Indian Journal of Clinical Psychiatry
An Official Journal of **Association of Clinical Psychiatry**
(Indian Psychiatric Society- Uttar Pradesh State Branch (IPS-UPSB))

RESEARCH ARTICLE
doi: 10.54169/ijocp.v4i01.120

Psychosocial Factors Related to Attempted Suicide During COVID-19 Pandemic

Kenil Jagani[1], Nidhi Doshi[2*], Parag Shah[2]

[1]Department of Psychiatry, GMERS Medical College and Civil Hospital, Junagadh, Gujarat, India.
[2]Department of Psychiatry, SMIMER, Surat, Gujarat, India.

Abstract

Background: The likelihood of more suicide attempts and fatal suicides remains high due to the significant changes in lifestyle and pressures brought on by to COVID-19 pandemic. Public health initiatives during the COVID epidemic, including social exclusion, lockdown, and travel restrictions, have harmed mental health and increased the risk factors for suicide. The current study is done to pinpoint the socio-demographic and psychosocial risk factors for suicide and evaluate whether they significantly influenced the suicide attempts made during the COVID-19 epidemic.

Methodology: The present cross-sectional analytical study was conducted for the duration of 18 months among those who survived the suicide attempts. Socio-demographic and psychosocial factors were discussed to evaluate the suicide risk. The Beck's suicide intent scale was used to assess the level of intent.

Result: Out of 90 patients, the majority had medium intent for suicide (60, 67%) and 18 (20%) had high intent for suicide. Suicide intent was equally present in both genders. Out of 27 study participants with loneliness, 37% had high intent for suicide and there was a significant association found between suicide intent and feeling of loneliness perceived by study participants. There was no association found for suicide intent and feelings of panic or fear of the COVID-19 pandemic.

Conclusion: In our study, participants who were unemployed were going through financial problems due to loss of wages during the lockdown period was significantly associated with suicide intent severity among study participants. Similarly, during the COVID-19 pandemic, people were suffering from loneliness, which was significantly associated with high intent on suicide scale in our study. Moreover, participants who had a history of past psychiatric illness during the pandemic were significantly associated with high intent for suicide on an intent scale in our study.

ARTICLE INFO

***Correspondence:**
Nidhi Doshi
nidhi12doshi@gmail.com
Department of Psychiatry, SMIMER, Surat, Gujarat, India.

Dates:
Received: 10-01-2024
Accepted: 20-02-2024
Published: 05-06-2024

Keywords:
Psychosocial Factors , Suicide, COVID-19

How to Cite:
Jagani K, Doshi N, Shah P. Psychosocial Factors Related to Attempted Suicide During COVID-19 Pandemic. Indian Journal of Clinical Psychiatry.2024;4(1):50-57.
doi: 10.54169/ijocp.v4i01.120

Introduction

An attempt at suicide is a self-harm behavior carried out with the purpose of ending one's life.[1] Suicide attempts are established as a predictor of the danger of mortality that comes along with further attempts since they occur 30 times more often than successful suicides.[2] Those who have survived suicide are more likely to have post-traumatic disorders, engage in suicidal behavior again, and experience guilt, shame, and societal stigmas.[3,4] Rather than having a single cause, suicide is a complicated occurrence that involves a number of variables, including biological factors, psychological factors, and social influences.[5] Unac-

ceptable life experiences may cause emotional and physical breakdowns, which in turn make a susceptible person want to attempt suicide.[6,7] Relationship issues, chronic illnesses, and economic distress were the most often reported stressors for attempted and successful suicide.[8–10] It's critical to assess these incidents in order to comprehend a person's suicide risk and identify any suicidal behavior the person may exhibit at any given time.[11]

The likelihood of more suicide attempts and fatal suicides remains high due to the significant changes in lifestyle and pressures brought on by to COVID-19 pandemic. According to studies, the COVID-19 pandemic public health initiatives during epidemic including social exclusion, lockdown, and travel restrictions, have harmed mental health and increased the risk factors for suicide.[12–15]

Research by Deena Dsouza *et al*. reviewed 69 suicide cases and revealed that financial hardship, work-related stress, and loneliness were the next most common factors in the majority of the instances, followed by fear of COVID-19 infection.[16]

With this background, it seems that further research needs to be done on the psychological and contextual aspects affecting suicides linked to COVID-19. The goal of the current study is to pinpoint the socio-demographic and psychosocial risk factors for suicide and evaluate whether it significantly influenced the suicide attempts made during the COVID-19 epidemic.

