



Domestic Violence And Alcohol Dependence: Cross Sectional Study In A Tertiary Care Setting

Gayathri Vijayalakshmi

Assistant Professor, Dept of Psychiatry, Karuna Medical College,

Palakkad, Kerala, India

gayathriv3180@yahoo.co.in

Abstract-

Background: Domestic violence is an all-pervasive, serious social malady with major public health implications. Alcohol use is among the most controversial and widely debated component in conceptual and predictive model of domestic violence. **Objectives:** a) Variation of Domestic violence (Intimate partner violence) by background characteristics, b) Prevalence of domestic violence among spouses of inpatients at deaddiction centre, c) To find characteristics, dimensions, severity of domestic violence experienced by the partners & d) To assess psychological status of both perpetrators and victims.

Methods: Consecutive (n=100) alcohol dependent patients admitted at a Tertiary care Centre of and their spouses were recruited. These men were assessed for severity of alcohol dependence, co-morbidities and psychopathology. Spouses assessed for type, severity of domestic violence and its consequences.

Results: Co-morbid psychiatric disorders found in sixty two percent. 68% had medical co-morbidities. Spouses who were physically abused (67%) also experienced other forms of abuse at similar rates viz., Emotional abuse (63%), Economic abuse (52%), and Sexual abuse (65%). Among women reporting domestic violence 11% had attempted suicide. The majority of those reporting domestic violence exceeded cut-off scores for a depressive disorder. Severity of violence correlated positively with Brief Psychiatric Rating Scale (psychopathology) scores.

Conclusions: The findings highlight the importance of screening alcohol dependent patients for psychopathology, spouse for domestic violence and its sequelae, in mental health settings.

Keywords: Intimate Partner Violence, Alcohol Dependence/co-morbidities, Depression, South India

means effective interventions should be employed to reduce further victimization..Many factors have been linked to domestic violence, although the causal role of many of these factors remains unclear. These include gender; alcohol and substance abuse; race/ethnicity; mental disorders and personality traits; family contexts, exposure to domestic violence; cultural; social contexts and socio-economic status.

“Domestic violence”, “Intimate partner violence”, “Wife abuse”, and “Family violence” are all terms that have been used to refer to the occurrence of violence within adult relationships. Domestic violence is any act of physical, sexual or psychological abuse or the threat of such abuse inflicted against a person by another individual intimately connected to her by marriage, family relation or acquaintainship.

Three types of Domestic violence (DV) have been identified. They appear to be conceptually and etiologically distinct. The first, *Intimate Terrorism*, is distinguished by severe male-to-female physical aggression (e.g., punching, threatening with weapons), with less severe female-to-male violence occurring during these episodes as a manner of self-defense. The second type, *Violent Resistance*, is characterized by violence that occurs in response to a partner's violent and controlling behavior. In these cases, the resistor is violent, but not controlling. The last type, *Situational Couple Violence*, is characterized by bidirectional partner aggression which is mild to moderate in severity, and typically occurs as a reaction as a conflict escalates.¹ The Situational Couple Violence is akin to violence reported in the general population surveys, whereas Intimate Terrorism more closely resembles the violence typically found in clinical samples.² Domestic violence has rather belatedly, now been recognized as a major public health issue, with implication both for health service providers and for the individual.

The Law:

In 2005, the Government of India passed a new legislation on Domestic Violence called (PWDA) ‘The Protection of Women from

I INTRODUCTION

Domestic violence represents a social problem of enormous magnitude in the world. However, many acts of domestic violence are never reported or come to the awareness of law enforcement agencies, shelters, hospitals, or social service organizations. The widespread nature of this social problem suggests that when society learns about acts of domestic violence through any

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Domestic Violence Act'-2005. ³ It is a civil law aimed at providing relief to millions of women including wives, mothers, daughters & sisters, affected by violence in their homes. Domestic Violence Act 2005 is the first significant attempt in India to recognise domestic abuse as a punishable offence, to extend its provisions to those in live-in relationships, and to provide for emergency relief for the victims, in addition to legal recourse. ³

Primary Beneficiaries of This Act

Women and children. Section 2(a) of the Act will help any woman who is or has been in a domestic relationship with the 'respondent' in the case. It empowers women to file a case against a person with whom she is having a 'domestic relationship' in a 'shared household', and who has subjected her to 'domestic violence'.

