0. Descriptive statistics of all explanatory parameters were done using frequency and percentages for categorical variables whereas mean and standard deviation (SD)for continuous variables.

Chi-square test (X^2): It is used to test the significance of association between two or more qualitative or categorical variables. It was used to study the significance of the association between different items of domestic violence between male and female spouses and also between domestic

violence and psychiatric morbidity.

Independent t-test: This is used to test the difference between the means in two groups. Here it was used to test the difference between the means of continuous variables i.e, age, and duration of the marriage, duration of psychiatric illness partners with domestic violence, and also for psychiatric morbidity in both the male and female spouses.

The level of significance was set to p-value <0.05.

Results and Observations

Socio-Demographic Characteristics

A total of 200 subjects (female & male spouses of psychiatric patients) were included in the study. 60.5 %(n=121) were female spouses and 39.5 % (n=79)were male spouses.

Age

Table 1: Age-Wise Distribution of the Sample

Age (in Years)	Females	%	Males	%	Total
18-25	2	1.7	0	0	2(1%)
26-40	96	79.3	41	51.9	137(68.5%)
41-50	23	19	38	48.1	61(30.5%)

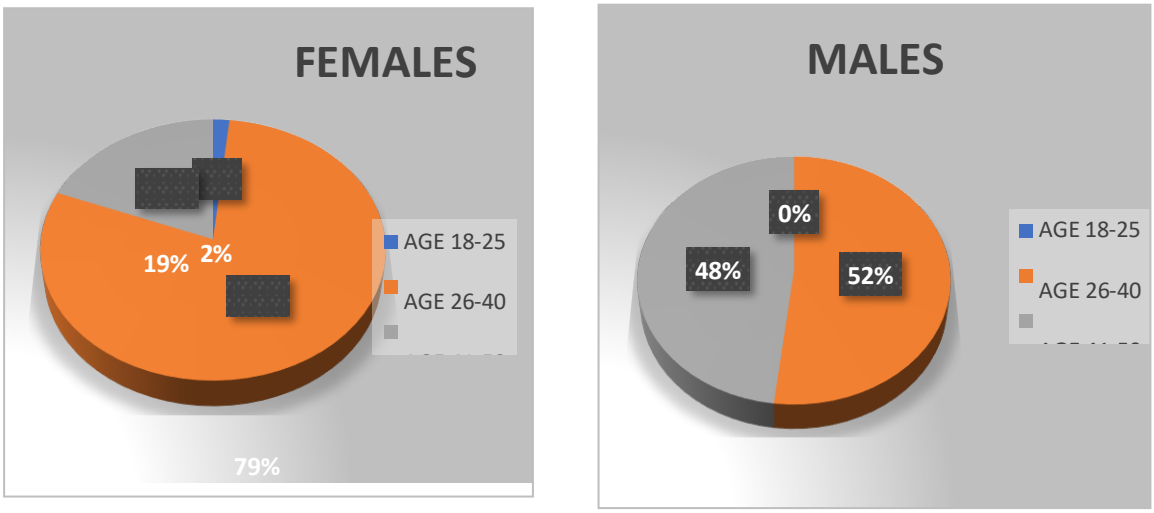

Figure 1: Showing Distribution of Age among Study

Participants

Mean age of the study subjects was 37.41 ± 5.275 years and within the age range of 18-48 years. Out of 200 subjects, 2.3% (n = 2) of female spouses were between the ages of 18 and 25; 79.3% (n = 96) were between the ages of 26 and 40, and 19% (n = 23) were between the ages of 41 and 50. Out of 200 subjects, 51.9% (n = 41) of male spouses were in the age range of 26to 40, and 48.1% (n = 38) were in the range of 41 to 50.

Education

Table 2: Distribution of Sample Based on Education

Education	Females	%	Males	%	Total
Primary	26	21.5	11	13.9	37(18.5%)
High School	68	56.2	32	40.5	100(50%)
Inter	18	14.9	25	31.6	43(21.5%)
Degree	9	7.4	11	7.4	20(10%)

Out of 200 subjects, most of them were studied up until high school. Among female spouses, 56.2% (n = 68) completed high school, 21.5% completed primary school, 14.9% completed inter, and 7.4% graduated. Among male spouses, 40.5% studiedup to high school, 31.6% up to inter, 13.9% up to primary school, and 7.5% were graduates.

Occupation

Table 3: Occupational Status among Study Participants

Occupation	Females	%	Males	%	Total
Employed	17	14	22	27.8	39(19.5%)
Skilled	21	17.4	18	22.8	39(19.5%)
Unemployed	60	49.6	12	15.2	72(36%)
Unskilled	23	19	27	34.2	50(25%)

The majority of study subjects, 36% (n = 72), were unemployed. Among them, n=60 were females, and n = 12 were males. Out of 121 female spouses, 23 were unskilled workers and 21 were skilled workers, and n = 17 were employed. Out of79 male spouses, n = 27 were unskilled workers, n = 18 were skilled, and n = 22 were employed.

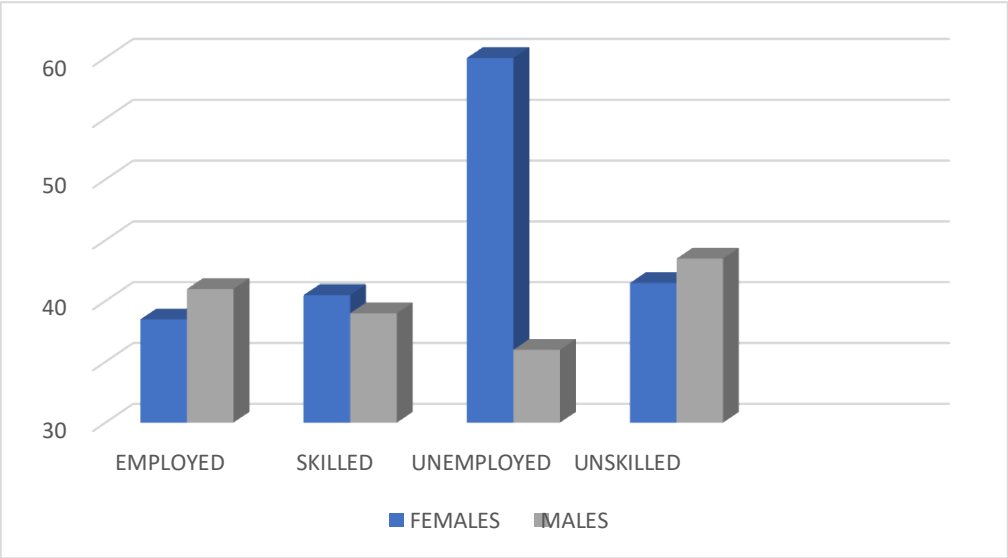

Figure 2: Showing Distribution of Occupational Status among Study Spouses

Socio Economic Status

Table 4: Distribution of Sample Based on Socio-Economic Status

Socio EconomicStatus	Females	%	Males	%	Total
Upper	2	1.7	0	0	2(1%)
UpperMiddle	13	10.7	10	12.7	23(11.5%)
Upperlower	9	7.4	10	12.7	23(11.5%)
Middle	2	1.7	0	0	2(1%)
LowerMiddle	23	19.0	34	43	57(28.5%)
Lower	72	59.5	25	31.6	97(48.5%)

According to the Kuppuswamy scale, the majority of study subjects (n=97) belongto a lower socio-economic group out of which n=72 were females and n=25 were males.11.5% belong to upper middle and upper lower,1% belong to middle and 28.5% belong to the lower middle socio-economic group.

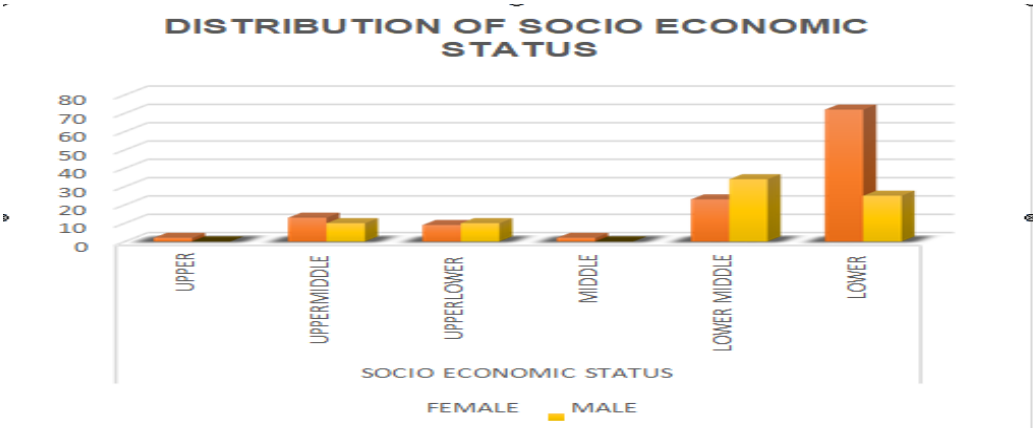

Figure 3: Showing Distribution Of Socio-Economic Status

Religion

Table 5: Distribution of Religion among Study Participants

Religion	Females	%	Males	%	Total
Hindu	111	91.7	66	83.5	177(88.5%)
Christian	10	8.3	8	10.1	18(9%)
Muslim	0	0.0	5	6.3	5(2.5%)

The majority of the sample belongs to the Hindu religion (88.5%) followed by Christians (9%) and then Muslims (2.5%). All Muslims in the study sample were male spouses.

