

Suicide Ideation in Depressed People Living with HIV/AIDS in District Jhansi, Uttar Pradesh (India)

Preeti Rai¹, Anil Kumar Malhotra²

ABSTRACT

Introduction: Suicide ideation is common amongst people with HIV/AIDS but may not often indicate any significant risk of suicide. However, persistent suicide ideation with associated depression, could be serious and must be investigated promptly and carefully. This communication aims at examining prevalence of suicide ideation in depressed People Living with HIV/AIDS (PLHAs) and in relation to some of its socio-demographic and clinical variates.

Material and Methods: This is a part of a cross sectional study on depression in 104 HIV/AIDS patients, registered at ART Clinic of a teaching hospital, undertaken in 2013-14 at Jhansi in Uttar Pradesh (India). On applying GHQ tool, 70 patients of depression were identified. These 70 patients were further studied for suicide ideation.

Results: The prevalence of suicide ideation among depressed HIV/AIDS was found 60% as well as significant association of suicide ideation was found with occupation, habitat and per month income of depressed HIV/AIDS patients.

Conclusions: The significant association between socio-demographic profile of depressed HIV/AIDS patients and suicide ideation is an important marker that should alert clinicians to underlying suicidal risk. Clinicians should routinely enquire on suicidality in depressed PLHAs and assist them in their early diagnosis and intervention.

Keywords: Suicide Ideation in Depressed People, HIV/AIDS

INTRODUCTION

Suicide is a complex bio-psychosocial outcome of depression, hopelessness, isolation and lack of support.¹ Mental disorders are associated with more than 90% of all cases of suicide globally.² Some of the psychiatric variables, predicting suicide ideation include concurrent past history of depression, substance abuse, and presence of hopelessness.³ Soon after an individual is made aware of HIV positive status, most important and immediate risk associated with his illness is committing suicide. This happens as a result of sudden, unexpected and unprepared disclosure of HIV test result, which leads to mental breakdown i.e. severe acute depression.⁴ Thus, depression in HIV/AIDS patients, many a times, leads to suicide ideation.

Findings from a Psychology Autopsy Study⁵ have indicated that more than 9% of completed suicides in all age groups are associated with psychiatric disorders. It is not the psychiatric disorder itself that increases the risk of suicide, but the combination of the psychiatric disorder and a stressor like HIV/AIDS. The association between depression and suicide is well documented.⁶ Central to depression are negative thoughts, generated by dysfunctional beliefs, which, in part,

may trigger suicidal behaviour in HIV positive patients.⁷ Suicide is a preventable cause of death and suicidal attempts may be associated with considerable morbidity even when these are non lethal.⁸ There are undoubtedly worse outcomes of HIV/AIDS in countries like India where only a small proportion of people with serious mental disorders receive any form of care. Even in developed countries, approximately 50% of individuals with severe psychiatric illnesses do not receive adequate treatment.⁹ The burden of suicidality among HIV patients has been highlighted in predominantly high income settings. There is a paucity of data on suicide ideation among People Living with HIV/AIDS (PLHAs) in India in general, particularly in the State of Uttar Pradesh. It is against this backdrop, an investigation to study psychiatric morbidity in HIV/AIDS in District Jhansi of Uttar Pradesh was undertaken in the year 2013-2014. Major findings of this study are reported elsewhere.¹⁰ This communication however, reports only results on suicide ideation seen in depressed HIV/AIDS patients of this study.

MATERIAL AND METHODS

This cross-sectional Study was undertaken at ART Clinic of Maharani Laxmi Bai Medical College and Hospital, Jhansi (U.P), India, during 1 April 2013 to 31 March 2014. HIV/AIDS patients-both males and females, aged 18 years and above, registered at the above Clinic were recruited as the study subjects. The minimum sample size, required for the purpose was estimated using method of Lwanga and Lameshow¹¹ and after giving some allowance for refusal rate, 104 participants were studied for the purpose. However, amongst study participants, 70 HIV/AIDS patients found positive for depression on applying the tool, General Health Questionnaire-28:Scaled Version (GHQ 28)¹² were finally included for the analysis. Suicide ideation of these 70 depressed HIV/AIDS patient during past 4 weeks (1 month) was assessed by applying the tool Montgomery-Asberg Depression Rating Scale (MADRS).¹³ Socio-demographic

¹Former Lecturer, Department of Community Medicine, G.S.V.M Medical College Kanpur, ²Professor and Head Department of Community Medicine, Maharani Laxmi Bai Medical College and Hospital Jhansi, India

Corresponding author: Preeti Rai, House no. 711, GMS Road, Dehradun, Uttarakhand, 248001, India

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Variables	Subject studied (n=70)	Suicide Ideation		Statistical Significance of Association		
		No.	Prevalence rate (%)	Chi-square	df.	p- value
Age(Years):						
<35	24	12	50.00	1.522	1	0.217
≥35	46	30	65.22			
Gender:						
Male	44	30	68.18	3.304	1	0.069
Female	26	12	46.15			
Marital Status:						
Married/Ever married	64	40	62.50	0.337	1	0.919†
Un-married	6	2	33.33			
Religion:						
Hindu	65	39	60.00	0.224	1	0.636†
Muslim	5	3	60.00			
Education:						
Illiterate	17	9	52.94	0.466	1	0.494
Literate	53	33	62.26			
Occupation:						
Un-employed	36	16	44.44	7.473	1	0.006*
Employed	34	26	76.47			
Habitat:						
Rural	41	29	70.73	4.749	1	0.029*
Urban	29	13	44.83			
Per month Income(Rupees):						
<5000	26	20	76.92	4.936	1	0.026*
≥5000	44	22	50.00			
Socioeconomic status‡						
Lower	46	27	58.70	0.423	2	0.809
Middle	17	10	58.82			
Upper	7	5	71.43			
Duration of illness:						
<3Years	40	24	60.00	0.000	1	1.000
≥3Years	30	18	60.00			
CD4 count:						
≤300	47	28	59.57	0.011	1	0.916
>300	23	14	60.87			

*P-value significant, †Yates Correction,‡Lower SES includes Lower and Upper- Lower, and Upper SES includes Upper - Middle and Upper SES.