Children are also covered by the Act;

Section 2 (q) states that any adult male member who has been in a domestic relationship with the aggrieved person is the 'respondent'. The respondent can also be a relative of the husband or male partner. Thus, a father-in-law, mother-in-law, or even siblings of the husband and other relatives can be proceeded against. ³

Definition of Domestic violence[The Protection Of Women From Domestic Violence Act, 2005] any act, omission or commission or conduct of the respondent shall constitute domestic violence in case it -

- a) harms or injures or endangers the health, safety, life, limb or well-being, whether mental or physical, of the aggrieved person or tends to do so and includes causing physical abuse, sexual abuse, verbal and emotional abuse and economic abuse; or
- b) harasses, harms, injures or endangers the aggrieved person with a view to coerce her or any other person related to her to meet any unlawful demand for any dowry or other property or valuable security; or
- c) has the effect of threatening the aggrieved person or any person related to her by any conduct mentioned in clause (a) or clause (b); or(d) otherwise injures or causes harm, whether physical or mental, to the aggrieved person.

Types :

1. **Physical abuse** – bodily pain
2. **Sexual abuse-** sexual assault
3. **Verbal abuse-** Insults, ridicule, humiliation
4. **Economic abuse-** Deprivation of all or

any economic or financial resources, Disposal of household effects, Prohibition or restriction to continued access to resources or facilities.

5. **Emotional abuse-** verbal aggression, dominant and jealous behaviors

Sections 18-23 provide a large number of options for legal redressal. She can claim through the courts Protection Orders, Residence Orders, Monetary Relief, Custody Order for her children, Compensation Order and Interim/ Ex parte Orders.

If a husband violates any of the above rights of the aggrieved woman, it will be deemed a punishable offence. Charges under **Section 498A** can be framed by the magistrate, in addition to the charges under this Act. Further, the offences are cognisable and non-bailable. Punishment for violation of the rights enumerated above could extend to one year's imprisonment and/or a maximum fine of Rs 20,000. ³

Moreover women have the right for free legal services under the Legal Services Authorities Act, 1987. ⁴

Reason for undertaking the study

Domestic violence is prevalent, serious, preventable issue that occurs on a continuum of economic, psychological and emotional abuse. Women are particularly vulnerable to abuse by their partners in societies where there are marked inequalities between men and women, rigid gender roles. ⁵ Indeed it is responsible for more preventable ill-health and premature death in women under the age of 45 than any other of the well-known risk factors, like high blood pressure, obesity and smoking. ⁵

Domestic violence has been identified as a significant health problem requiring urgent attention by a number of bodies at the international, national and local levels, including: the World Health Organization, in its landmark World Report on Violence and Health. ⁵Of the various components that have been identified in conceptual and predictive models of Intimate Partner Violence, **alcohol use** is among the most controversial and widely debated. Those who engage in Domestic Violence often drink and that intoxication often accompanies violence. There is considerable debate as to whether or not alcohol use simply co-varies with Domestic Violence, or is simply an "excuse" for aggression. This debate has important treatment implications, if intoxication is causally linked to Domestic Violence, then interventions that are successful in reducing drinking could reduce the occurrence of partner violence.

Hence an attempt was made to find the relationship of alcohol use and domestic violence.



EPIDEMIOLOGY

A multinational study estimated that 15-71% of women had been physically or sexually assaulted at some time by a partner.⁶ Domestic Violence is a major public health problem with a prevalence similar to chronic diseases such as diabetes and asthma.^{7, 8} Population-based studies conducted in 48 countries have revealed that 10% to 69% of women report having been physically assaulted by an intimate partner during their lifetime.⁹ Although the results of family conflict studies or crime studies showed equal rates of assault by men and women,¹⁰ the injury rate for assaults by men is about seven times the injury rate for assaults by women.¹⁰⁻¹³

National surveys include the National Family Violence Survey (NFVS), National Crime Victimization Survey (NCVS), and National Victimization Against Women Survey (NVAW) Survey. Methodological differences among these studies limit our ability to draw appropriate comparisons across these surveys.¹⁴⁻¹⁶

