

EVALUATION OF SELF-HARM AND SUICIDAL ATTEMPTS AMONG UNIVERSITY STUDENTS

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Abstract Self-harm and suicidal attempts are very important public health concerns and emerging issues affecting millions globally, especially young and adults. Suicidal attempts and self-harm are essential predictors of suicide in future and intolerable suffering. Assessment in this domain is challenging as no agreement is observed to conceptualize the behaviors. Our study aims to assess the prevalence rate of suicidal attempts and thoughts and self-harm thoughts in young adults. This cross-sectional study was conducted at Shaheed Mohtarma Benazir Bhutto Medical University for 6 months. An online questionnaire was prepared and circulated among young adults. Informed consent was obtained from all participants. The questionnaire included many demographic questions, including age, gender, living status, and relationship status. The data was analyzed using SPSS 24.0. For all qualitative variables, frequencies and percentages were measured. A total of 401 responses were collected. The number of female participants was more (66.6%) than male participants (33.4%). The majority of participants (70.3%) were aged between 18-23 years, followed by 24-29 years (23.7%) and 30-35 years (6%). In questions regarding self-harm and suicidal thoughts, 27.2% of respondents said that they had serious thoughts about suicide but never attempted it, 17.2% responded that they had such thoughts before attending university, and 11.7% said that they tried to attempt suicide in some manner. Thoughts of suicide and self-harm were observed among university students. Various factors influence students' mental health, including parental help, home environment, and university workload. Stress-free environment and social support to students may decrease the prevalence of suicidal tendencies among students.

Keywords: Suicidal thoughts, self-harm, students, suicidal tendency, adults

Introduction

Self-harm and suicidal attempts are very important public health concerns and emerging issues affecting millions globally, especially young and adults (Bilsen, 2018; Quarshie et al., 2020). Suicidal attempts and self-harm are essential predictors of suicide in the future and intolerable suffering (McCabe et al., 2018). According to literature and research, self-harm and suicidal attempts are very strong interpreters for morbidity and mortality, including suicide (Duarte et al., 2020; Olfson et al., 2018). Assessment in this domain is very challenging

as no agreement is observed in order to conceptualize the behaviors. Some studies defined all behaviors of self-injury as self-harm without exploring the actual purpose (Kapur et al., 2013). Although, few studies distinguished between self-harm or injury and suicidal attempt (David Klonsky et al., 2013; O'Connor et al., 2018). Although a good focus has been given to these behaviors, many gaps remain (Morgan et al., 2022). Particularly, researchers have been engrossed in assessing the prevalence of self-harm and suicide attempt in adults far their teenage

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period. In this context, it is not clear that self-harm, and suicide attempt vary in young individuals. Nevertheless, a Scottish study was conducted on a population and evaluated the prevalence rate of 16% for self-harm among young adults (O'Connor et al., 2018). There is an obvious pattern of development for self-harm that peaks in adolescence and decreases in adulthood (Brager-Larsen et al., 2022).

The transformation from the teenage group to adulthood is crucial as multiple challenges can be faced, including decreased parental monitoring and guidance, stressful college and university life, exposure to risky activities and stresses related to life decisions in various domains. These factors may affect future correspondences, such as career, education, and marriage decisions (Bachman et al., 2018; Darvishi et al., 2022; Hochberg & Konner, 2020; Moon & Bahn, 2022). A systemic review observed that college students had high prevalence rates of suicide attempts and ideation. (Mortier et al., 2018) Although most of the studies in this systemic review included only undergraduate students. Our study aims to assess the prevalence rate of suicidal attempts and thoughts and self-harm thoughts in young adults.

Methods and materials

This cross sectional study was conducted at Shaheed Mohtarma Benazir Bhutto Medical University for 6 months (1st February to 31 July 2023). An online Google questionnaire was prepared and circulated among young adults through Google forms. Informed consent was obtained from all participants. Adults with age between 18 to 35 years were included in this study and the participants having age less than 18 and above 35 were not included in this study. Teachers, non – academic staff and students outside SMBBMU were excluded from the study. The questionnaire included many demographic questions, including age, gender, living status, and relationship status. To meet the study's objective, questions regarding suicidal thoughts and self-harm were asked of all participants. The questions were further asked in case of positive responses to assess the actual period faced by the respondent. The data was analyzed using SPSS 24.0. For all qualitative variables, frequencies and percentages were measured.

Results

A total of 401 responses were collected. The number of female participants was more (267/66.6%) as compared to male participants (134/33.4%) (Figure 1).