Methodology

The present cross-sectional analytical study was conducted at tertiary care center, SMIMER, Surat for the duration of 18 months from after 1st wave of the COVID-19 pandemic. The institutional review board and the ethics committee of the hospital approved the study. Informed consent was obtained from each participant.

During the 18 months, both male and female patients aged ≥18 years who survived the suicide attempts were considered for the study participation. A conventional sampling method was used for the sample selection for the study. Children and completed suicide cases were excluded from this study. About 90 study participants were fully assessed for suicide attempts *via* in-person interviews after obtaining consent. These interviews were conducted only after having stabilized their medical conditions. Additional data was gathered from the patient's relatives, companions, and admissions records.

In order to ensure that the research objectives are met, the following actions were carried out. First, we discussed risk factors like sex, age, marital status, occupation history, family structure, socio economic structure, and marital status. Semi-structured self-made questionnaire was used to assess various psychological factors like easy availability of toxic medication, a victim of domestic violence, feeling of panic or anxiety due to COVID, stigma, loneliness, relapse of past psychiatric illness, psychological disorder the patient was suffering through during pandemic, financial crisis etc., to evaluate the suicide risk factors.

The Beck's suicide intent scale was used to assess the level of intent.[17] Beck's suicide intent scale contains 20 items, each scoring from 1 to 3 points. The total score of 15 to 19 was recorded as low intent, the score 20–28 was recorded as medium intent, and the score of 29 and above was recorded as high intent.

After collecting all information, data was entered in Ms-Excel and further analysis was done in SPSS version 25. The Chi-square test was applied to find an association between different risk factors with their severity of suicidal intent.

Result

The suicide prevention clinic in the psychiatric OPD saw 90 patients. They were sent to the clinic by several departments that admit patients who had

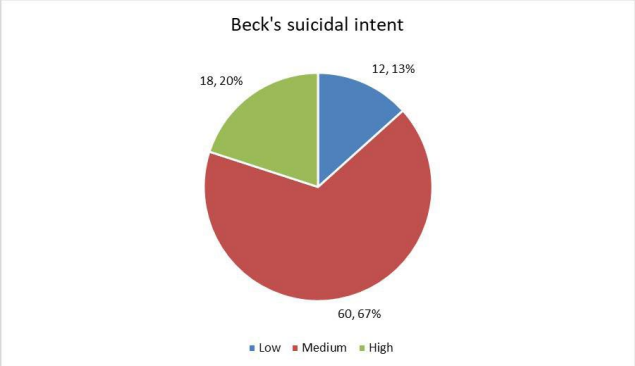

Figure 1: Beck's suicide intent among study participants

made an attempt at suicide. Out of 90 patients, the majority had medium intent for suicide (60,67%) and 18 (20%) had high intent for suicide according to Beck's suicide intent classification, as seen in Figure 1.

As per Tables 1 and 2, the majority of study participants were aged between 21 to 40 years. High suicide intent was seen among 21 to 40-year-old patients, followed by age more than 40 years; however, the association between age and suicide intent was not significant. The present study included 50 male and 40 female study participants. Suicide intent was equally present in both genders. People who are married or unmarried had similar intent for suicide levels. Out of 90, the majority (66) participants were living in a nuclear family and 23 lived in a joint family. There was no significant difference found between Suicide intent and the type of family a person is having. Education and socioeconomic status are not associated with the suicide intent severity of the patients. However, the person who is unemployed and works on a daily wage had high suicide intent compared to a person with a secure job. There was a significant association found between a person's occupational status and suicide intent.

Table 1: Socio-demographic variables present among study participants

Socio-demographic variable		*Frequency*	*Percentage (%)*
Age (years)	<=20	11	12.2
	21–40	66	73.3
	>=41	13	14.4
Gender	Male	50	55.6
	Female	40	44.4
Marital status	Married	45	50.0
	Unmarried	35	38.9
	Separated	5	5.6
	Divorced	5	5.6
Type of family	Joint	23	25.6
	Nuclear	66	73.3
	Expanded	1	1.1
Religion	Hindu	69	76.7
	Muslim	19	21.1
	Christian	2	2.2
Education	Secondary	34	37.8
	Higher secondary	21	23.3
	Graduate	9	10.0
	Dropout	26	28.9
Socioeconomic status	Upper	1	1.1
	Middle	21	23.3
	Lower	68	75.6
Occupation	Employed	51	56.7
	Unemployed	25	27.8
	Daily wage worker	14	15.6

