# Study of Association between Intimate Partner Violence with Depression and Suicide

Roopesh Gopal N.V.<sup>1</sup>, Sathish Kumar S.V.<sup>2</sup>, Ganesh Kumar S.<sup>3</sup>, Sreeraj V.S.<sup>4</sup>

<sup>1</sup>Assistant Professor <sup>2</sup>Senior Resident, Department of Psychiatry, Kodagu Institute of Medical Sciences, Madikeri, Karnataka Karnataka 571201, India. <sup>3</sup>Additional Professor, Department of Preventive and Social Medicine, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry 605006, India. <sup>4</sup>Assistant Professor, Department of Psychiatry, National Institute of Mental Health & Neuro Science (NIMHANS), Bangalore, Karnataka 560029, India.

#### **Abstract**

Background: An intimate relationship is an interpersonal *relationship* that involves physical or emotional intimacy. Those who are in such relationship may experience violence and it can be seen in both males and females. Depression and suicidal attempt can be a major health problem which needs early intervention and treatment. Aims: To assess the relationship between Intimate partner violence with depression and suicide. Settings and Design: Cross-sectional, hospital-based study. Recruitment by purposive sampling. Materials and Methods: Total of 2362 consecutive subjects who visited the psychiatry OPD from March 2017 to April 2018 were assessed and among them 46 subjects, both men and women in the age group of 18 to 60 years were recruited. Those subjects who reported IPV on HITS scale were assessed for severity of depression on Hamilton depression rating scale and suicidal intent on Beck suicide inventory scale. Results and Conclusion: Majority of the study subjects belonged to rural background and lower socioeconomic status. Among them 82.4% women and 41.7% of men reported IPV? It is also positively correlated with depression [95.6%] and suicidal intent [69.5%].

**Keywords:** Intimate Partner; Depression; Suicide; Violence.

Corresponding Author: Sathish Kumar S.V., Senior Resident, Department of Psychiatry, Kodagu Institute of Medical Sciences, Madikeri, Karnataka Karnataka 571201, India. E-mail: svsk666@gmail.com

Received on 12.06.2018, Accepted on 15.10.2018

© Redflower Publication Pvt. Ltd.

#### Introduction

Intimacy among consenting adults is essential for healthy and satisfactory life of individuals and overall human development. The term "intimate partner" includes current and former spouses and dating partners. The abuse that occurs between two people in a close relationship is termed as Intimate partner violence (IPV). IPV may vary from single episode to ongoing episodes of violence over a period [1].

The World Health Organization (WHO) defines intimate partner violence as "any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviours" [1].

Violence varies from slapping, hitting, kicking and beating, constant humiliation, intimidation (e.g. destroying things), threats of harm, sexual coercion [2].

According to WHO report globally, 30%–38% of women who are in relationship have experienced physical and/or sexual violence by their intimate partner. They also found to have various health problems and 1.5 times more likely to acquire sexually transmitted diseases like HIV [3].

Both men and women may be the victims of IPV, however one population-based survey from around the world, showed 10%-69% of women were physically assaulted by an intimate male partner at some point in their lives which is accompanied by psychological abuse and in one-third to over half of

the cases by sexual abuse [4].

Various psychiatric problems are encountered in people who experience IPV. Among them Depression and suicide are responsible for a substantial burden of disease globally. One Study showed IPV had a statistically significant association with severity of depressive symptoms among South African Women during Pregnancy and Postpartum [5].

Another study which studied the extent to which IPV experience is associated with incident depression and suicide attempts, and vice versa, in both women and men. They found out that among women subjects IPV was associated with incident depressive symptoms, and depressive symptoms with incident IPV [6].

IPV was also associated with incident suicide attempts. In men IPV was associated with incident depressive symptoms but no clear evidence of association with suicide attempts [6].

Another study on Intimate Partner Violence, Depression, PTSD and Use of Mental Health Resources among Ethnically Diverse Black Women shows that Severity of IPV was significantly associated with cooccurring mental health problems [7].

# Materials and Methods

The study was a cross-sectional, hospital based study in which subjects were included using the purposive sampling method.

The study was conducted at Department of Psychiatry at Kodagu Institute of Medical sciences teaching hospital, Madikeri at outpatient department.

Total of 2362 consecutive subjects who visited the psychiatry OPD from March 2017 to April 2018 were assessed and among them 46 subjects, both men and women in the age range of 18 to 60 years andwould understand and could give written informed consent were recruited for the study.

Those patients with past and current history of psychotic disorders and personality disorder were excluded.

Specially designed sociodemographic and clinical data sheet were used to record the demographic and clinical variables. After obtaining approval from the Institutional Ethical Committee, those subjects who fulfilled the inclusion criteria were assessed by two independent psychiatrists using Hurt, Insulted, Threatened and Screamed [HITS] Domestic violence tool to assess intimate partner violence, Then those subjects who reported IPV were assessed for

depression as per ICD-10 criteria and severity was assessed using Hamilton depression rating scale [HDRS], and Beck suicide inventory scale to assess suicidal attempt.