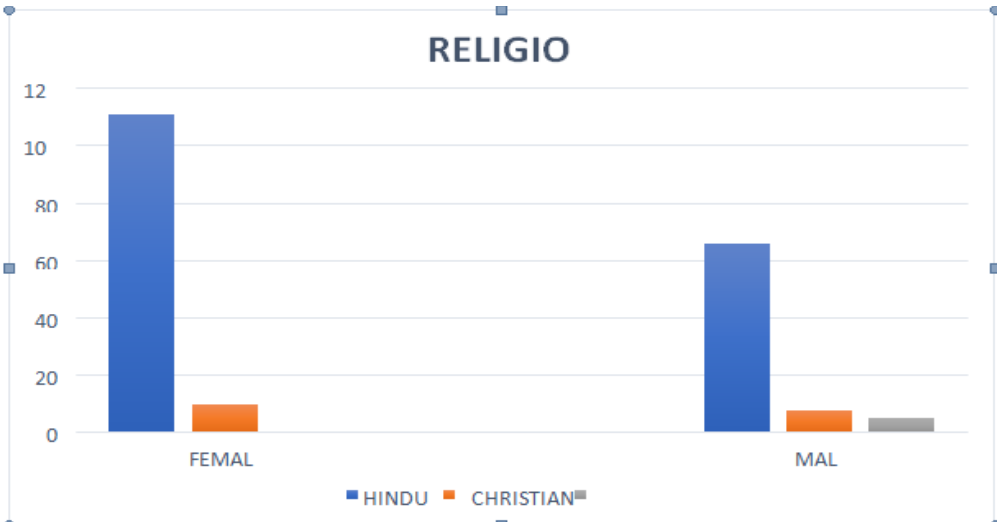

Figure 4: Showing Distribution of Religion among Study Spouses Residence

Table 6: Distribution of Residence among Study Participants

	Category	Females	%	Males	%	Total
Residence	Rural	73	60.3	43	54.4	116(58%)
	Urban	48	39.7	36	45.6	84(42%)

58% (n=116) of the total sample were from rural backgrounds and 42% (n=84) belong to the urban background. Most of the female spouses are from rural areas.

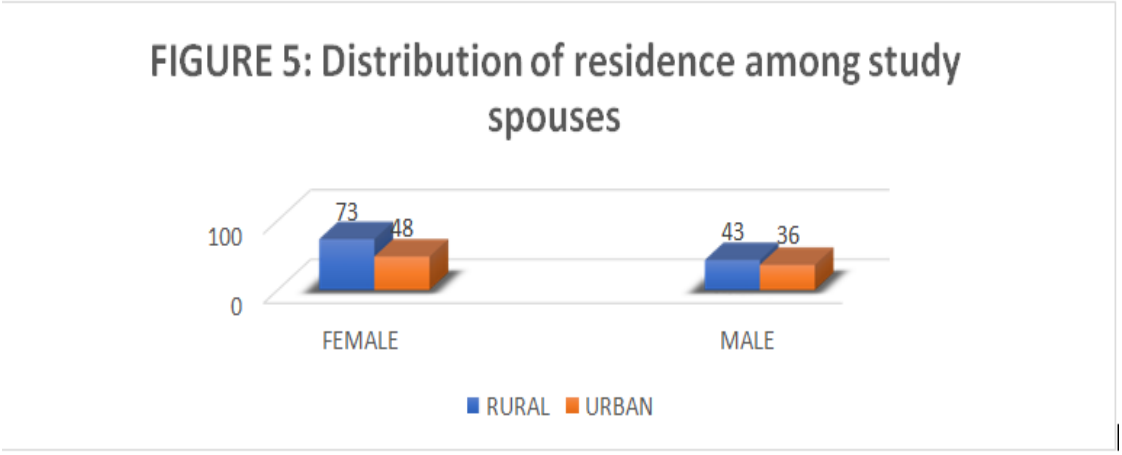

Figure 5: Showing Distribution of Residence among StudySpouses Family Characteristics of the Study Sample

Table 7: Distribution of Family Characteristics of the Study Spouses

Variable	Category	Females N (%)	Males N%
Type of Family	Nuclear	80 (66.1%)	51(64.6%)
	JOINT	41 (33.9%)	28(35.4%)
Type of Marriage	Consanguineous	29(24%)	22(27.8%)
	Non-Consanguineous	92(76%)	57(72.2%)
No. of Children	No Children	4 (3.3%)	1(1.3%)
	1	17 (14%)	10(12.7%)
	2	90(74.4%)	60(75.9%)
	>2	10(8.3%)	8(10.1%)
Duration of Marriage	1-10 Yrs	40(33.1%)	24(30.4%)
	11-20 Yrs	67(55.4%)	41(51.9%)
	21-30 Yrs	14 (11.6%)	14(17.7%)
Family H/O MentalIllness	Yes	20(16.5%)	12(15.2%)
	NO	101 (83.5%)	67(84.8%)

The majority of the sample 65.5% (n=131) belong to the nuclear family and 34.5%(n=69) were from the joint family. Of most of the study spouses, 74.5% (n=149) had a nonconsanguineous marriage whereas 5.5% (n=51) had a consanguineous marriage. 75% (n=150) of the study spouses had 2 children, 9% (n=18) had more than 2 children, 13.5% (n=27) had one child and 2.5% (n=5) had no children. Mean duration of marriage was 14.48 ±5.917, 32% (n=64) had married life duration between 1-10 years, 54% (n=108) was between 11-20 years And 14% (n=28) had married life between 21-30 years. 84% (n=168) of the study spouses had no family history of mental illness whereas 16% (n=32) had a historyof mental illness in the family.

Clinical Variables in Partner of Study Spouses

This study included the spouses of the most common type of psychiatric illness diagnosed according to ICD-10 attending Government hospital for mental care, Visakhapatnam, and also the duration of illness in a partner.

Table 8: distribution of type of psychiatric illness in partner of study spouses

Type of PsychiatricIllness In Partner	Females	%	Males	%	Total
Alcohol Use Disorder	61	50.4	3	3.8	64(32%)
Schizophrenia	29	24	29	36.7	58(29%)
Bipolar Disorder	17	14	28	35.4	45(22.5%)
Depressive Disorder	4	3.3	11	13.9	15(7.5%)
Anxiety Disorder	10	8.3	8	10.1	18(9%)

Out of 200 subjects, 32%(n=64) of partners of the study subjects had a diagnosis of Alcohol use disorder most of which are females.29%(n=58) of partners had a diagnosis of Schizophrenia equal for both male and female spouses.22.5%(n=45)had a diagnosis of the bipolar disorder most of which(35.4%) are female partners of male study spouses.7.5% (n=15) partners of the study spouses had a diagnosisof depression. 9%(n=18) of partners had an Anxiety disorder.

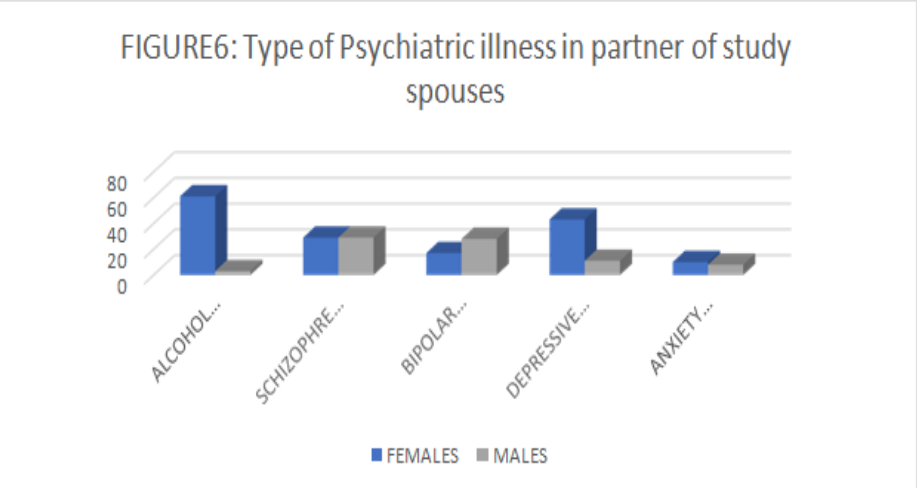

Figure 6: Showing Type of Psychiatric Illness in Partner of Study Spouses Duration of Psychiatric Illness in Partner of Study Spouses

Table 9: Duration of Psychiatric Illness in Partner of Study Spouses

Category	Female	%	Male	%	Total
<5 Yrs	24	19.8	23	29.1	47(23.5%)
5-10 Yrs	76	62.8	49	62	125(62.5%)
>10 Yrs	21	17.4	7	8.9	28(14%)

The mean duration of illness in the partner of the study spouses was 7.630 ±4.1873years. 62.5% (n=125) of the study spouses had their partner's psychiatric illness duration between 5-10 years, 23.5%(n=47) had a duration of illness <5 years and 14% (n=28) were >10 years predominantly being female spouses in all three categories.