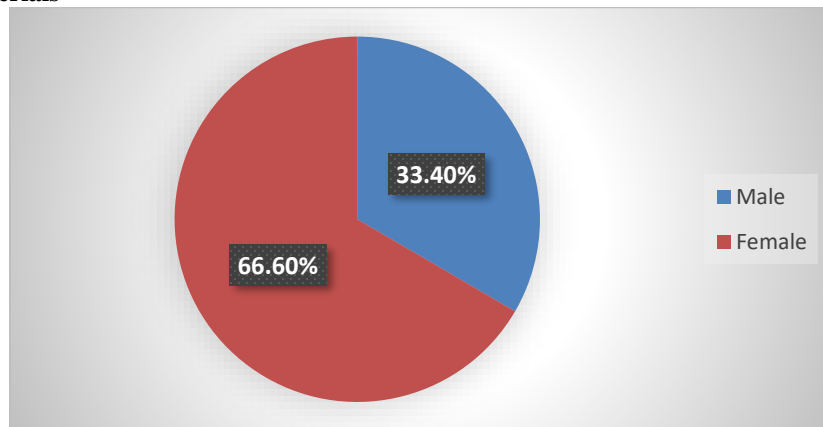


Figure 1: Gender distribution among participants (n=401)

The age of the participants was also categorized. The majority of participants (282/70.3%) were aged

between 18-23 years, followed by 24-29 years (95/23.7%) and 30-35 years (24/6%) (Figure 2).

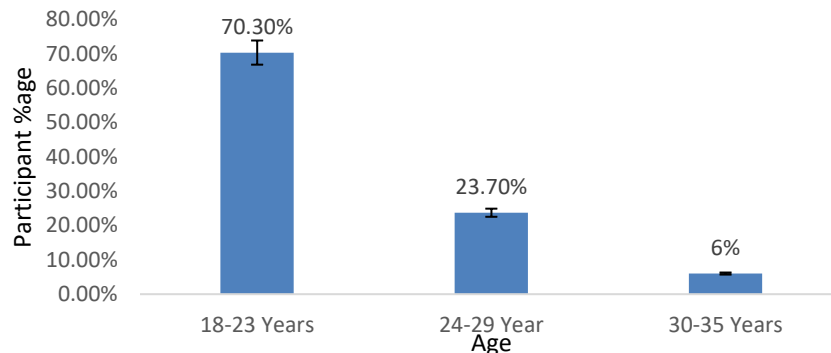


Figure 2: Age distribution among participants (n=401)

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Other demographic details were also evaluated, including living status and relationship status. Most participants lived with others (366/91.27%), followed

by a few living alone (35/8.7%). The relationship status of the majority was single (329/82%), followed by married (56 (14%) (Table 1).

Table 1: Demographic data of participants (n=401)

Variable	Category	Frequency	Percentage
Living status	Living alone	35	8.7%
	Living with others	366	91.27%
Relationship status	Single	329	82%
	Married	56	14%
	Partner	14	3.5%
	Divorced	2	0.5%

Questions regarding self-harm and suicidal thoughts were evaluated. In one question, 109 (27.2%) respondents said they had seriously thought about suicide but never attempted by respondents. Among these responses, 38 (34.86%) said they had these thoughts one year and the past year. On the other question, 69 (17.2%) responded that they had such thoughts before attending university, while 62

(15.5%) felt these feelings after attending the university. Regarding suicide attempts, only 47 (11.7%) said they tried to attempt suicide in some manner, while others denied it. Among positive responses, 25 (53.19%) tried the attempt in the past week. In other questions, 62 (15.5%) said they intended to harm their selves without killing (Table 2).

Table 2: Questions regarding self-harm and suicidal thoughts among participants (n=401)

Question	Response	Frequency	Percentage
Serious thought about suicide but never attempted	Yes	109	27.2%
	No	292	72.8%
Time of suicidal thought	After starting university	62	15.5%
	Before starting university	69	17.2%
	Never thought	270	67.3%
Attempt to suicide	Yes	47	11.7%
	No	354	88.3%
Intention to harm yourself without killing	Yes	62	15.5%
	No	339	84.5%
Thought of suicide in past 2 weeks	A little	68	16.9%
	Extreme	14	3.5%
	Not at all	319	79.6%

Regarding the age of first onset to think about suicide, 57 (14.2%) were aged between 20 and 25 (Figure 3).