The HITS is a four-item scale rated on a 5-point Likert scale from 1 (never) to 5 (frequently). This tool was initially developed and tested among family physicians and family practice offices, and since then has been evaluated in diverse outpatient settings. A score of greater than 10 signify that subjects are at risk of intimate partner violence and should seek help for the same. Internal reliability and concurrent validity are acceptable [10,11].

The HDRS (also known as the Ham-D) is the most widely used clinician-administered depression assessment scale. The original version contains 17 items (HDRS17) pertaining to symptoms of depression experienced over the past week [12].

The suicide intent scale was developed by Aaron T. Beck and his colleagues at the University of Pennsylvania for use with patients who attempt suicide but survive. It is important to understand a patient's will to die in order to assess the severity of the suicide attempt [13].

## Statistical Analysis

The statistical analysis of data was performed using the computer program, Statistical Package for Social Sciences (SPSS for Windows, version 16.0. Chicago, SPSS Inc.) and Microsoft Excel (Redmond, Washington: Microsoft, 2003. Computer Software).

Descriptive statistics was used to define the sample characteristics. One sample Kolmogorov–Smirnov (K S) test was done to test the normality of the distribution. As the distribution was not normally distributed, nonparametric comparative statistics was used. Comparison of sociodemographic variable was done using the Chi square test. Correlation among the study variables was done using Pearson's correlation.

### Results

A sample of 46 married subjects were recruited out of 2362. The mean age of subjects was 32.39 [SD-9.92], and The average education of the sample was up to class 7 [mean -7.84 and SD-4.50] Table 1.

Of the sociodemographic variables IPV was noted in both males and females. Among females 82.4% and among males 41.7% had HITS score of more than 10 which was statistically significant. However correlation between IPV and rest of the

sociodemographic variables was not statistically significant Table 2.

Table 3 shows positive correlation between depression with domains of IPV [HITS scale].

Suicide intent shows positive correlation with scream or curse at you domain of IPV.

## Discussion

The study was conducted at [Kodagu institute of Medical Sciences] KoIMS teaching hospital Madikeri which is in Kodagu district and in a South Indian state of Karnataka which is largely mountainous,

Table 1: Socio Demographic data of continuous variables

Variable	Mean±SD	n(%) of subjects with IPV score >10	n(%) of subjects with IPV score <10	Mann Whitney-U value	p-Value
Age in Years	32.39±9.92	33 [71.73]	13 [28.26]	204	.798
Education in Years	7.84±4.50	33[71.73]	13[28.26]	213.5	.980

Table 2: Socio Demographic data of categorical variables

Variable		n (%) of subjects with IPV HITS score >10	n (%) of subjects with IPV HITS score <10	<b>X</b> <sup>2</sup>	P
Sex	Male Female	5[41.7] 28[82.4]	7[58.3%] 6[17.6%]	7.242	.007
SES	Low Middle	28 [71.8] 5[71.4]	11[28.2] 2[28.6]	.0	.984
Language	Kannada Multiple	10[66.7] 23[74.2]	5[33.3] 8[25.8]	.282	.595
Occupation	Housewife/Students Manual Labourer Unemployed	9[69.2] 22[71] 2	4[30.8] 9[29] 0	.837	.658
Resi dence	Rural Semi urban Urban	25[75.8] 3[50] 5[71.4]	8[24.2] 3[50] 2[28.6]	1.662	.436
Family type	Joint Nuclear	9[75] 24[70.6]	3[25] 10[29.4]	.085	.770
Family psychiatric illness	Present Absent	9[81.8] 24[68.6]	2[18.2] 11[31.4]	.724	.395
Past psychiatric illness	Yes No	8[88.9] 25[67.6]	1[11.1] 12[32.4]	1.623	.203
Presence of depression	Pres <i>e</i> nt Absent	32[72.7] 1[50]	12[27.3] 1[50]	.487	.485

Table 3: Showing correlation between IPV with depression severity and suicide intent

	Physically Hurt	Insult or Talk Down To You	Threaten You With Harm	Scream Or Curse At You	HITS Total Score
Depression	.426**	.482**	.452**	.354*	.468**
severity Suicide intent	.089	042**	154**	.022**	002**

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed).

falling on the eastern slopes of the Western Ghats.

Geographically Kodagu shares border with Kerala and Tamil Nadu and falls in between many linguistic zones and many languages are spoken here, which includes the indigenous Kodava, Tulu, AreBhashe, Kannada, Konkani, Urdu, and Malayalam languages. The district is multicultural. Kannada is the state language of Karnataka.