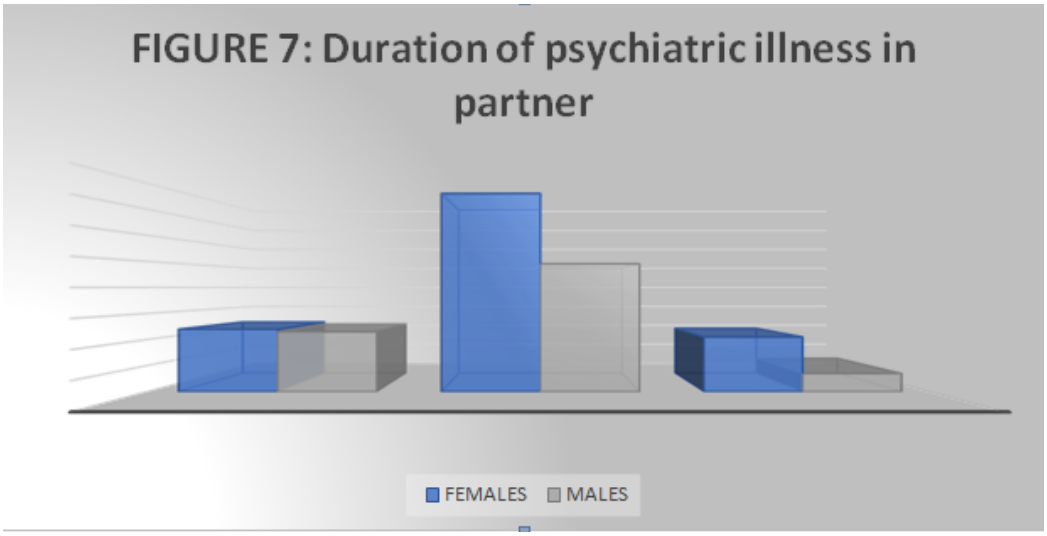

Figure 7: Showing Duration of Psychiatric Illness in PartnerClinical Variables in Study Spouses

In this study, clinical variables were discussed under Domestic violence and Psychiatric morbidity

Domestic Violence

In this study, DV was assessed by using the revised conflict tactics scale (CTS2).

Table 10: Distribution of Domestic Violence among Spouses

Domestic Violence	Females		Males	
	N	%	N	%
Yes	90	74.4	40	50.6
No	31	25.6	39	49.4
Total	121	100	79	100

Out of 200 subjects, the majority 65% (n=130) of spouses experienced domestic violence by their partners. Females 74.4% (n=90) experience more domestic violencethan males 50.6% (n=40).

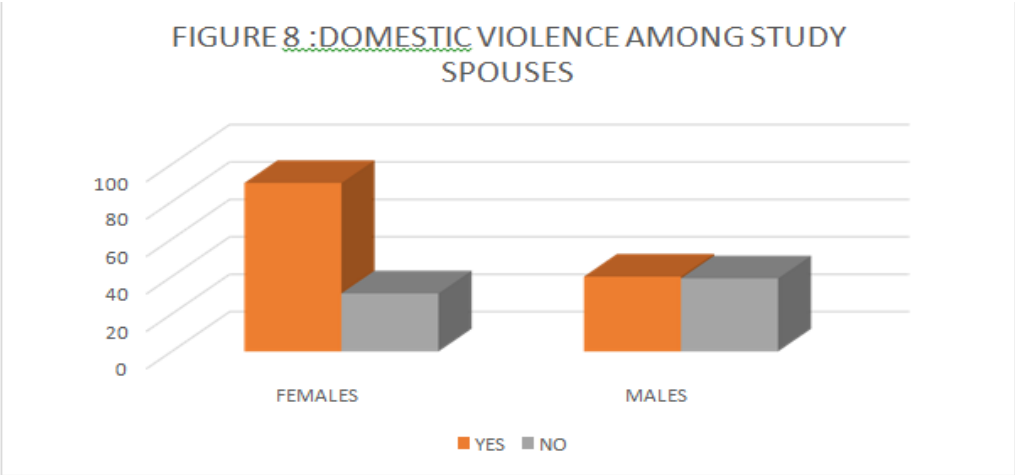

Figure 8: Showing Domestic Violence among Study Spouses

Distribution of Types of Domestic Violence Based on the Cts2 Scale among Study Spouses: In this study, by using the tool CTS2, Domestic violence was subdivided into Negotiation, Psychological aggression, Physical assault, Sexual coercion, and Injury.

Table 11: Types of DV and Their Comparison among Study Spouses

Type Of Domestic Violence	Category	Females	%	Males	%	Total	Significance
Negotiation	Emotional	75	62	26	32.9	101(50.5%)	X2-16.635,
	Cognitive	15	12.4	14	17.7	29(14.5%)	p value<0.001
PsychologicalAggression	Minor	31	25.6	14	17.7	45(22.5%)	X2- 20.067,
	Severe	50	41.3	14	17.7	64(32%)	P value<0.001*
PhysicalAssault	Minor	32	26.4	15	19	47(23.5%)	X2-14.160
	Severe	26	21.5	4	5.1	30(15%)	P value-0.001*
Sexual Coercion	Minor	13	10.7	5	6.3	18(9%)	X2- 8.457
	Severe	10	8.3	0	0	10(5%)	Pvalue-0.015*
Injury	Minor	27	22.3	9	11.4	36(18%)	X2-19.327
	Severe	21	17.4	1	1.3	22(11%)	Pvalue<0.001*

Of the 200 spouses, 65% reported experiencing negotiation, mainly emotional violence. This was followed by psychological violence in 54.5% (n = 109), physical violence in 38.5%, and sexual violence in 14%. When compared to male spouses, female spouses had a statistically significant higher likelihood of experiencing psychological aggression.

47.9% (n=58) of females were more likely to experience physical assault when compared to 24.1% (n=19) of males which was statistically significant (p-0.001). 14%(n=28) of study spouses had sexual coercion more in female spouses compared to 6.3%(n=5) of males which was statistically significant (p<0.05).

29% (n = 58) of study spouses were more likely to suffer injury, with minor subtypes(n = 36) occurring more frequently in females (n = 27) than in males (12.7% (n = 10), which was statistically significant (p 0.001).

Table 12: Association of Domestic Violence with Socio-Demographic Characteristics

Category	Domestic Violence		Total	Significance
	Yes (N %)	No (N %)		
Age In Years				
18-25	1 (0.8%)	1 (1.4%)	2 (1.0%)	
26-40	94 (72.3%)	43 (61.4%)	137(68.5%)	Chi Square=2.542
41-50	35 (26.9%)	26 (37.1%)	61 (68.5%)	P-Value- 0.281
Sex				
Female	90 (69.2%)	31 (44.3%)	121(60.5%)	Chi Square=11.848
Male	40 (30.8%)	39 (55.7%)	79 (39.5%)	P Value- 0.001*
Education				

Primary	27 (20.8%)	10 (14.3%)	37 (18.5%)	
High School	63 (48.5%)	37 (52.9%)	100 (50%)	Chi square=1.818
Inter	26(20%)	17 (24.3%)	43 (21.5%)	P Value-0.611
Degree	14 (10.8%)	6 (8.6%)	20 (10%)	
Unemployed	50 (38.5%)	22 (31.4%)	72 (36%)	
Occupation				
Unskilled	35 (26.9%)	15 (21.4%)	50 (25%)	Chi square=3.513
Employed	24 (18.5%)	15 (21.4%)	15 (21.4%)	P value- 0.319
Skilled	21 (16.2%)	18 (25.7%)	39 (25.7%)	
Socio Economic Status				
Upper	2 (1.5%)	0	2(1%)	
Uppermiddle	13 (10%)	10 (14.3%)	23 (11.5%)	Chi square=4.474
Upperlower	13 (10%)	6 (8.6%)	19 (9.5%)	Pvalue-0.483
Middle	13(10%)	6(8.6%)	19(11.5%)	
LowerMiddle	1(0.8%)	1(1.4%)	2(1%)	
Lower	33(25.4%)	24(34.3%)	57(28.5%)	
Domicile				
Rural	77(59.2%)	39(55.7%)	116(58%)	Chi square=0.231
Urban	53(40.8%)	31(44.3%)	84(42%)	Pvalue-0.631
Religion				
Hindu	113(86.9%)	64(91.4%)	177(88.5%)	
Christian	12(9.2%)	6(8.6%)	18(9%)	Chi-Square-2.819
Muslim	5(3.8%)	0	5(2.5%)	P value- 0.244

Association of DV with socio-demographic variables revealed DV is more common in female spouses who were statistically significant with pvalue 0.001 and there is no statistical significance in other variables.