According to findings from the National Victimization Against Women Survey (NVAWS), over three-fourths of women who have been victimized — either raped and/or physically assaulted — since age 18 were victimized by a current or former intimate partner.^{17, 18} In fact, the number of female victims is startlingly high; almost one quarter of the women surveyed indicated that they had been physically assaulted and/or raped by an intimate partner in their lifetime.¹⁷

Based on the National Crime Victimization Survey (NCVS), an estimated 876,340 females were victims of crimes perpetrated by intimate partners in 1998.^{18, 19}

The Indian Scenario

Violence against women is a serious problem in India. Overall, one-third of women age 15-49 have experienced physical violence and about 1 in 10 have experienced sexual violence. In total, 35 percent have experienced physical or sexual violence.²⁰ Nearly two in five (37 percent) married women have experienced some form of physical or sexual violence by their husband.²⁰ According to **United Nation Population Fund Report**, around two-third of married Indian women are victims of domestic violence and as many as 70 per cent of married women in India between the age of 15 and 49 are victims of beating, rape or forced sex.²¹ In India, more than 55 percent of the women suffer from domestic violence, especially in the states of Bihar, U.P., M.P. and other northern states.²⁰ Domestic violence constitutes 33.3% of the total crimes against women.²²

Physical violence was reported by 14% of pregnant women in the past year, psychological abuse by 15%, and sexual coercion by 9%. One-half of these women also reported ongoing abuse during pregnancy.²³

The antecedents of Domestic Violence have also been explored in a variety of studies. Many studies suggest that Domestic Violence is associated with lower socioeconomic status,²⁴ lower education and problem drinking by the male spouse doubles the risk of Domestic Violence.²⁵ One in six (16 percent) married women have experienced emotional violence by their husband. Only one percent of married women have ever initiated violence against their husband.²⁰

Epidemiology of alcohol use

National Household Survey of Drug Use in India, recorded alcohol use in 21% of adult males and less than 5 per cent in women. These were significantly seen higher use among tribal, rural and lower socioeconomic urban sections.²⁶ A study in southern rural India showed that 14.2% of the population surveyed had hazardous alcohol use on the Alcohol Use Disorder Identification Test.²⁷

Co-occurrence of substance abuse and mental illness

Among adolescents and young adults with a substance abuse disorder, 41 to 65 percent also have a mental health disorder.²⁸ The most common psychiatric co-morbidity was depression 39%,²⁹ Phobia 16%^{28, 29} and Anti Social Personality Disorder 22.7%.^{30, 32}

Alcohol use & Domestic violence

Alcohol abuse contributed to 84% of violence acts. Alcohol doubles the risk of Domestic Violence in the family.³³⁻³⁵

Compared to nonviolent husbands, violent husbands reported higher levels of problem drinking^{34, 35} more frequent and higher quantity alcohol consumption,^{36, 37} and an earlier onset of problem drinking.³⁴ How alcohol contributes to domestic violence remains unclear. It may, for example, interfere with cognitive processes, contribute to or aggravate aggressive tendencies.³⁸ Forty per cent of all males with alcohol dependence in Karnataka (India) reported solving disagreements by physical fights.²⁰

Reducing substance use (including alcohol) may reduce levels of physical injury but has not been shown to reduce the actual occurrence of domestic violence (intimate partner violence).^{39, 40} Domestic Violence in partners of alcohol users depends on a number of variables pre-drinking mood, aggression and worries; environmental factors; personality specific factors; and individual goals of drinking. It is equally important to



emphasis that even if his substance use ceases, his violence and abuse usually continues.⁴¹ Although the connection between domestic abuse and alcohol consumption remains somewhat contentious, there is a notable shift and growing recognition that alcohol is not a direct cause of domestic abuse.⁴²

Finally, two studies found similar results using multivariate regression analyses, such that alcohol problems and alcohol use were associated with marital violence prospectively.⁴³

Age groups vulnerable to victimization

The peak ages of onset of alcohol dependence are from the early 20s to about age 40. Female partners in this relationship, ranging in age from 16-24, experience the highest rates of domestic violence.^{44, 45} Domestic violence is common across all racial/ethnic groups, whereas others suggest that it is predominantly a minority and lower socioeconomic class phenomenon.²⁵