As seen in Tables 3 and 4, 27 study participants had feelings of loneliness. Out of 27 study participants with loneliness, 37% had high intent for suicide and there was a significant association found between suicide intent and feeling of loneliness perceived by study participants. Only 6 study participants had depicted their feelings of panic and fear for COVID-19 and there was no association found between suicide intent and feelings of panic or fear of the COVID-19 pandemic. Domestic abuse history was positive in 17 study participants, though suicide intent was equally distributed with a negative history of domestic abuse. A person's financial crisis, stigma and discrimination faced due to COVID-19 infection, psychological suffering during the COVID-19 pandemic period, and easy access to poisonous medicine and family history of suicidal death are not significantly associated with a person's suicide intent severity. Out of 9 participants who had a relapse of past psychiatric illness, 67% had high intent on suicide and there was a significant association found between suicide intent and relapse of past psychiatric illness in study participants.

Discussion

In the current study, male participants found more compared to females for suicide attempts. Ponnudurai *et al*.[18] assessed a similar group of patients over a period of 1-year and their sample had more males in, similar to our study. In contrast to current study findings Lal and Sethi *et al*.[19] have noted that females predominate in the incidence for attempt to suicide. In general, females had higher suicide attempts compared to males. However, during COVID-19, males might be more worried about

Table 2: Association of suicide intent with socio-demographic variable of the study participants

Socio-demographic variable		*Beck's intent scale*			*Chi-square value*	*p-value*
		Low	*Medium*	*High*		
Age (years)	<=20	3	7	1	3.85	0.43
		27.30%	63.60%	9.10%		
	21–40	7	46	13		
		10.60%	69.70%	19.70%		
	>=41	2	7	4		
		15.40%	53.80%	30.80%		
Gender	Male	6	34	10	0.18	0.91
		12.00%	68.00%	20.00%		
	Female	6	26	8		
		15.00%	65.00%	20.00%		
Marital status	Married	5	30	10	10.7	0.09
		11.10%	66.70%	22.20%		
	Unmarried	7	25	3		
		20.00%	71.40%	8.60%		
	Separated	0	3	2		
		0.00%	60.00%	40.00%		
	Divorced	0	2	3		
		0.00%	40.00%	60.00%		
Type of family	Joint	2	18	3	2.5	0.64
		8.70%	78.30%	13.00%		
	Nuclear	10	41	15		
		15.20%	62.10%	22.70%		
	Expanded	0	1	0		
		0.00%	100.00%	0.00%		
Religion	Hindu	11	44	14	3.21	0.52
		15.90%	63.80%	20.30%		
	Muslim	1	15	3		
		5.30%	78.90%	15.80%		
	Christian	0	1	1		
		0.00%	50.00%	50.00%		
Education	Secondary	3	24	7	5.53	0.47
		8.80%	70.60%	20.60%		
	Higher secondary	3	13	5		
		14.30%	61.90%	23.80%		
	Graduate	3	6	0		
		33.30%	66.70%	0.00%		
	Dropout	3	17	6		
		11.50%	65.40%	23.10%		

Socioeconomic status	Upper	0	1	0	1.11	0.89
		0.00%	100.00%	0.00%		
	Middle	3	15	3		
		14.30%	71.40%	14.30%		
	Lower	9	44	15		
		13.20%	64.70%	22.10%		
Occupation	Employed	7	38	6	13.56	0.009*
		13.70%	74.50%	11.80%		
	Unemployed	5	10	10		
		20.00%	40.00%	40.00%		
	Daily wage worker	0	12	2		
		0.00%	85.70%	14.30%		

Table 3: Psychosocial variables present among study participants

Psychosocial variables	*Frequency*	*Percentage (%)*
Symptoms after COVID-19 pandemic	58	64.4
Were you feeling low and having suicidal thoughts due to financial crisis	37	41.1
Were you feeling lonely during pandemic	27	30.0
Were you suffering from any psychological disorder during the COVID-19 pandemic	25	27.8
Were you victim of domestic abuse	17	18.9
Do you feel you had easy access to poisonous substances due to the COVID-19 pandemic	12	13.3
Do you had a relapse of past psychiatric illness	9	10.0
Were you feeling panic, fear and uncertain because of the unknown nature of COVID-19	6	6.7
Did any of your family memebers tried or died of suicide	5	5.6
Do you or your family members faced stigma and discrimination due to COVID-19 infection	1	1.1