Domestic Violence and Family Characteristics & ClinicalVariables in Partner:

An Independent sample t-test was used to compare the means of continuous variables and Domestic violence in both male and female studyspouses

Table 13: Comparison of Means of Continuous Variables with Domestic Violence in Female Spouses

Parameter	DomesticViolence	Frequency	Mean	StandardDeviation	P Value
Age	Yes	90	35.8	4.927	
	No	31	36.84	5.478	0.327
Duration OfMarriage	Yes	90	13.94	5.703	
	No	31	15.29	5.9	0.266
Duration OfIllness In Partner	Yes	90	8.367	4.2279	0.023*
	No	31	6.468	2.997	

Table 14: Comparisons of Means of Continuous Variables with Domestic Violence In Male Spouses

Parameter	Domestic Violence	Frequency	Mean	Standard Deviation	P Value
Age	Yes	40	39.68	4.859	
	No	39	39.26	5.061	0.709
Duration Of Marriage	Yes	40	14.45	6.206	
	No	39	15.08	6.145	0.653
Duration of Psychiatric Illness In Partner	Yes	40	7.675	4.4686	0.387
	NO	39	6.808	4.3914	

DV was found in female spouses by their partners whose duration of psychiatric illness with a mean of 8.367 (SD-4.22) was statistically significantwith p-value <0.05 when compared with male spouses.

Table15: Association of Domestic Violence in Spouses withType of Psychiatric Illness in Their Partner

Type Of Psychiatric Illness In Partner	Female Spouses		Male Spouses	
	Yes	No	Yes	No
	N (%)	N (%)	N (%)	N (%)
Alcohol UseDisorder	52(57.8)	9(29)	2(5)	1(2.6)
Schizophrenia	23(25.6)	6(19.4)	18(45)	11(28.2)
Bipolar Disorder	14(15.6)	3(9.7)	16(40)	12(30.8)
DepressiveDisorder	1(1.1)	3(9.7)	4(10)	7(17.9)
Anxiety Disorder	0	10(32.3)	0	8(20.5)
Total	90	31	40	39

Chi square -38.867; p -value-0.001*(F) Chisquare-11.40; p-value-0.022*(M). Female spouses reported experiencing domestic violence (DV) from partners with alcohol use disorders in 57.8% (n = 52), followed by partners with schizophrenia in 25.6%. And depression in 1.1%, and bipolar disorder in 15.6% which were statistically significant p-value- 0.001. Among male spouses, 45% (n = 18) experienced DV from their partners who had schizophrenia followed by bipolar disorder (40%) and alcoholism (40%) and 10% had depressive disorder, which was statistically significant p<0.05.

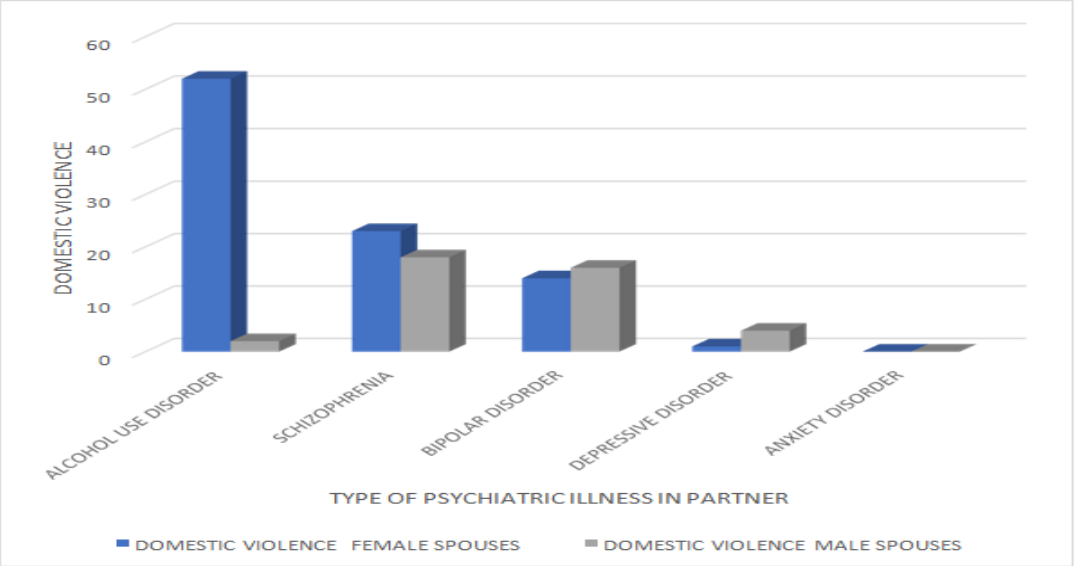

Figure 9: Association of Domestic Violence in Spouses withType of Psychiatric Illness in Their Partner

Psychiatric Morbidity

Table 16: Distribution of Psychiatric Morbidity among Study Spouses

PsychiatricMorbidity	Female Spouses		Male Spouses		Total
	N	%	N	%	
Yes	78	64.5	30	38.0	108
No	43	35.5	49	62.0	92

***(Chi Square-13.500, Pvalue-0.001*). Out of 200 subjects, Psychiatric morbidity was found in 54% (n=108), of whichn=78 were females and n=30 were males, which was statistically significant.

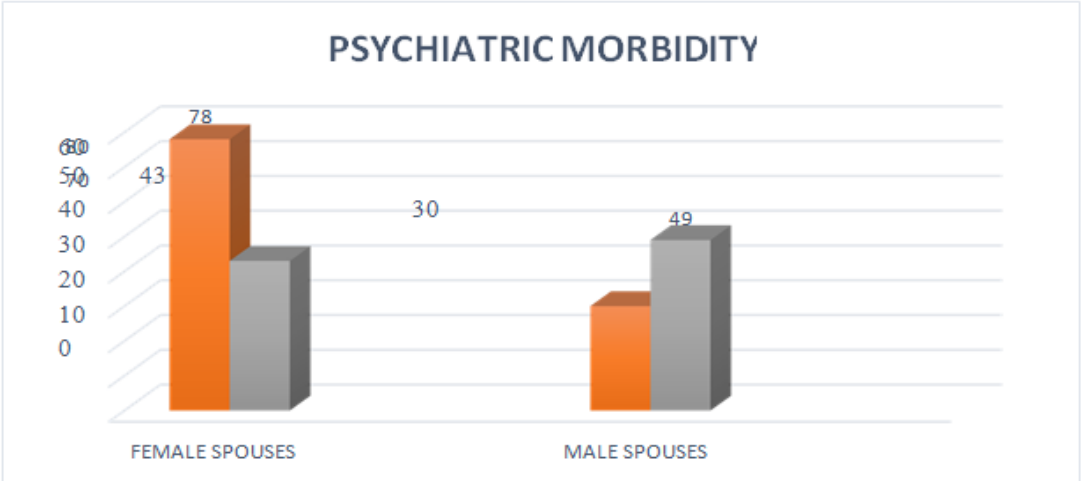

Figure 10: Distribution of Psychiatric Morbidity among Study Spouses

Table 17: Distribution of Type of Psychiatric Morbidity among Study Spouses

Type of Psychiatric Morbidity	Female Spouses		Male Spouses	
	N	%	N	%
Alcohol Use D/O	0	0	11	13.9
Major Depressive D/O	38	31.4	10	12.7
GeneralizedAnxiety D/O	10	8.3	7	8.9
Panic D/O	8	6.6	1	1.3
Psychosis	4	3.3	0	0
PTSD	7	5.8	1	1.3
Social Anxiety D/O	4	3.3	0	0
Suicidality	7	5.8	0	0
No	43	35.5	49	62
Total	121		79	