Mental disorders, Personality traits and Domestic violence

Some research indicates that men who assault their partners suffer from a range of mental disorders, including antisocial or borderline personality disorder and post-traumatic stress disorder, and that they typically suffer from low self-esteem, jealousy, aggressiveness, and poor communication skills.⁴⁶⁻⁴⁸ The antisocial personality are more generally violent and involved with delinquent peers, substance abuse, and criminal behavior; they are broadly willing to employ violence to have their way in many contexts. As with Borderline personality both of these types score high on impulsivity, acceptance of violence, and hostile attitudes toward women, and low on measures of social skills.^{49,50}

Research has shown that men diagnosed with **Morbid jealousy** are especially upset about a partner's sexual infidelity and resort to questioning, stalking, and violence. 15 % of women at some time or other experienced violence at the hands of jealous partner.⁵¹

Family context

Many studies indicate that individuals who grow up in violent homes are more likely to become violent with their intimate partners thus violence is learned—that is, that exposure to violence as a child contributes to a social learning process that views violence as an appropriate and acceptable strategy for resolving conflicts.^{17,18}

Cultural and social context

Attitudes and beliefs about domestic violence and gender may derive from and be reinforced by traditional patriarchal views in society (e.g., certain cultural values) may either promote or accept domestic violence as an

appropriate approach to resolving certain types of conflict.^{52, 53}

Additional factors linked to domestic violence victimization

- Marital and cohabitation status (couples who are unmarried and cohabiting)
- Income- (lower income populations)
- Education- (less educated)
- Occupational disparity within a relationship
- Power disparity.^{17, 18}

Groups vulnerable to victimization

Both men and women experience Domestic Violence. However, **women** are 2 to 3 times more likely to report an intimate partner pushed, grabbed or shoved them and 7 to 14 times more likely to report an intimate partner beat them up, choked them, or tied them down.^{17,18} American Indian/Alaska Native women and men report more violent victimization than do women and men of other racial backgrounds.^{17, 18}

Women with Intimate Partner Violence tend to have spouses with less education and problem drinking, corroborating prior findings,²³ an association between lower socioeconomic status and Intimate Partner Violence.⁵⁴

Mental health consequences of domestic violence

Domestic violence was identified as a major contributor to the global burden of ill health in terms of female morbidity and mortality leading to psychological trauma and depression, injuries, sexually transmitted diseases, suicide and murder.^{6, 54-58} The global health burden from violence against women in reproductive age group is about 9.5 million disability adjusted life years –DALYs.⁶ Most research addressing the consequences of Domestic Violence has focused on acts of physical aggression, whereas significantly less attention has been accorded more subtle and difficult-to-measure dimensions of partner violence such as psychological abuse.^{59, 60} This gap is surprising, given that battered women frequently identify psychological abuse as inflicting greater distress compared to physical acts of violence.⁶¹ A comprehensive meta-analysis,⁵⁹ showed that abused women were three to five times more likely to experience depression, suicidality, self harm, Panic disorder, Phobias, PTSD, alcohol abuse, and drug abuse than the general population. Emotional and verbal abuse was a significant individual predictor of **depression**. This finding is consistent with reports of battered women describing ridiculing behaviors as particularly pernicious.⁶² Taunting, degrading behavior may influence depression via its eroding effect on self-esteem and self-worth.⁶² 70-85% of abused women experience



at least mild depression and 30-55% severe depression.⁶³⁻⁶⁵

Women who have experienced physical or sexual abuse are more likely to attempt or at least think seriously about committing **suicide**. Women in these countries living in rural areas were more likely to attempt suicide, seemingly based on lower levels of education, greater social isolation and limited access to healthcare.⁶⁶ Most women eventually leave their abusive partners to make the violence end.⁶⁵

In an **Indian study** conducted in five different states, 34.1% of the women suffering from domestic violence reported mental stress, 29.3% reported depression, 26.4% reported disturbed sleep, 21.8% reported anxiety and 15.1% chronic headache.⁶⁷ The effects of domestic violence during **pregnancy**, both physical and non-physical, have the potential to affect the mother and the unborn baby such as depression, substance abuse, smoking, amnesia, first and second trimester bleeding, and the reduction in birth weight.^{68, 69}