Table 4: Association of suicide intent with psychosocial variable of the study participants

Psychosocial variables		*Beck's intent scale*			*Chi-square value*	*p-value*
		Low	*Medium*	*High*		
Symptoms after COVID-19 pandemic	Present	8	35	15	3.8	1.14
		13.80%	60.30%	25.90%		
	Absent	4	25	3		
		12.50%	78.10%	9.40%		
Were you feeling lonely during pandemic	Yes	2	15	10	7.32	0.026*
		7.40%	55.60%	37.00%		
	No	10	45	8		
		15.90%	71.40%	12.70%		

Were you feeling panic, fear and uncertain because of unknown nature of COVID-19	Yes	1	3	2	0.89	0.64
		16.70%	50.00%	33.30%		
	No	11	57	16		
		13.10%	67.90%	19.00%		
Were you victim of domestic abuse	Yes	2	12	3	0.14	0.93
		11.80%	70.60%	17.60%		
	No	10	48	15		
		13.70%	65.80%	20.50%		
Were you feeling low and having suicidal thoughts due to financial crisis	Yes	4	22	11	3.76	0.15
		10.80%	59.50%	29.70%		
	No	8	38	7		
		15.10%	71.70%	13.20%		
Do you or your family members faced stigma and discrimination due to COVID-19 infection	Yes	0	1	0	0.5	0.77
		0.00%	100.00%	0.00%		
	No	12	59	18		
		13.50%	66.30%	20.20%		
Were you suffering from any psychological disorder during the COVID-19 pandemic	Yes	2	15	8	3.46	0.17
		8.00%	60.00%	32.00%		
	No	10	45	10		
		15.40%	69.20%	15.40%		
Do you feel you had easy access to poisinous substance due to the COVID-19 pandemic	Yes	1	7	4	1.63	0.44
		8.30%	58.30%	33.30%		
	No	11	53	14		
		14.10%	67.90%	17.90%		
Do you had relapse of past psychiatric illness	Yes	1	2	6	13.88	0.001*
		11.10%	22.20%	66.70%		
	No	11	58	12		
		13.60%	71.60%	14.80%		
Did any of your family memebers tried or died of suicide	Yes	1	4	0	1.37	0.5
		20.00%	80.00%	0.00%		
	No	11	56	18		
		12.90%	65.90%	21.20%		

their jobs and financial issues. During the COVID lockdown period, which is also found to be significantly associated with high-intent suicide, explains the higher number of males with suicide attempts during the COVID pandemic.

According to Narang *et al.*,[20] married women and unmarried men are more likely to attempt suicide. In the current study, half of the study participants were married and attempted suicide.

Work-related issues were a significant contributing factor to high-intent suicide in our study. The COVID-19 restrictions had a tremendous influence on the world economy and increased the financial burden on the poor. During the lockdown, a number of industries, including entertainment, tourism, travel, etc., were impacted.

According to Merzyk, who was cited by Logaraj *et al*.,[21] the poison's accessibility determines the substance taken. Our hospital serves an urban area. Although the form of attempt and lethality of intent depends on knowledge of the deadly potential of taken substances, this link could not be established.

About five study participants had positive family history of suicide and the majority of them had medium suicidal intent. Venkoba Rao[22] also mentioned these findings in his hospital-based study of attempted suicide, where he indicates that roughly 20% of suicide attempters in his study had a family history of suicidal attempts. Patients with a family history of suicide attempts need more care as successful suicide was associated with a positive family history of suicide, according to Badrinarayana.[23]

Globally, there could be a serious mental health crisis as a result of the epidemic. High suicidal intent has been linked to the presence of mental illness or the recurrence of a previous mental disorder. Jain *et al*.[24] had reported that depression was connected with suicidal attempts and in these people, suicidal intent was high. In the current study, we have not classified disease to examine suicide intent level.

Loneliness can result from social exclusion and a lack of social support, unfulfilling the urge to belong. Suicidal ideation and attempted suicide have both been linked to loneliness.[25] Hopelessness, stigma, and discrimination during COVID-19 were considered contributing factors for suicide; however, they were significantly not associated with a level of suicide intent.

Study Limitations

We have done a study during the pandemic using a convenience sampling method, which might introduce bias and limit the generalization of the study findings. We use self-reported data in interviews of subjects which might cause recall bias and alter the study findings. As we have done an analytical study, we tried to prove the association among variables. To prove causality, more longitudinal studies are required as suicide is a multifaceted phenomenon influenced by various factors beyond those explored in this study.

