Original article

Belief and Risk Factors Associated with Suicidal and Self-harm Behaviour among Young Adults of Kathmandu District

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ABSTRACT

Background: Suicide is an emerging public health problem accounting for over 700,000 annual deaths globally. It is also the fourth leading cause of death among the age group 15-29 years in the world. In Nepal, on average 14 people commit suicide every day. Our study explores the factors associated with suicidal and self-harm behaviours among young adults in the Kathmandu district, Nepal.

Methods: A descriptive cross-sectional study was conducted among a total of 242 young adults of the Kathmandu district. Data were collected through interview using a developed semi-structured questionnaire. Descriptive statistics and odds ratios were used for data analysis.

Results: The mean age for initial suicidal and self-harm behaviour was found to be 14 and 15 years respectively, with 28.51% reporting suicidal behaviours including making a plan or suicidal ideation or attempts, and 18.5% with self-harm behaviours. Avoidance and emotional discharge were found as common coping strategies adopted by participants. Belief, family functioning, depression status and self-harm behaviour were found statistically associated with suicidal behaviour.

Conclusions: Various factors including belief, family functioning, and depression were found to influence individual suicidal behaviour. Hence, an integrated approach addressing these factors is crucial for the prevention and control of suicide among young adults at risk.

Keywords: Self-harm behaviour; suicidal behaviour; suicidal ideation; young adults.

INTRODUCTION

Every year, more than 700,000 people die worldwide due to suicide, making it the fourth leading cause of death among the 15-29 years age group.[1] In the year 2019, WHO estimated about 77% of the global suicide burden in low- and middle-income countries.[2]

Young adults are assumed as vulnerable to suicidal and self-harm behaviour, with major life-changing decisions at the beginning of adulthood.[3] The first ever National Mental Health Survey conducted by Nepal Health Research Council in 2020 showed 7.2% prevalence of suicidality among adults in Nepal and current and lifetime suicidal thoughts were reported 6.5% and 1.1.% respectively.[4] This shows prevalence of suicidality among young adults as growing and alarming public health problem in Nepal. Studies have shown the association of family factors with increasing suicidal and self-harm behaviour among young adults.[5-8] Besides, people living in urban areas were found at higher risk of suicide with the increasing struggles to live a happy and healthy life.[9]

Given this alerting prevalence of suicide globally and nationally, this study assessed the beliefs and risk factors associated with suicidal and self-harm behaviour among young adults of the Kathmandu district considering limited studies in Nepal. Studies conducted till today, more focused on individual factors contributing towards suicidal and self-harm behaviour but our study tried to address individual factors (beliefs & depression status) and family factors (family functioning) associated with

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suicidal and self-harm behaviours of young adults in one of fastest growing urbanized city i.e., Kathmandu.

METHODS

A cross-sectional analytical study was conducted among 242 young adults of Kathmandu District between August and December 2019 in Kathmandu District, Nepal to assess suicidal and self-harm behaviours.

Young adults aged 18-24 years residing in any municipality of the Kathmandu district for more than six months were included in the study and were selected using a multi-stage sampling technique. An equal representative sample of 22 were taken from each municipality followed by a random selection of ward of the municipality and by purposive sampling for the selection of study participants. A sample size of 242 was included in the study undertaking a prevalence of suicidal planners as 18% (Assessment of suicide and risk factors in Illam district of Nepal-NHRC Study) at a 5% margin of error with a 5% non-response rate.[13] Self-devised questionnaire was developed and used for the study taking reference from NHRC study conducted in Illam.[13] Beliefs and family functioning status were assessed through Likert scale and pre-testing of tools were performed to ensure validity and reliability. The Cronbach's alpha of 0.894 for belief statements and Cronbach's alpha of 0.861 for functioning functioning was observed. Further, Depression status was assessed through PHQ-9 standard validated tool.