Hurdles of research

The prevalence of intimate partner violence is notoriously difficult to determine. Studies consistently show that compared with victims of other forms of violence women affected are less likely to disclose, to seek legal help, or form other social organization, even name the act as violence.⁷⁰ A major hurdle to studying and treating partner violence is the heterogeneity of the perpetrators and victims.^{71,72}

Owing to the sensitivity of the subject, violence against women is “almost universally under reported” and reported levels should be thought of “as representing the minimum levels of violence that occur”.⁷³

OBJECTIVES

Variation of Intimate partner violence (Domestic violence) by background characteristics [education, age, caste, religion, head of household, work status of women, duration of married life] To find prevalence of Intimate partner violence (Domestic violence) among spouses of patients with alcohol dependence. To assess characteristics, dimensions, severity of Domestic violence, and its consequences among the spouses To assess psychological status of both perpetrators and victims

II MATERIALS AND METHODS

STUDY DESIGN: Cross sectional study

STUDY SETTING: The study followed a cross-sectional design conducted in the Department of Psychiatry at Karuna Medical College . It has a wide catchment area. The study protocol was

approved by the Institute's 'Ethics committee'. From both patient and their spouse, written informed consent were taken and interviewed individually.

SAMPLING METHOD – Continuous sampling.

In this study, we recruited 114 patients admitted consecutively between February 2013 and May 2015 diagnosed with Mental and behavioral disorders due to the use of alcohol dependence syndrome(ICD 10). 8 patients had polysubstance dependence & 6 patients who had significant cognitive impairment were excluded.

SAMPLE SIZE: 100 patients and their spouses

INCLUSION CRITERIA

1. Patients diagnosed to have Mental and behavioral disorders due to the use of alcohol dependence syndrome(ICD 10) admitted & Spouse of the above patients aged 16 yrs and above

EXCLUSION CRITERIA

Mini-Mental Status Examination (MMSE) screening scores of less than 24. When the spouse is not currently living with him.

Patients who fulfilled the study criteria were detoxified and then interviewed by using the Study proforma, Alcohol Use Disorders Identification Test (AUDIT) scale, Brief Psychiatric Rating Scale (BPRS). Morbid jealousy assessed by model proposed by Cobb.^{74,75}

Demographic data, Hamilton Scale for Depression (HAM D){for assessing the severity of depression }, Composite Abuse Scale (CAS){for intimate partner violence} were administered to the spouses of these patients.

COMPOSITE ABUSE SCALE

The Composite Abuse Scale (CAS) is a widely used self report of behaviours that women describe as abusive by their partners. It has been published in the Centers for Disease Control and Prevention compendium of intimate partner violence measures. It is an easily administered measure that provides standardized sub scale scores on four dimensions of intimate partner abuse. It consists of 30 items presented in a six point format requiring respondents to answer “never”, “only once”, “several times”, “monthly”, “weekly” or “daily” in a twelve month period. The strength of the scale is the ability to measure different types and severity of abuse, although a limitation is the reduced number of sexual abuse items.

ADMINISTRATION

The CAS has mostly been used with women 16 years of age and over and pregnant women.

SCORING

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CAS is scored by summing the frequency scores without any weighting of the 30 items. a Total Score (0-150) have been computed by summing all scores across subscales. And physical abuse score ranges from 0-35. CAS has quite high sensitivity and specificity, a cut-off total score of 7 would correctly detect 95.8% of women with no women labeled abuse incorrectly (0%). Cut –off score 2 for the physical abuse scale [sensitivity 92.3%, specificity 1.8%].

The Composite Abuse Scale has demonstrated face, content, criterion, & construct validity. ^{89- 91} Limitation – lack of availability of local language version.

DATA ANALYSIS:

Analysis of data using SPSS 11(Statistical Package for Social Science) Independent t test is used to test for a difference between two independent groups on the means of a continous variable. Pearson’s correlation is used to find a correlation between at least two continous variable. The value for a Pearson’s can fall between 0.00 (no correlation) and 1.00 (perfect correlation). Other factors will determine if the correlation is significant. Correlation above 0.80 are considered pretty high.