Table-1: Association between suicide ideation and some socio-demographic and clinical variables.

Grade	Depression		Suicide Ideation	
	No.	(%)	No.	(%)
Mild	15	(21.42)	7	(16.67)
Moderate	27	(38.57)	12	(28.57)
Severe	28	(40.00)	23	(54.76)
Total	70	(100.00)	42	(100.00)

$\chi^2=2.313$, p-value=0.314, df=2

Table-2: Association of level of depression with suicidal ideation.

and clinical profiles of respondents were completed by interviewing each participant separately, using a pretested questionnaire. The socio-economic status of respondents was measured, using Modified Kuppusswamy Scale.¹⁴

STATISTICAL ANALYSIS

Data were analyzed using SPSS version 16. Chi square test was used for the analysis.

RESULTS

Out of 104 HIV/AIDS patients included in the study, 70 patients (67.31%) were found to be depressed. Socio-demographic and clinical characteristics of these 70 depressed HIV/AIDS patients study show that majority of the respondents were in the age group ≥ 35 years (65.7%), male (62.8%) married (91.4%) literate (75.7%), employed in either public or private sector (51.4%), Hindus (92.8%), had Income ≥ 5000 Indian Rupees (62.8%), from lower socioeconomic status (65.7%), with duration of HIV/AIDS illness <3 years (57.1%) and with CD4 count being ≤ 300 (67.1%).

Suicide Ideation in Depressed HIV/AIDS Patients in relation to some of their Socio-economic and Clinical Variables

The 1-month period prevalence of suicide ideation in depressed HIV/AIDS patients was found to be 60%. When

investigated for suicide ideation in relation to patients, various socio-demographic and clinical variables (Table 1), our analysis showed that suicide ideation was significantly associated with, occupation ($\chi^2=7.473, df=1, p=0.006$) with higher prevalence amongst employed (76.47%), habitat ($\chi^2=4.749, df=1, p=0.029$) with higher prevalence (70.73%) amongst those residing in rural areas and with monthly income <500 Rs ($\chi^2=4.936, df=1, p=0.026$), with higher prevalence amongst poorer patients (76.92%). The variables-age, gender, marital status, religion, education, duration of illness, CD4 Count and socioeconomic status, did not exhibit any significant association with suicide ideation.

Suicide Ideation and Level of Depression in HIV/AIDS Patients

When investigated suicide ideation against levels of depression in HIV/AIDS patients (Table 2), we found that among 28 severely depressed patients, 23 had at least one time suicide ideation during past 1 month which accounts for 54.76% of all depressed patients. However by and large, there was no association between suicide ideation and the grades of depression ($\chi^2=2.313, df=2, p=0.314$).

DISCUSSION

Amongst 104 patients, 70 (67.3%) satisfied the criteria of depressive disorder.¹² Prevalence of suicide ideation was found to be 60% in depressed HIV/AIDS patients. Significant association of suicide ideation was found with patients who were employed in either public or private sector, came from rural habitat and had low income. These findings of our study confirm results of earlier studies,^{15,16} undertaken in some other countries that many HIV positive patients had high levels of depressive symptomatology and those with suicide ideation had increased levels of depression. In a study³ from Bangalore, depression was significantly associated with suicidal ideation (73% of suicidal patients). Another Study¹⁷ of more than 2,300 psychiatric consultations in New York City Hospital reported that, approximately 20% patients with HIV infection exhibited suicidal behaviour, compared to 14% of patients with unknown HIV sero-positivity status. A Study¹⁸ from USA reported that suicidal ideation is significantly higher in HIV positive than in HIV negative group and in current major depression. Similarly, in Study¹⁹ from Philadelphia among the depressed patients, 20% expressed death wishes, 12% reported occasional suicide ideations and 6% reported persistent suicide ideations whereas 8% had made attempts to commit suicide. Further, similar to our Study findings, a Study²⁰ from Tanzania showed that 45% participants who had depression also had suicide ideation and participants who had depression were 2 times more likely to have suicide ideation; the association was statistically significant.

Different studies in high and low income countries indicated suicidal ideation in PLHA is associated with various factors. In the study³ from Bangalore female sex, lower education level and lower monthly income level were reported as risk factor for suicidal ideation among HIV/AIDS. Study²⁰ from Tanzanian reported high proportion of females compared to

males, showing suicide ideation. It is said that females, more often, attempt suicide but males more often complete.

The Study²¹ from Benin showed that suicide ideations were commoner and more intense among age group 18 - 27 years ($P=0.001$). A longitudinal Study²² conducted over 20 years in Swiss reported association of higher suicide rates among older patients and men. An increase in the CD4 count was associated with reduced risk of suicide in this study.

There are lot of differences in result among studies which is attributed to tools used to collect the information from the participants, sample size variation, study design and cross sectional versus longitudinal studies which gives more chances to collect information from participants compared to cross sectional studies.

CONCLUSION

Our findings indicate a high prevalence of suicide ideation among depressed HIV-infected patients. We also found significant association of suicide ideation with depressed patients who were employed, were residing in rural habitat and had low income. There are few limitations of this Study. The small size may reduce generalization of our findings. Further, like all cross-sectional studies, here also it is difficult to establish causal association between dependent and independent variables.

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