Data were entered and analysed in SPSS version 16.0. Descriptive statistics were calculated and odd's ratio was computed at a 95% confidence interval (CI) to determine the odds of having suicidal behaviour in terms of belief, family functioning, depression, and self-harm behaviour of participants respectively.

Written informed consent was taken from obtained from the participants. Ethical approval was obtained from Institutional Review Committee, Nobel College (Reg. No.2022019).

RESULTS

Socio-demographic characteristics: A total of 242 participants participated in the study. The mean age of the participants was 20.8±2 years. More than half (56%) of the participants were female. More than half (51.2%) had negative beliefs about suicide and suicidal behaviours (Table 1).

Table 1. Socio-demographic characteristics of participants.

Variables (n=242)	Frequency (n)	Percentage (%)
Age categorization (Mean 20.87, SD 1.82)		
≤ 20 years	110	45.45
>20 years	132	54.55
Sex		
Male	107	44.2
Female	135	55.8
Marital Status		
Unmarried	204	84.3
Married	38	15.7
Type of Family		
Nuclear	157	64.9
Joint	68	28.1
Extended	17	7.0
Educational Status		
Can't read and write	0	-
Primary	2	0.9
Lower Secondary	20	8.3
Secondary	40	16.5
Higher Secondary	124	51.2
Bachelors or more	56	23.1
Family History of Suicide		
Yes	5	2.1
No	237	97.9
Belief on suicidal and self-harm behaviour		
Positive	118	48.8
Negative	124	51.2

Prevalence of suicidal and self-harm behaviours: Among 242 participants, 28.51% (69 participants) were found with ever any form of suicidal behaviours including suicidal ideation, plans, and attempts while 18.5% were found with self-harm behaviours (Table 2).

Table 2. Suicidal and Self-harm behaviours of participants.

Variables (n=242)	Frequency (n)	Percentage (%)
Ever suicidal plans	29	11.9
Ever suicidal ideation	54	22.3
Ever suicidal attempts	24	9.9
Ever self-harm behaviours	45	18.5
Suicidal and self-harm behaviours within 12 months		
Suicidal plans	5	2
Suicidal ideation	18	7.4
Suicide attempts	0	-
Self-harm behaviours	14	5.7

In the last 12 months, 5.7 % were reported with self-harm behaviours and 8.6% (21 participants) with any form of suicidal behaviours. In total, 31.40% (76 participants) young adults were reported with suicidal and self-harm behaviours.

Risk Factors perceived (n=242): Negative emotions or stress (31.8%), poor interpersonal relationships (19.8%), and family conflict and functioning (12%) were the three main risk factors of suicidal and self-harm behaviours perceived by the participants. All the participants agreed that family factors determine suicidal and self-harm behaviours of an individual.

Coping Strategies: Out of 76 participants with ever suicidal or self-harm behaviours, 35 were found using coping strategies. Avoidance (34.3%) and emotional discharge (17.1%) were the most common coping strategies adopted by participants (Table 3).

Table 3. Methods of coping strategies adopted by the participants.

Variables	Frequency (n)	Percentage (%)
Coping Strategies (n=35)		
Logical Analysis	3	8.6
Avoidance	12	34.3
Positive Revaluation	7	11.4
Guidance Seeking	3	8.6
Finding Solution	4	11.4
Cognitive Avoidance	0	-
Emotional Discharge	6	17.1

Association and Odds Ratio

In this study, the odds of having suicidal behaviours among participants with positive beliefs were 0.312 times less likely than those with positive beliefs ($p<0.001$). In terms of family functioning, the odds of having suicidal behaviour among participants with negative family functioning was 0.529 times less likely than those with family functioning($p=0.003$). In the case of depression, the odds of having suicidal behaviours among participants with depression were 2.133 times more than those with no depression ($p=0.01$). While the odds of having suicidal behaviours among participants with self-harm behaviours were 3.860 times more likely than those with no self-harm behaviours ($p<0.001$) (Table 4).