Agriculture which includes coffee, rice and spices cultivation is the main occupation of the residents.

Our study was conducted at KoIMS teaching hospital in the district head quarters which provides comprehensive psychiatric services s keeping in mind the cultural and linguistic variations.

Total of 2362 male and female subjects who visited the psychiatric OPD of KoIMS teaching hospital from March 2017 to February 2018, were assessed and among them 34 females and 14 males who fulfilled the study criteria were included in the study.

# Sociodemographic Characteristics

Majority of the study subjects were in the mean age group of 32 years and mean education was up to class 7 [Primary education]. Resided in rural area and working as manual labourers and belonged to lower socioeconomic status.

Similar sociodemographic characters were found in previous studies which assessed Intimate partner violence among women subjects [9,14].

#### **Intimate Partner Violence**

In our study psychological violence in terms of insult, threaten with harm, scream or curse was more as compared to physical violence i.e., physical hurt.

An Indian study showed IPV in physical, psychological and sexual domains. However, another Indian study showed physical violence was most common as compared to sexual and psychological violence [14,9].

An international study reported IPV in the form of physical violence was more among women seeking termination of pregnancy [29%] as compared to women seeking contraceptive counselling [22%] [15].

From the above studies it can be inferred that IPV is experienced in women in various domains.

Our study noted IPV in 26% of male subjects from their spouse, however there was no association between IPV and depression. There are only limited studies which assessed IPV among males. One such study which assessed IPV among men from their spouse shows that there was no clear evidence of an association between IPV and depressive symptoms [6]. Our study is in agreement with the above study.

## **Intimate Partner Violence and Depression**

In our study 95.6% of the study subjects who experienced IPV met criteria for depression, among them moderate and very severe depression constituted 23.9% and 30.4% respectively.

Similar findings were noted in various studies where both IPV and depression were highly prevalent and that IPV intensity had a statistically significant association with depression symptom severity and it is also consistent with what has been shown in longitudinal studies conducted among women in high-income countries [5,6,8,16,17].

Hence it is important to identify associated depression in subjects experiencing IPV to reduce morbidity through timely intervention.

## Intimate Partner Violence and Suicide

Overall 69.5% of the subjects reported suicidal intent in the current study and 30% did not have suicidal intent. Experience of IPV increases the odds of incident depressive symptoms and of suicide attempts among women. For men, there was no clear evidence of an association between IPV and incident suicide attempts [6]. Our study is in agreement with the above-mentioned study.

In a study which assessed Intimate partner violence and suicidal ideation in pregnant women, it was found that in low-income, urban sample of pregnant women who experienced IPV; nearly 1 in 4 women expressed thoughts of suicidal ideation [18].

In another study with large community-based pregnant sample, the prevalence of suicidal ideation was as low as 2.7% [19].

In a Canadian sample, the prevalence of suicidal ideation was significantly higher (i.e., 23.5%) among Aboriginal women, a group known to experience greater social inequities [20].

Studies have found associations between IPV and suicidal ideation and suicide attempts among women living in shelters, though pregnancy status was not examined. Limited research has examined the association between different types of IPV and suicidal ideation and women reporting both physical and psychological violence are at higher risk for suicidal ideation than those women reporting psychological

violence only [21,22,23].

Our study is in agreement with previous studies that suicidal ideas and attempts are present in female subjects who experience IPV. Hence it is important to identify such risk factors among subjects with IPV and to initiate early therapeutic interventions.

### Conclusion

On the basis of the available literature and results of the index study, substantiating the earlier findings, it can be concluded that IPV can be present in both rural and urban areas and across various age groups and educational background.

Intimate partner violence can be seen in both males and females. Depression and suicidal ideas/attempts are seen in subjects who are victims of IPV.

Routine clinical assessment to enquire about IPV is needed for timely intervention.

Limitations

Since the sample size was small the findings of the study cannot be generalised.

*Implications of the Study* 

In routine clinical interview, assessment of Intimate partner violence is of prime importance in all patients with depression and suicidal attempt.

Financial Support and Sponsorship: Nil.

Conflicts of Interest

There are no conflicts of interest.

#### References

- Krug Etienne G., Dahlberg Linda L., Mercy James A., Zwi Anthony B., Lozano Rafael. World report on violence and health (PDF). Geneva, Switzerland: World Health Organization. 2002. ISBN 9789240681804.
- 2. Heise L, Garcia Moreno C. Violence by intimate partners. In: Krug EG et al., eds. World report on violence and health. Geneva, World Health Organization, 2002.pp.87–121.
- 3. World Health Organization. Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non partner sexual violence. Available

form: www.who.int.