IV RESULTS

Total sample N= 100 [alcohol dependent patients (100) and their spouses(100)]

Table 1

Demography of patient and spouse:

	Patient		Spouse	
Age	24-65 yrs M=40.9 sd=9.9		20-60yrs M=35.8 sd=9.7	
Age at marriage	20-37yrs M=27.6 sd=3.8		11-30yrs M=22.5 sd=3.9	
Education	Schooling	42	43	
	Graduate	58	57	
Occupation	Unskilled	15	9	
	Semiskilled	61	0	
	Skilled	16	25	
	None	8	60	(homemakers)
Income Rs/month	nil	1	53	
	< 5000	18	14	
	<10000	19	11	
	>10000	63	22	
Religion	Hindu	85		
	Christian	7		
	Muslim	8		

Residence	Rural	36	
	Urban	64	
Type of family	Joint	44	
	Nuclear	56	
Type of marriage	Arranged	86	
	Marriage by choice(Love)	14	
Head of family	Patient	67	
	Father	25	

M=Mean, sd=standard deviation

*The table showed the sample were mainly from Hindu, middle aged, educated, semiskilled workers, earning more than 10000/month, and living in nuclear family and patient being the head of the family .

+While most of the partners were educated, unemployed and homemakers.

ALCOHOL USE

[Abbreviations used N- Number, M-Mean, sd-standard deviation]

All the **patients** recruited had fulfilled ICD 10 criteria for alcohol dependence. ⁹²

Duration alcohol intake was 3-40 years

M= 18.9 sd=10.03

AUDIT score [patients]

Range = 19-35

Mean = 26.8

sd = 4.52

35 had previous history of de-addiction treatment

BPRS score [patients]

Range = 18-63

Mean = 26.24

Sd = 11.7

Psychiatric co-morbidity [patients]

Depression 24

Schizophrenia and related psychosis 9

Bipolar disorders 3

Nicotine dependence 31

Morbid jealousy [patients] 26

Medical co-morbidity [patients]

Hypertension 17

Diabetes 30

Coronary artery disease 6

Alcohol liver disease 11

Pancreatitis 4

DOMESTIC VIOLENCE TOWARDS THE SPOUSE

Composite Abuse Scale (CAS)

Significant value N=83

Range =7-93

M = 47.5

sd = 29

Physical abuse N= 67

Range = 2-28



M = 12.8
sd = 7.7

Table 2
Relation between composite abuse score and physical abuse score:
Pearson correlation

		CAS total	Physical abuse total
CAS total	Pearson Correlation	1	.927(**)
	Sig. (2-tailed)	.	.000
	N	100	100
Physical abuse total	Pearson Correlation	.927(*)	1
	Sig. (2-tailed)	.000	.
	N	100	100

* Correlation is significant at the 0.01 level (2-tailed).

+The table showed that there is linear relation with the composite abuse score and physical abuse scores.

SPOUSE

Hamilton Scale for Depression Score

Range =2-44	M = 17.1	sd = 11.1
0-7	no depression	33
8-13	mild	9
14-23	moderate	22
>23	severe	36

Abuse pattern

Physical abuse	67
Emotional abuse	63
Economic abuse	52
Sexual abuse	65

Spouse reaction

Sexual avoidance	67
Plans of marital separation	48
Suicidal attempt	11

Physical violence was taken as marker of Domestic violence which was compared with other data.

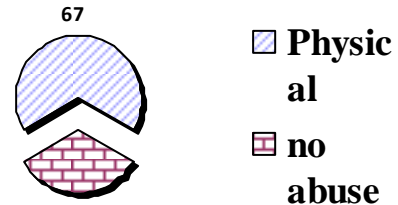


Table 3
Physical abuse vs parameters

Physical abuse	particulars	Mean	SD	p
(-)	AUDIT (total score)	24.9	4.8	NS
(+)		27.7	4.1	
(-)	BPRS (total score) [patient]	19.7	5.8	0.001
(+)		29.4	12.5	
(-)	HMD (total score) [spouse]	6.9	4.1	0.001
(+)		23	9.5	
(-)	Age of patient (years)	39.1	11.4	NS
(+)		41.1	9.1	
(-)	Duration of alcohol (years)	15.6	11.1	NS
(+)		20.5	9.1	
(-)	Age of spouse (years)	34.8	10.2	NS
(+)		36.3	9.4	

NS= p value non significant

*The above table showed that physical abuse were significantly found in patients with more psychopathology (BPRS score) and the spouses were moderately to severely Depressed.