(Chi square-46.426; pvalue-0.001*). 46% (n=92) had no psychiatric morbidity. 24 % (n=48) of study spouses had major depressive disorder found in female spouses followed by a generalized anxiety disorder in 8.5%(n=17) .5.5%(n=11) of male spouses had alcohol use disorder. Panic disorder was found in 4.5% (n=9) followed by PTSD in 4% (n=8), suicidality in 3.5% (n=7) and social anxiety disorder was found in 2% (n=4). Except for alcohol use disorder, all other disorders were found more in female spouses which was statistically significant (p -0.001)

Type of Psychiatric Morbidity

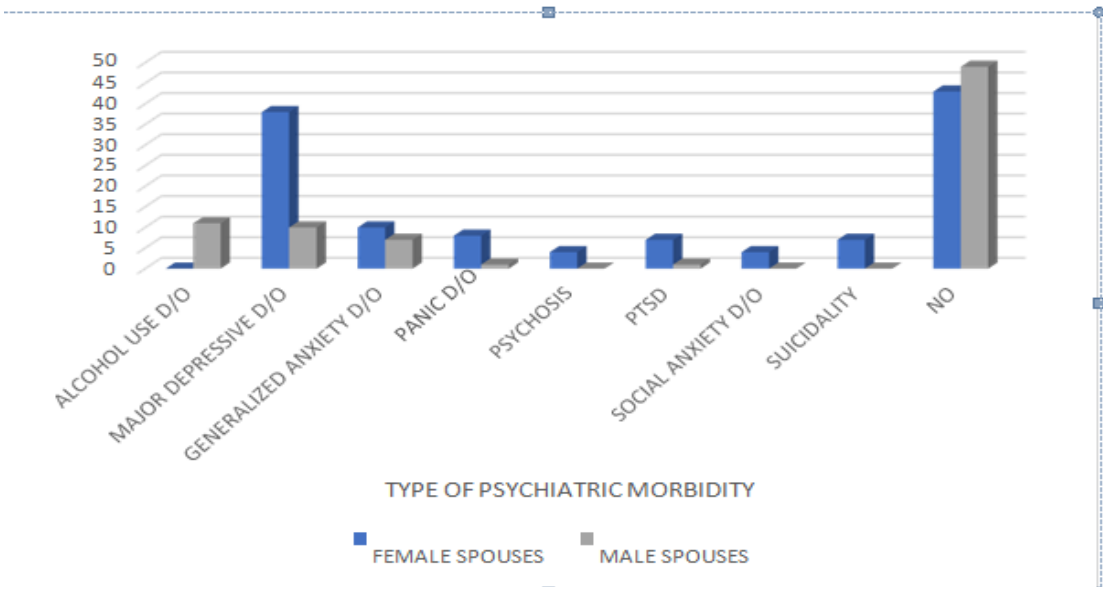

Figure 11: Distribution of Type of Psychiatric Morbidityamong Study Spouses

Psychiatric Morbidity and Socio-Demographic Characteristics

Table 18: Association of Socio-Demographic Characteristics with Psychiatric Morbidity

Category	Psychiatric Morbidity				Significance
	Female Spouses N (%)		Male SpousesN (%)		
	Yes	No	Yes	No	
Age					
18-25	1(1.3)	1(2.3)	0	0	Chi-square-4.640, p-value-0.098
26-40	67(85.9)	29(67.4)	14(46.7)	27(55.1)	
41-50	10(12.8)	13(30.2)	16(53.3)	22(44.9)	
Education					
Primary	20(25.6)	6(14)	5(16.7)	6(12.2)	Chi-square=9.724, p-value-0.021*
High School	43(55.1)	25(58.1)	10(33.3)	22(44.9)	
Inter	8(10.3)	10(23.3)	8(26.7)	17(34.7)	
Degree	7(9)	2(4.7)	7(23.3)	4(8.2)	
Occupation					
Unemployed	41(52.6)	19(44.2)	7(23.3)	5(10.2)	Chi-square =8.995, p-value-0.029*
Unskilled	17(21.8)	6(14)	10(33.3)	17(34.7)	
Employed	9(11.5)	8(18.6)	8(26.7)	14(28.6)	
Skilled	11(14.1)	10(23.3)	5(16.7)	13(26.5)	
Socio Economic Status					
Upper	1 (1.3)	1 (2.3)	0	0	Chi-square=6.723, p-value-0.242
Uppermiddle	7 (9)	6 (14)	5 (16.7)	5 (10.2)	
Upperlower	5 (6.4)	4 (9.3)	4 (13.3)	6 (12.2)	
Middle	1 (1.3)	1 (2.3)	0	0	
Lower middlE	13 (16.7)	10 (23.3)	11 (36.7)	23 (46.9)	
Lower	51 (65.4)	21 (48.8)	10 (33.3)	15 (30.6)	
Domicile					
Rural	51 (65.4)	22 (51.2)	17 (56.7)	26 (53.1)	Chi-Square=2.374, Pvalue-0.123
Urban	27 (34.6)	21 (48.8)	13 (43.3)	23 (46.9)	
Religion					
Hindu	71 (91)	40 (93)	24 (80)	42 (85.7)	Chi-Square-1.484, P-Value-0.476
Christian	7 (9)	3 (7)	2 (6.7)	6 (12.2)	
Muslim	0	0	4 (13.3)	1 (2)	

Psychiatric morbidities were more likely in spouses who studied up to high school ($p<0.05$) and who belong to a lower socioeconomic status($p<0.05$) which were statistically significant.

Table 19: Showing the Association between Psychiatric Morbidity and Family History of Psychiatric Illness in Study Spouses

Family H/O MI	Psychiatric Morbidity			
	Females		Males	
	Yes N (%)	No N (%)	Yes N (%)	No N (%)
Present	17 (21.8)	3 (7)	8 (26.7)	4 (8.2)
Absent	61 (78.2)	40 (93)	22 (73.3)	45 (91.8)
Total	78	43	30	49

Chi square-4.411, p value-0.036*(F); Chi square-4.945, p value-0.026* (M)(F)- Female spouses ;(M)- Male spouses. Psychiatric morbidity was found in 21.8% of male and 26.7% of female spouses who had a family history of psychiatric illness which was statistically significant withp value<0.05.

Psychiatric Morbidity and Clinical Variables in Partner of Study Spouses

Table 20: Association between Types of Psychiatric Illness in Partner with Psychiatric Morbidity

Type of Psychiatric IllnessIn Partner	Female Spouses		Male Spouses	
	Yes	No	Yes	NO
	N	N	N	N
Alcohol Use Disorder	46	15	0	3
Schizophrenia	20	9	16	13
Bipolar Disorder	11	6	12	16
Depressive Disorder	0	4	2	9
Anxiety Disorder	1	9	0	8
Total	78	43	30	49

Chi-square 23.652,p-value -0.001*(F); Chi-square 12.489p-value- 0.014*(M). Psychiatric morbidity in female spouses is more in alcohol use disorder partners followed by schizophrenia later by bipolar and anxiety disorder which was statistically significant by p- 0.001. Psychiatric morbidity in male spouses is more in schizophrenia partners followed by the bipolar and depressivedisorder which was statistically significant p <0.05.

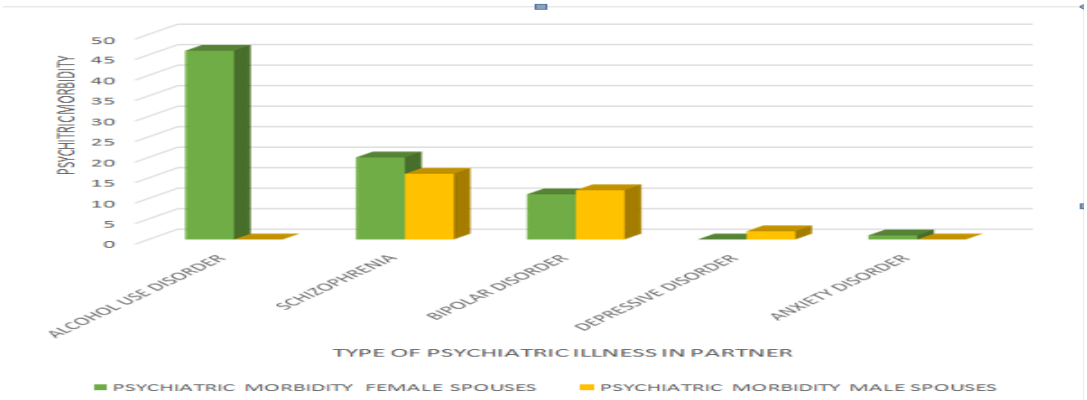

Figure 12: Association between Type of Psychiatric Illness in Partner with Psychiatric Morbidity