- World Health Organization. The WHO multi-country study on women's health and domestic violence against women. 2003. Available form: www.who.int/ gender/violence/multicountry.
- Tsai AC, Tomlinson M, Comulada WS, Rotheram-Borus MJ. Intimate Partner Violence and Depression Symptom Severity among South African Women during Pregnancy and Postpartum: Population-Based Prospective Cohort Study. PLOS Medicine. 2016 Jan 19;13(1):e1001943. https://doi.org/10.1371/ journal.pmed.1001943.
- Devries KM, Mak JY, Bacchus LJ, Child JC, Falder G, Petzold M, et al. Intimate Partner Violence and Incident Depressive Symptoms and Suicide Attempts: A Systematic Review of Longitudinal Studies. Tsai AC, editor. PLoS Medicine. 2013 May;10(5):e1001439. https://doi.org/10.1371/journal.pmed.1001439.
- Sabri B, Huerta J, Alexander KA, St.Vil NM, Campbell JC, Callwood GB. Multiple Intimate Partner Violence Experiences: Knowledge, Access, Utilization and Barriers to Utilization of Resources by Women of the African Diaspora. Journal of health care for the poor and underserved. 2015 Nov;26(4):1286–303. http://doi.org/10.1080/00981389.2012.745461.
- Lövestad S, Löve J, Vaez M, Krantz G. Prevalence of intimate partner violence and its association with symptoms of depression; a cross-sectional study based on a female population sample in Sweden. BMC Public Health. 2017;17:335.http://doi.org/10.1186/ s12889-017-4222-y.
- Kundapur R, Shetty SM, Kempaller VJ, Kumar A, Anurupa M. Violence against educated women by intimate partners in Urban Karnataka, India. Indian J Community Med 2017;42:147-50.
- Rabin, Rebecca F, Jennings, Jacky M. Campbell, Jacquelyn C, Bair-Merritt, Megan H. Intimate Partner Violence Screening Tools: A Systematic Review. American Journal of Preventive Medicine. 2009 May 1;36(5):439–445.e4. Doi:10.1016/j.amepre.2009.01.024.
- Sherin KM, Sinacore JM, Li XQ, Zitter RE, Shakil A. HITS: a short domestic violence screening tool for use in a family practice setting. Family Medicine. 1998 July;30(7):508–512. ISSN 0742-3225. PMID 9669164.
- 12. Hamilton M. A rating scale for depression. J Neurol Neurosurg Psychiatry 1960;23:56–62.
- Beck A, Schuyler D, Herman I. Development of suicidal intent scales. In: Beck A, Resnik CL, Lettieri D, eds, The Prediction of Suicide. Bowie, Md: Charles Press; 1974.pp.45-56.
- 14. Chandra PS, Satyanarayana VA, Carey MP. Women Reporting Intimate Partner Violence in India: Associations with PTSD and Depressive Symptoms. Archives of women's mental health. 2009 Aug; 12(4):203–9.
- 15. Öberg Mariella, Stenson Kristina, Skalkidou Alkistis,

- Heimer Gun. Prevalence of intimate partner violence among women seeking termination of pregnancy compared to women seeking contraceptive counseling. Acta Obstetricia et Gynecologica Scandinavica. 2013 Dec 17;93(1):45–51.
- Tsai AC, Weiser SD, Dilworth SE, Shumway M, Riley ED. Violent Victimization, Mental Health, and Service Utilization Outcomes in a Cohort of Homeless and Unstably Housed Women Living With or at Risk of Becoming Infected With HIV. American Journal of Epidemiology. 2015 May 15;181(10):817–26.
- 17. Rees S, Steel Z, Creamer M, Teesson M, Bryant R, McFarlane AC, et al. Onset of common mental disorders and suicidal behavior following women's first exposure to gender based violence: a retrospective, population-based study. BMC Psychiatry. 2014;14:312.
- 18. Alhusen JL, Frohman N, Purcell G. Intimate partner violence and suicidal ideation in pregnant women. Archives of women's mental health. 2015 Aug; 18(4):573–8.

- 19. Gavin AR, Tabb KM, Melville JL, et al. Prevalence and correlates of suicidal ideation during pregnancy. Arch Womens Ment Health. 2011;14:239–246.
- Bowen A, Stewart N, Baetz M, et al. Antenatal depression in socially high-risk women in Canada. J Epidemiol Community Health. 2009;63:414–16.
- 21. Weaver TL, Allen JA, Hopper E. Mediators of suicidal ideation within a sheltered sample of raped and battered women. Health Care Women Int. 2007; 28:478–489.
- 22. Wingood GM, DiClemente RJ, Raj A. Adverse consequences of intimate partner abuse among women in non-urban domestic violence shelters. Am J Prev Med. 2000;19:270–275.
- 23. Pico-Alfonso MA, Garcia-Linares MI, Celda-Navarro N, et al. The impact of physical, psychological, and sexual intimate male partner violence on women's mental health: Depressive symptoms, posttraumatic stress disorder, state anxiety, and suicide. J Womens Health. 2006;15:599–611.