+The abuse was **not related** to the severity, duration of alcohol intake, the age of patient or the victim.

Table 4
Physical violence vs other demographic characters

		N	Physical abuse mean	sd	P
Education of patient	< 10 th std	42	8.4	7.8	NS
	> 10 th std	58	8.5	7.7	
Residence	Rural	36	9.2	7.6	NS
	Urban	64	5.3	7.8	
Type of marriage	Arranged	86	9.2	7.8	NS
	Love	14	5.1	6.1	



Type of family	Joint Nuclear	44 56	8.5 8.7	7.4 8.1	NS
Head of family	Patient Others	67 33	8.4 8.4	7.7 7.6	NS

*The abuse were not determined by the education of patient, the residence, type of marriage, type of family, and who runs the family.

Table 5:

Effects of physical violence

		N	Physical abuse mean	sd	P
Economic abuse	Present	5	14.1	5.5	0.001
	Absent	48	2.8	5.1	
Emotional abuse by patients	Present	6	13.6	5.6	0.001
	Absent	38	0.58	1.0	
Morbid jealousy(patient)	Present	2	13.1	5.3	0.001
	Absent	67	7.1	7.8	
Suicidal thoughts(spouse)	Present	1	16.4	6.1	0.001
	Absent	18	7.7	7.4	
Sexual avoidance by spouse	Present	6	13	6.1	0.001
	Absent	35	0.5	1.0	
Thoughts of Separation among spouses	Present	4	14.6	4.8	0.001
	Absent	82	3.3	5.5	

* Presence of physical abuse is an important factor for marital disharmony.

+The affected spouses often think of ending the relationship, or run away from the source of abuse(48%).

++Morbid jealousy is common in accuser (26%) while sexual avoidance in victim (65%).The affected spouses were significantly depressed (67%) and had suicidal ideation (11%).

Demography:

Our study sample were mainly from Hindu, middle aged, educated, semiskilled workers,

earning more than 10000/month, living in nuclear family and patient being the head of the family, while the spouses were educated but homemakers. This does not replicate the general population, as the study is conducted in a private psychiatric hospital.

The alcohol use and co-morbidities:

The study population satisfied criteria for alcohol dependence and nearly all had severe dependence pattern with mean AUDIT score of 26.2

Depressive disorders, Bipolar disorders and schizophrenia related psychosis were found in 24, 3, 9 patients respectively.

An Indian study assessed the lifetime prevalence of co-morbidity in patients with substance dependence. The commonly co-occurring disorders were mood disorders (35 %), psychotic disorders (11.5 %) and anxiety disorders (3.5 %). The depressive disorders ranged from 8.8%- 23.6%.⁹³⁻⁹⁸

In our study the psychiatric co-morbidities were assessed only clinically not using a structured questionnaire, while the overall psychopathology was assessed using Brief Psychiatric Rating Scale whose mean score was 26.4.

One third of the study patients had nicotine dependence which is similar to an earlier study,⁹⁹ which showed that 37 percent of adults who were classified as current drinkers were also current smokers.

Upto 72% had medical illness, Diabetes Mellitus (30), Hypertension (17), alcohol liver disease (11), and coronary artery diseases (6)

Heavy alcohol consumption (>3 drinks/day) is associated with up to a 43percent increased incidence of diabetes.^{100, 101}

10 to 35% of all alcoholics have changes consistent with Alcoholic Hepatitis.¹⁰²

Morbid Jealousy:

26 percent of alcohol dependent patients had morbid jealousy this included that jealousy occurred both during intoxication and when in sober state & it was done using clinical interview using the model proposed by Cobb.^{74,75} The rates were similar to an earlier study,¹⁰³ where Morbid jealousy was present in the range of 27% - 34% among men recruited from alcohol treatment services.

Domestic violence

The mean total score of composite abuse scale and its subset of physical abuse score linearly correlated.

Spouses who were physically abused (67%) also experienced other forms of abuse at



similar rates viz., Emotional abuse (63%), Economic abuse (52%), and Sexual abuse (65%).