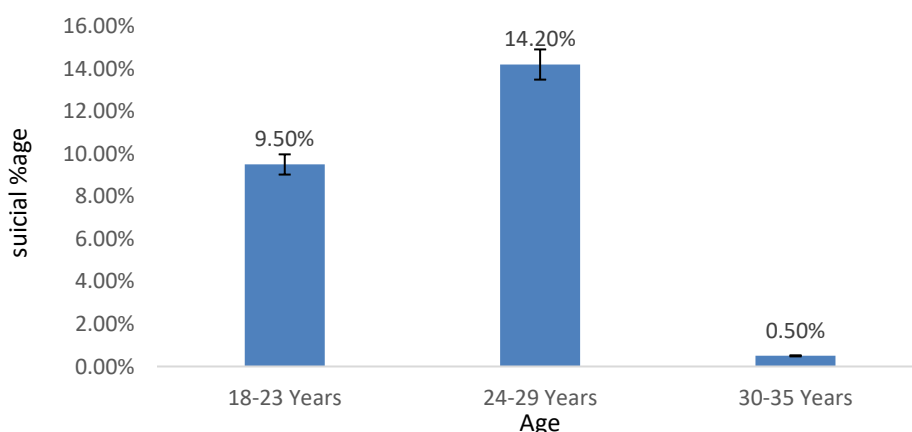


Figure 3: Age of onset at first suicidal thought

Discussion

Our study shows that the prevalence of suicidal thoughts among young students of the university was 27.2%. The majority of these students had these thoughts even before joining the university. Among university students, 11.7% tried to attempt suicide in

some manner. The female ratio was higher as compared to males. This is supported by Sivertson et al., in which the ratio of females also increased (Sivertsen et al., 2019). In another study, the prevalence rate was similar in males and females (O’Connor et al., 2018). The current study also

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observed that this rate was higher in young adults and declining in adulthood. This can be explained by the healthy survival effect, in which long-term education among healthy students, differences in behaviors and perceptions, and study participation. The findings in age groups agreed with another study (Plener et al., 2015). The rate of suicide attempts decreased (4%) in study by Hjelmeland et al. (18). Although the age range was much higher in their participants, this may be the reason for this difference. In another study, the rate of self-harm was higher (28%) than in the current study (Straiton et al., 2012). Other studies also observed that suicide attempts were more common at an early age (Muehlenkamp et al., 2019). Although the study participants also included adults and old age. Zakharov et al. also showed that suicide attempts are common in ages 14 to 18 (Zakharov et al., 2013). Regarding the increasing rate of suicidal attempts, Lewinsohn et al. explored that the number reaches the peak in girls over the age of 13 years, with the maximum peak between 15 to 18 years, followed by a decline (Lewinsohn et al., 2001). Makara-Studyzinksa et al. showed the highest prevalence of suicidal attempts rate among girls aged between 10 to 14 years (Makara-Studyzinksa et al., 2012). In our study, the starting age of inclusion was 18 years, although the rate was higher in young females. Orlewska et al. claimed that the admission ratio in psychiatric wards is increased in girls due to suicide attempts (Orlewska et al., 2021). The findings of Johnson et al. showed a mean age of 19.78 years (F.A. et al., 2021). This age group is important as self-harm and suicidal thoughts at this age may lead to future consequences such as depression, morbidity, and mortality. There is a strong effect of relationships on the mental health of an individual (Tao et al., 2020). Various studies have shown the significance of relationships with self-harm and its related behaviors among adolescents (Fong et al., 2022; Tao et al., 2020). In a study by Moore et al., it was explored that there is an increased incidence of depression and other mental disorders in children with single parents compared to children living with both parents (Moore et al., 2006). Strategies by parents and their attachment are seen to be essential factors leading to changes in emotional behaviors, mental health, communication, and their overall presentation in adult life (Kvernmo & Rosenvinge, 2009). Negative environment at home, including physical abuse, neglect, or loss of a parent, can also lead to increased suicidal thoughts and self-harm (Dionisio-García et al., 2023; Ochi & Dwivedi, 2022).

Conclusion

Thoughts of suicide and self-harm were observed among university students. Various factors influence students' mental health, including parental help, home environment, and university workload. Stress-free environment and social support to students may

decrease the prevalence of suicidal tendencies among students.

Declarations

Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

Ethics approval and consent to participate

Not applicable

Consent for publication

Not applicable

Funding

Not applicable

Conflict of Interest

Regarding conflicts of interest, the authors state that their research was carried out independently without any affiliations or financial ties that could raise concerns about biases.

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