Table 4. Odd ratio of suicidal behaviours with variables.

Variables	Suicidal Behaviour		P- value	Odds Ratio at 95%CI
	Yes	No		
Beliefs				Positive/ Negative Beliefs
Negative Beliefs	20	98		0.312
Positive Beliefs	49	75	< 0.0001	(0.171-0.570)
Family Functioning				Positive/ Negative Functioning
Negative	34	37		0.529
Positive	35	70	0.03	(0.300-0.932)
Depression				Present/ Absent
Present	33	27		2.133
Absent	36	80	0.01	(1.202-3.784)
Self-harm behaviours			<0.001	Present/ Absent
Present	28	18.45		3.86
Absent	70	89	<0.001	(1.968-7.571)

DISCUSSION

In our study, more than half (51.2%) of the participants had negative beliefs regarding suicidal behaviour. Similar results were found in the study conducted among Chinese adolescents, American adolescents, and young people.[10,11] This may be because of social stigma and taboos prevailing on mental health at individual and societal level. Majority of the participants considered negative emotion/stress (31.8%), poor interpersonal relationships (19.8%), and family conflict and functioning (12%) to be the three major risk factors of suicidal and self-harm behaviour. Studies conducted in Hong Kong and America identified negative emotions, interpersonal relationships, unhappy family life and parental functioning (parental separation, poor parenting, and parental personal problems) as the key factors leading to suicidal attempts.[6-8, 12] This shows similarity and congruency in perceived risk factors among young adults in our study. The prevalence of suicidal ideation and suicidal plan within 12 months was 7.4% and 2% respectively, similar to studies being conducted in Ilam district of Nepal, and in China.[4, 10,13] Increasing suicidality reported in National Mental Health Survey conducted in 2020 as well.[4]

A study conducted in Spain amongst high school students showed that adolescents who inflicted self-harm used emotional discharge, avoidance, logical analysis, cognitive avoidance, acceptance-resignation as a coping strategy.[14-16] In our study, the most common coping strategies used were emotional discharge and avoidance. Emotional discharge, while is a safe method, avoidance as a coping strategy still holds a benefit of doubt. Amongst the respondents involved in self-harm behaviour, majority of them (34.3%) chose to avoid the situation which could imply their prioritization of being self-aware and keeping it unshared to a second person. This calls for building cordial environment with a sense of safety, respect and confidentiality for young members of family, school, neighbourhood and community where their confessions are heard and taken into a serious consideration.

The present study determined a statistically significant association of the suicidal behaviour of the participants with the belief, family functioning, depression, and self-harm behaviour of the participants. Similar results were determined by the study conducted among French young adults, Kuwaiti students, and Austrian and Turkish medical students respectively.[17-19] This suggests that personal belief, family, and social factors can lead to suicidal and self-harm behaviours among young adults, and an integrated approach is crucial for the prevention of suicide.

Although this study is one among few studies conducted to assess the belief and risk factors associated with suicidal and self-harm behaviour among young adults, it has some limitations. Firstly, it was conducted in a small cross-section of the population in the Kathmandu district. Hence, the generalization of the results may be limited. Secondly, the study was conducted according to the objectives set, so it may not cover all the factors associated with suicidal and self-harm behaviours.

CONCLUSIONS

Based on the study result, we can conclude that young adults are having a higher tendency to suicidal and self-harm behaviour. Poor interpersonal relationships, family conflict and functioning, and negative emotions were four major reasons considered by the majority of participants for having suicidal or self-harm behaviour. A statistical relationship exists between belief; risk factors (namely depression, family functioning, self-harm behaviour) with suicidal behaviour. Hence, measures for the prevention of suicidal and self-harm behaviour are crucial. An integrated approach addressing the beliefs of young adults towards suicide and mental health, and considering all factors that influence an individual's mental health along with promoting a supportive environment where people feel at ease to share their problems is pivotal to mental health promotion.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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