Studies from World Health Organisation: Multi country study,⁶ showed the lifetime prevalence of physical violence by an intimate partner range between 13-61% and sexual abuse 6-59%.

In India^{20, 58} reported 10-30% of women in community sample had experienced sexual violence and 94% of women who experienced physical violence also reported verbal insults and humiliations.

Consequences of Domestic violence

Two thirds of the spouses had clinical depression and 11 had suicidal ideation.

Western studies,^{5, 65,104,105} reported the prevalence of mental disorders were 49% among women who reported any type of violence versus 19% in control population.

Depression, suicide and alcohol abuse was the most prevalent negative health consequences of domestic violence.^{23, 55, 57,106}

In Brazil 48% of women, Egypt 61%, India 64%, Indonesia 11% and in Philippines 28% of women had significant correlation between domestic violence and suicidal ideation.⁵

Significant association between exposure to violence and unhealthy mental status has been found in an Indian study conducted in five different states, 34.1% of the women suffering from domestic violence reported mental stress, 29.3% reported depression, 26.4% reported disturbed sleep, 21.8% reported anxiety and 15.1% chronic headache.^{58,67}

Determinants of Physical Abuse

In our study the psychopathology (BPRS score) in patients was the only determinant of physical abuse and it seemed it is not related to the duration or severity of alcohol.

Similarly socio-demographic characters like age of the patient, or the spouse, the residence, the type of family and head of family were also not statistically significant for physical abuse.

Previous studies emphasized that presence of mental illness were important determinant of domestic violence.

Incidence of violence was higher for those with severe mental illness but only significantly so for those with co occurring substance use and / dependence.¹⁰⁷

Certain socio-demographic factors, however, have been associated with increased risk of Domestic violence including young age, lower socioeconomic status, Separated or divorced status among women, while presence of lower education, and problem drinking among the accusers.^{23,108,109}

Alcohol and Domestic violence

Recent studies indicate that alcohol is not an identified direct cause of domestic violence, though it clearly is a correlate and may be a contributing factor.^{42,110}

If alcohol were a direct cause of IPV, either through disinhibition or because of its cognitive distortion properties, consumption would precede or proceed the violence in a preponderance of instances. However it was found that upto 75% of the assaults were perpetrated by someone who is sober at that time.^{110,111}

Furthermore, if alcohol abuse were a direct causal factor in IPV, a cessation of the alcohol use should be associated with cessation of the relationship violence and abuse. Unfortunately, "...none of the evidence suggests that alcohol treatment alone will effectively change abusive behavior" but surely, it certainly helps improve the situation.^{112,113}

Thus, it is doubtful that a simple, direct, linear, causal relationship exists with regards to alcohol and Intimate Partner Violence.

Overall this cross-sectional study replicates other international studies and demonstrates strong association between psychopathology and intimate partner violence and alcohol use being the contributory factor.

While the best available sources for the prevalence of violence were chosen, it is widely accepted that any existing measures are likely to under-estimate the actual size of the problem.

STRENGTHS

One of the strengths of this Study is its use of uniform instruments and methodology, in particular in terms of sample design and data analysis. This study is one of the tertiary centre based studies in India that has provided valuable data on domestic violence ,established the strong association between domestic spousal violence and its impact on mental health. It also provides substantive evidence of the need to classify domestic violence as a major public health problem.

LIMITATIONS: Cross sectional study, Retrospective designs, recall bias & underreporting of violence. A cross-sectional study in general does not distinguish whether common mental disorders or violence happened first and cannot reach conclusions concerning causality. However, since we looked at the association between lifetime violence and recent symptoms of common mental disorders in this study, even if there is no evidence for causality, there are indications for temporal sequence. Only the main health problems affecting women exposed to intimate partner violence were



included in the disease burden estimates (eg.: depression, suicide), rather than all the problems found in the review of the evidence on the health impacts.

The impacts of emotional abuse could not be included. This also meant that it was not possible to separately examine how much the different forms of abuse contribute to disease burden. Another, somewhat related, limitation is that all of the spouses of alcohol dependent patients admitted at de-addiction centre had been assessed. Personality profiles were not assessed. Lack of control-group subjects who have non-violent but unhappy relationships. Female-to-male partner violence (FMPV) not assessed.

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