Association of Psychiatric Morbidity with ContinuousVariables:

Table 21: Comparison of Means of Continuous Variables with Psychiatric Morbidity in Female Spouses

Parameter	PsychiatricMorbidity	Frequency	Mean	StandardDeviation	P Value
Age	Yes	78	35.59	4.897	0.165
	No	43	36.93	5.32	
Duration OfMarriage	Yes	78	14.03	5.691	0.502
	No	43	14.77	5.983	
Duration Of IllnessIn Partner	Yes	78	8.41	4.289	0.036*
	No	43	6.919	3.327	

Table 22: Comparison of Means of Continuous Variables with Psychiatric Morbidity in Male Spouses

Parameter	PsychiatricMorbidity	Frequency	Mean	StandardDeviation	P Value
Age	Yes	30	39.9	5.384	0.546
	No	49	39.2	4.673	
Duration OfMarriage	Yes	30	15	6.357	0.787
	No	49	14.61	6.072	
Duration OfIllness In Partner	Yes	30	8.9	5.114	0.008*
	No	49	6.235	3.638	

Independent sample t test was used for comparison of mean differences of two groups with and without psychiatric morbidity showed that there is an association with duration of psychiatric illness in partner with statistical significance among bothfemale spouses(p<0.05) and male spouses(p <0.05).

Table 23: Association between Domestic Violence and Psychiatric Morbidity in Study Spouses

DomesticViolence	Psychiatric Morbidity			
	Female Spouses		Male Spouses	
	Yes	No	Yes	No
Present	77 (85.6%)	1 (3.2%)	29 (72.5)	1 (2.6)
Absent	13(14.4)	30(96.8)	11 (27.5)	38(97.4)
Total	90	31	40	39

Chi square-68.224, p value-0.001*(F); Chi square-41.005, p value-0.001*(M) (F)- Female spouses: (M)-Male spouses.

Psychiatric morbidity was more likely in female spouses 85.6% (n=77) who experienced DV by their psychiatric partners which was statistically significant (p- 0.001). 72.5% (n=29) of male spouses had psychiatric morbidity who experienced by their partners with psychiatric illness which was statistically significant (p -0.001).

There is a significant statistical association between domestic violenceand psychiatric morbidity among both female and male spouses who experience different types of violence by their partners.

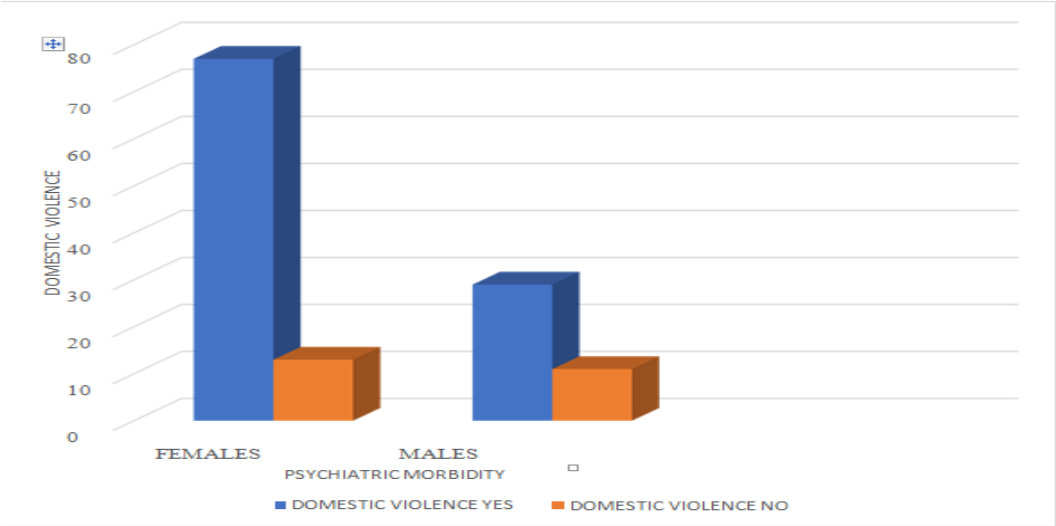

Figure 13: Association of Psychiatric Morbidity with VariousSubtypes of Domestic Violence

Table 24: Association of Negotiation Sub Type of DomesticViolence with Psychiatric Morbidity

Type of psychiatric morbidity	Emotional		Cognitive	
	Female spouses N (%)	Male spousesN (%)	Female spouses N (%)	Male spouses N (%)
MDD	36 (48%)	9 (34.6 %)	1 (6.7%)	1 (7.1%)
AUD	0	5 (19.2%)	0	6 (42.9%)
GAD	7 (9.3%)	6(23.1%)	3 (20%)	0
Panic Disorder	6 (8%)	1 (3.8%)	2 (13.3%)	0
Psychosis	4 (5.3%)	0	0	0
PTSD	6 (8%)	0	1 (6.7%)	1(7.1%)
Social Anxiety Disorder	2 (2.7%)	0	2(13.3%)	0
Suicidality	5 (6.7%)	0	2 (13.3%)	0
NIL	9 (12%)	5 (19.2%)	4 (26.7%)	6 (42.9%)
Total	75	26	15	14

Chisquare-84.487, pvalue-0.001(F), Chisquare-61.536, pvalue -0.001(M)Based on the CTS2 scale, negotiation is categorized into emotional and cognitive types. Female spouses who experienced emotional violence (n=36) were more likely to have Major depressive disorder compared to other disorders which was statistically significant (p-0.001). Male spouses who experienced emotional violence (n=9) were more likely to have major depressive disorder compared to others (p-0.001).

Table 25: Showing the Association of PsychologicalAggression with Psychiatric Morbidity

Type of psychiatric morbidity	Psychological Aggression			
	Minor		Severe	
	Female spouses N (%)	Male spouses N (%)	Female spouses N (%)	Male spouses N (%)
MDD	6 (19.4%)	3 (21.4%)	31 (62%)	7 (50%)
AUD	0	5 (35.7%)	0	4 (28.6%)
GAD	6 (19.4%)	3 (21.4%)	2 (4%)	3 (21.4%)
Panic Disorder	6 (19.4%)	0	0	0
Psychosis	0	0	4 (8%)	0
PTSD	1 (3.2%)	1 (7.1%)	6 (12%)	0
Social Anxiety Disorder	2 (6.5%)	0	1 (2%)	0
Suicidality	2 (6.5%)	0	5 (10%)	0
NIL	8 (25.8%)	2 (14.3%)	1 (2%)	0
Total	31	14	50	14

Chi-square-105.295,p-value-0.001(F), Chi-square-67.541,p-value -0.001(M).

Female spouses(n=31) who experienced severe psychological aggression were more likely to have major depressive disorder as the most common psychiatric morbidity followed by PTSD (n=6), Suicidality (n=5) and others which were statistically significant (p-0.001) . Male spouses (n=28) who experienced Psychological aggression were more likely to have MDD(n=10) followed by alcohol use disorder(n=9), GAD(n=6,) and others which werestatistically significant (p-0.001).

Association of Physical Assault with Psychiatric Morbidity

Table 26: Showing the Association of Physical Assault withPsychiatric Morbidity

Type of psychiatric morbidity	Physical Assault			
	Minor		Severe	
	Female spouses N (%)	Male spouses N (%)	Female spouses N (%)	Male spouses N (%)
MDD	14 (43.8%)	7 (46.7%)	17 (65.4%)	2 (50%)
AUD	0	4 (26.7%)	0	0
GAD	4 (12.5%)	3 (20%)	0	1 (25%)
Panic Disorder	1 (3.1%)	0	0	0
Psychosis	1 (3.1%)	0	3 (11.5%)	0
PTSD	5 (15.6%)	0	0	1 (25%)
Social Anxiety Disorder	1 (3.1%)	0	1 (3.8%)	0
Suicidality	2 (6.3%)	0	5 (19.2%)	0
NIL	4 (12.5%)	1 (6.7%)	0	0
Total	32	15	26	4

Chi-square-79.748, p-value-0.001(F), Chi-square-62.734, p-value-0.001(M)

Female spouses (n=58) who experienced Physical assault by their partners were more likely to have MDD (n=31) followed by Suicidality (n=7), PTSD (n=5), and others (p -0.001). Male spouses (n=19)who experienced physical assault were more likely to have MDD(n=9) followed by Alcohol use disorder(n=4) and GAD(n=4) which was statistically sig (p-0.001).