References

1. Gvion Y, Apter A. Suicide and suicidal behavior. Public Health Rev. 2012 Dec.
2. Suicide: An unnecessary death. Oxford Academic.2023 Feb.
3. Stanley IH, Hom MA, Boffa JW, Stage DL, Joiner TE. PTSD from a Suicide Attempt: An Empirical Investigation Among Suicide Attempt Survivors. Journal of Clinical Psychology.2019 Oct.
4. Pinto S, Soares J, Silva A, Curral R, Coelho R. COVID19 Suicide Survivors—A Hidden Grieving Population. Front Psychiatry 2020 Dec.
5. Junior A, Fletes J, Lemos T, Teixeira E, Risk MS, 2020 undefined. Risk factors for suicide: systematic review. 2020.
6. Heidari M, Ghodusi M. The Relationship between Body Esteem and Hope and Mental Health in Breast Cancer Patients after Mastectomy. Indian Journal of Palliative Care. 2015 May 1.
7. Chang EC, Yu EA, Kahle ER, Jeglic EL, Hirsch JK. Is doubling up on positive future cognitions associated with lower suicidal risk in Latinos: A look at hope and positive problem orientation. Cognitive Therapy and Research. 2013 Dec.
8. Bastia BK, Kar N. A psychological autopsy study of suicidal hanging from Cuttack, India: focus on stressful life situations. Archives of Suicide Research2009 Jan.
9. Bhatia MS, Verma SK, Murty OP. Suicide notes: psychological and clinical profile. International Journal of Psychiatry Med. 2006.
10. Hall RCW, Platt DE, Hall RCW. Suicide risk assessment: a review of risk factors for suicide in 100 patients who made severe suicide attempts. Evaluation of suicide risk in a time of managed care. Psychosomatics. 1999.
11. Overholser JC, Braden A, Dieter L. Understanding Suicide Risk: Identification of High Risk Groups during High Risk Times. Journal of Clinical Psychology. 2012.
12. Sher L. The impact of the COVID-19 pandemic on suicide rates. An International Journal of Medicine. 2020.
13. Hacimusalar Y, Kahve AC, Yasar AB, Aydin MS. Anxiety and hopelessness levels in COVID-19 pandemic: A comparative study of healthcare professionals and other community sample in Turkey. Journal of Psychiatry Research.2020 Oct.
14. Moghanibashi-Mansourieh A. Assessing the anxiety level of Iranian general population during COVID-19 outbreak. Asian Journal of Psychiatry.2020 Jun.
15. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China. International Journal Environment Research and Public Health 2020 Mar.
16. Dsouza DD, Quadros S, Hyderabadwala ZJ, Mamun MA. Aggregated COVID-19 suicide incidences in India: Fear of COVID-19 infection is the prominent causative factor. Psychiatry Research.2020 Aug.
17. Beck AT, Kovacs M, Weissman A. Assessment of suicidal intention: the Scale for Suicide Ideation. Journal of Consulting and Clinical Psychology .1979.

18. Ponnudurai R, Jeyakar J, Saraswathy M. ATTEMPTED SUICIDES IN MADRAS. Indian J Psychiatry .1986 Jan.
19. Lal N.DEMOGRAPHIC AND SOCIOECONOMIC VARIABLES IN ATTEMPTED SUICIDE BY POISONING. Psychiatry journal .1975.
20. Narang RL, Mishra BP, Nitesh M. ATTEMPTED SUICIDE IN LUDHIANA. Indian J Psychiatry.2000 Jan.
21. Logaraj M, Ethirajan N. Suicidal attempts reported at a medical college hospital in Tamilnadu.2005
22. Psychiatry VRIJ of, 1965 undefined. ATTEMPTED SUICIDE (An Analysis of one hundred awl fourteen nedical admissions into the Erskine Hospital, Madurai).
23. Badrinarayana A. STUDY OF SUICIDAL RISK FACTORS IN DEPRESSIVE ILLNESS. Indian J Psychiatry [Internet]. 1980 Jan.
24. Jain VK, Tantuway R, Khare V. Study of incidence of tuberculosis in fine needle aspiration cytology of cervical lymph node: a city based study. International Journal of Advances in Medicine.Sep 26.
25. Li LZ, Wang S. Prevalence and predictors of general psychiatric disorders and loneliness during COVID-19 in the United Kingdom. Psychiatry Research 2020 Sep.