Association of Sexual Coercion with Psychiatric Morbidity

Table 27: Showing the Association of Sexual Coercion withPsychiatric Morbidity

Type of psychiatric morbidity	Sexual Coercion			
	Minor		Severe	
	Female spouses N (%)	Male spouses N (%)	Female spouses N (%)	Male spouses N (%)
MDD	5 (38.5%)	2 (40%)	5 (50%)	0
AUD	0	2 (40%)	0	0
GAD	1 (7.7%)	0	0	0
Panic Disorder	0	1 (20%)	0	0
Psychosis	1 (7.7%)	0	0	0

PTSD	2 (15.4%)	0	1 (10%)	0
Social Anxiety Disorder	1 (7.7%)	0	0	0
Suicidality	1 (7.7%)	0	4 (40%)	0
NIL	2 (15.4%)	0	0	0
Total	13	5	10	0

Chi-square-38.273, p-value-0.001(F), Chi-square-24.410, p-value-0.001(M)Female spouses (n=23) were more likely to experience sexual coercion by their partners with psychiatric illness and (n=10) had MDD, followed by suicidality (n=5), PTSD(n=3)and others which were statistically significant(p-0.001). Male spouses (n=5) were likely to experience minor sexual violence when compared to females.

Association of Injury Subtype of Domestic Violence withPsychiatric Morbidity

Table 28: Showing the Association of Injury Subtype ofDomestic Violence with Psychiatric Morbidity

Type of psychiatric morbidity	Injury			
	Minor		Severe	
	Female spouses N (%)	Male spouses N (%)	Female spouses N (%)	Male spouses N (%)
MDD	18 (66.7%)	4 (44.4%)	10 (47.6%)	1 (100%)
AUD	0	4 (44.4%)	0	0
GAD	3 (11.1%)	0	0	0
Panic Disorder	1 (3.7%)	0	1 (4.8%)	0
Psychosis	1 (3.7%)	0	3 (14.3%)	0
PTSD	3 (11.1%)	0	0	0
Social Anxiety Disorder	0	0	0	0
Suicidality	0	0	7 (33.3%)	0
NIL	1 (3.7%)	0	0	0
Total	27	9	21	1

Chi-square-96.330, p-value-0.001 (F); Chi-square-27.993,p-value-0.002(M). Female spouses (n=48) who experienced injury by their partners with psychiatric illness had MDD (n=28) followed by Suicidality (n=7), psychosis was reported in 3.3% (n=4) and GAD in (n=3), which was statistically significant (p- 0.001). Male spouses (n=10) who experienced injury by their partners were more likely to have MDD (n=5) followed by alcohol use disorders. ($p<0.05$)

Discussion

Violence and mental illness continue to be intricately linked with each other. Stigma leads to the nondisclosure of mental illness leading to decreased need for treatment. The prevalence of IPV among men and women across all diagnostic categories of mental disorders was found to be high in a review of worldwide literature. However, there is a paucity of research on the mental health of spouses experiencing DV by their partners with common mental illnesses in India.

Socio-Demographic Profile and Domestic Violence:

The mean age of female spouses of male psychiatric patients was 35.8 ± 4.92 years, while the mean age of male spouses of female psychiatric patients was 39.6 ± 4.85 years. According to the NFHS-4 Tamilnadu report, which showedthat 46% of women between the ages of 15 and 49 have experienced DV, and themajority of the participants in this study were middle-aged. This shows that as spouses get older, they can perceive DV as being more prevalent or feel less hesitant to disclose it.

Among participants who experienced DV,48.5% completed high school and 20.8% completed primary school. Rural backgrounds are represented by 59.2% ofmarried women and 55.7% of married men. This is consistent with the findings of the study done by Ahmed et al [47] 2003 in rural Bangladesh**.** IPV is linked to differences in education and background between couples. Women with literacy in rural areas are more independent and less likely to accept the conventional role of rural women, making them more vulnerable to domestic violence. Similarly, educated males try to uphold traditional notions of

male authority in rural areas. Vyas et al 2008 [48] hypothesized that employment reduces women's dependence on their husbands and enhances their power reducing their vulnerability to DV. Prevalence of DV was found in the majority 38.5% of subjects who were unemployed and 25.4% belong to the lower socio-economic group. In a study done by Indu PV et al [47] and Aggarwal et al, half of the sample belonged to below the poverty line. Because patients from lower income

groups cannot afford private hospitals, the study setting being a government hospital was more accessible to them in this study.

Frustration, stress, and marital violence are all possibilities for men who lack a stable and secure job. According to Kimmel et al. [48] (1996) and Mozuder (2003), working women are more prone to question their husbands' authority and are more likely to be victims of violence. The relationship between employment status and DV, however, is not significant in the current study.

86.9% of the survey participants who had experienced domestic violence were Hindus & few were Christians and Muslims. In a study done by Indu PV et al [42] most of them belonged to the Hindu religion (75%). 18.3% were Christians and 6.7% were Muslims**.** This could be a result of Hinduism's dominance in India, which has no association with DV in this study.

Family Characteristics and Domestic Violence:

The majority 65.5% of the study subjects belong to nuclear families. This may be because most couples today prefer to live apart from their parent families and/or must relocate for their jobs. Diverse family structures established different gender roles, and this has had a lasting effect that accounts for variations in violence against spouses. This was similar to the findings in a study done by Prats et al [49]2019.

74.5% had a nonconsanguineous marriage. In three of the four countries investigated in the US, there is a negative correlation between consanguinity and intimate partner violence (IPV). However, there is a strong connection between them in India this might be due to the fact that dowry customs in India are distinct from those in other nations.

The mean duration of marriage in the study spouses was more than 10 years which was similar to the study done by Mundodan et al [50] 2021 in Kerala. This is in contrast to the study done from Maharashtra, by Bagul et al 2015 where they observed more psychiatric illness in spouses married for more than 21 years and they got a significant association between psychiatric morbidity of spouses with their duration of marital life.

75 % of study subjects had 2 children. 62% of the couples in the Nair S [51] et al.study had two kids. The majority of the study group had two children in the Aggarwal A et al study. Hence these results were consistent with this study. 84% of study spouses had a family history of mental illness and there is no significant association between them.

Clinical Characteristics in Partner and Domestic Violence:

Type of Psychiatric Illness:

Female Spouses

Women who were married to men who had alcohol use disorders reported experiencing domestic violence (DV) from these partners at a rate of 57.8%, followed by schizophrenia (25.6%), bipolar disorder (15.6%), and depressive illness (1.1%). Among married women, poor mental health and violence are linked to the male partner's alcohol abuse.

Male Spouses

Among male spouses, DV was experienced by 45% of their partners who had schizophrenia, followed by 40% of couples who had a bipolar illness, 2% of partners who had alcohol use disorder, and 10% of partners who had a depressivedisorder.

One study performed in Sweden found that persons suffering from mental and behavioral health conditions were more likely to perpetrate abuse against their partners. According to a study done by Divija et al, men who drink more often andheavily were more likely to perpetrate violence towards their female partners, which could affect their ability to self-regulate and decision making. Benegal reported that5% of Indian women consume alcohol.

Men with schizophrenia often have more negative symptoms, whilst women show more emotional symptoms (Leung & Chue,2000). Swanson et al [24] in their study hypothesized that instead of negative symptoms, "positive" psychotic symptoms such as persecutory ideation enhanced the chance of both minor and major violence. An individual with bipolar disorder may feel motivated and happy during a manic episode, but this rapid surge of energy can also have detrimental effects. Violence was linked by Ceslo Arango [52] and colleagues to medication non- compliance secondary to lack of insight.

Duration of Psychiatric Illness in Partner:

The mean duration of psychiatric illness in partners among both study spouses is between 5-10 years which had a significant association with DV. This may be due to the chronicity of the illness. Furthermore, characteristics of mental illness may directly raise the risk (e.g., irritability during a manic episode, suspiciousness, and anger during a psychotic episode), and risk varies between disorders. Identifying the extent to which certain mental diseases are related to violence towards a spouse is crucial since it will influence violence prevention initiatives.

Domestic Violence:

Domestic violence among study spouses was 65% most of them were females which was similar to the study by Schumacher et al,2001. Domestic violence against males is also not acknowledged under Indian law. Despite this, a growing percentage of males are subjected to harassment and psychological and physical abuse by women. Kristin Carbone-López et al [25] 2006 stated that the majority of both sexes experience no violence; a minority suffers non-multidimensional violence.

A final subset is characterized by considerable, severe, and multidimensional violence, as well as other types of power-controlling aggression. Men are substantially less likely than women to have suffered IPV, although men and women tend to experience IPV in a similar pattern.

Domestic Violence among Female Spouses

The most common type of DV experienced by our subjects was Negotiation followed by psychological aggression and physical violence while Ahuja et al reported physical violence. Babu and Kar et al [53] reported psychological abuse more common than physical violence.

Psychological aggression, physical assault, sexual coercion, and injury were shown to be statistically significant in female spouses as compared to the nonviolent group. Manohar et al [35]. studied that woman of alcoholics experienced more physical and psychological abuse than wives of non-alcoholics. Another research, done by Nilesh Pinto, found that psychological, physical, and sexual abuse was much greater among the women of alcoholic spouses.

Domestic Violence among Male Spouses

Negotiation was found in all cases of experiencing violence among male spouses, followed by psychological aggression, which was equal for both minor and severe categories, and less severe in cases of physical assault, minor sexual violence, and minor injuries when compared to females, which was statistically significant. Results are similar to the study done by Malik et al [8] 2019 as emotional violence ismost common in men.

A study done by Straus et al [6] hypothesized that most female perpetrators of intimate partner violence are motivated by a desire to dominate their spouses rather than by self-defense. Psychopathology, anger, revenge, skill inadequacy, head injuries, physiological imbalances, feelings of powerlessness, a lack of resources, and frustration are some of the other factors for both male and female perpetrators of domestic violence.

Psychiatric Morbidity

Psychiatric morbidity among subjects experiencing DV by their partners with psychiatric illness was found to be 54 % most of whom were females. IPV perpetration and victimization were linked to mental health symptoms in both men and women. When compared to the general population, having someone in the family with a psychiatric illness is a significant stressor leading to psychological problems. According to studies done by Fulu et al 2013 [9] and Shorey et al 2012 [10], IPV has a considerable influence on mental health in both sexes.

Intimate partner violence (IPV) exposes men and women to a greater risk of poor physical health and disability, psychological distress and mental illness, and increased recreational and non-recreational substance use. IPV experiences are associated with worse health outcomes in women, presumably due to gender inequalities in the severity of violence experienced.

Saloni et al [43] studied the relationships between DV and psychological morbidities. More than half of the couples suffered from a psychiatric disorder. 20% of people had a major depressive disorder. 60% of spouses experienced domestic abuse.

Sociodemographic Characteristics and Psychiatric Morbidity

Most of the study spouses with psychiatric morbidity were in the age group of 26- 40 years. According to research done in Puducherry, 70% of spouses with mental illness were between the ages of 35 and 45. According to the literature, spouses in this age range are more likely to experience depression symptoms since they must perform the responsibilities of both parents. It was found that there is no significant difference between the age groups and spouses' psychiatric morbidity.

Spouses in this study had completed high school education among both males and females and were unemployed which was statistically significant. Other socio- demographic variables showed no statistical difference.

Family Characteristics and Psychiatric Morbidity

In this study, spouses belonging to nuclear families had more experiences of DV and psychiatric morbidity. This may be due to good family support playing a protective role.

Ibrahim et al [29] 2020 study on the diagnosis of the five major mental disorders proposes a multi-factorial model of causality rather than relying exclusively on a hereditary predisposition. In this study, there is no significant difference between consanguineous and non-consanguineous marriage.

Family history of psychiatric illness had a significant association with psychiatric morbidity

as family-level factors may also influence the relationship between cognitive ability and risk of psychiatric disorder. Genetic factors could underpin both impaired cognitive ability and the increased risk of mental disorders. Evidence to support this hypothesis includes a co-twin-control study, which found that whereas pre-onset cognitive ability was associated with the risk of post-traumatic stress disorder, this relationship could be explained by common genetic factors (Kremen WS et al,2007).

Association of Domestic Violence and Psychiatric Morbidity:

At least one of the psychiatric disorders -Major Depressive disorder, Generalized Anxiety disorder, Panic disorder, PTSD, Suicidality, Psychosis, Alcohol use disorder, and Social anxiety disorder was observed in 54 % of the study spouses out of which 64.5 % were females.

Muhammud Ayub 2009 et al hypothesized that the prevalence of mental diseases is consistent with the estimates observed in community studies. Domestic violence is a key correlation that might be the target of interventions. Nearly two-thirds of the women in their research had a mental condition, and one-third had Major Depressive Disorder. Stressful life experiences, verbal violence, and assault were all positively associated with mental illness which is consistent with our results.

Surprisingly, the Protection of Women from Domestic Violence Act (2005) does not recognize psychiatric illness in perpetrators as a cause of domestic violence. In the Act, there is provision for a special order "Not to consume alcohol or drugs which lead to DV in the past", but none for medical treatment of the same.

85.6% of female spouses had at least one psychiatric disorder with MINI diagnostic interview who experienced Domestic violence by their partner which was similar to the study done by Indu et al [42] where psychiatric morbidity was found in 85% of spouses of alcohol-dependent males.

72.5% of male spouses had psychiatric morbidity that experienced DV by their partner with psychiatric illness and our study showed a significant association between DV and psychiatric morbidity.

MDD- Major depressive disorder

Most common psychiatric morbidity found in 12.7% of men and 31.4% of women exposed to spousal violence which are consistent with the systematic review of longitudinal studies done by Davies et al [37].

AUD- Alcohol use disorder & PTSD

13.9% of male spouses were identified with Alcohol use disorder who were exposed to partner violence. IPV has been linked to an increased risk of alcohol and drug abuse. This link is generally believed to be related to the overwhelming negative emotions or post-traumatic stress symptoms that someone who experiences a terrible event, such as IPV. To cope with and minimize these emotions, the individual may turn to alcohol or other narcotics (Jacobsen et al, 2001). They also explained the Self-medication hypothesis and also that the use of alcohol and other substance seems to provide symptomatic relief from PTSD.

PTSD was found in 5.8% of women and 1.3% of men experiencing partner violence.

Generalized anxiety disorder

8.9% of men and 8.3% of women exposed to partner violence reported generalized anxiety disorder. Muhammud Siddiqui et al 2021 [54] also found a similar significant association between domestic abuse and GAD.

Suicidality

5.8% of women were found to have a risk of suicidality and more common in those exposed to sexual violence. This may be more likely in addition to facing a financial crisis, burden of children, and illness in a partner. According to Bergman et al and Davidson et. al., physical and sexual violence both carry a higher risk for suicide.

Psychosis

3.3% of women reported psychotic symptoms that were exposed to emotional, severe psychological, physical, and injury types of violence by their partners. Roma Shah et al [57] 2018 in their study concluded that exposure to IPV was associated with greater than 3-fold odds of reporting at least one psychotic experience.

Social anxiety and panic disorders

3.3% of women reported social anxiety disorder associated more with emotional and psychological violence by their spouse. 6.6% of women and 1.3% of men reported panic disorder in association with negotiation and psychological violence which was consistent with the study done by Romito [58] 2007 considering the cumulative effect of violent panic attacks are more common among women and alcohol problems among men.

Conclusion

This study had evaluated the prevalence of domestic violence among spouses of psychiatric patients and its impact on their mental health. Domestic violence was highly prevalent among female spouses of alcohol- dependent male partners followed by schizophrenia and bipolar disorder.

Most common type of domestic violence experienced by study spouses was emotional

followed by psychological, physical and the other types like sexual and injury were less likely in male spouses. Most common type of psychiatric morbidity reported being Major depressivedisorder among both men and women.

PTSD symptoms were reported more in women Generalized Anxiety disorder was associated with domestic violence in both menand women.

The risk of Suicidality was significantly associated with sexual and physicalviolence in women and not men.

Psychotic symptoms, social anxiety, and panic attacks were reported by womenwhen compared to men experiencing domestic violence.

Men exposed to partner violence were more likely to abuse alcohol.

Therefore, assessing the spouses of psychiatric patients is very crucial as it is associated with poor mental health.

Strengths:

Limited studies there from India measuring the prevalence of Domestic violence by partners with psychiatric illness. This study is one of the attempts to do the same.

Relationship behaviors between both male and female partners were measured by the Revised Conflict tactics scale (CTS2) and different types of violence were measured separately which were apt for the study.

The mental health of the spouse was assessed in association with domestic violence by the partner who was neglected and given little importance. Scales used in this study were valid and reliable.

Limitations:

It was a cross-sectional study so a temporal relationship couldn't be established.

Self-reported measurements for domestic violence and suicide risks were used. So, there is a chance for some recall bias, custom-related issues, and readiness to report domestic violence.

The measurement used for domestic violence i.e Revised Conflict Tactics Scale doesn't measure economic abuse which is also a part of domestic violence.

The study included the assessment of partner violence of common psychiatric disorders attending government hospital for mental care.

Majority of the study population belongs to rural area and was done in a hospital setting so, generalization of the result would not be appropriate.

Future Recommendations:

A longitudinal study could help in assessing the predictors of domestic violence.

Health care providers should be trained in the screening of spouses who are the sufferers of domestic violence for any health care support and counseling.

Education, Self-help group and self-employment to increase social support shouldbe encouraged as they are protective factors against domestic violence

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