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RESEARCH

Factors associated with suicide risk and attempts in healthcare students: A cross-sectional study

Simón Castro[a], Clara Pastene[b], Nicolás Vásquez[b], Pía Galleguillos[c], Marcelo Salas[d], Ruben Alvarado[e*]

[a]Departamento de Salud Familiar y Atención Primaria, Facultad de Medicina, Universidad de Chile, Santiago, Chile; [b]Escuela de Medicina, Facultad de Medicina, Universidad de Chile, Santiago, Chile; [c]Escuela de Terapia Ocupacional, Facultad de Medicina, Universidad de Chile, Santiago, Chile; [d]Escuela de Enfermería, Facultad de Medicina, Universidad de Chile, Santiago, Chile; [e]Centro Interdisciplinario de Estudios en Salud (CIESAL), Departamento de Salud Pública, Escuela de Medicina, Facultad de Medicina, Universidad de Valparaíso, Valparaíso, Chile

ABSTRACT

INTRODUCTION Suicide deaths in young people have been increasing in recent decades and are considered a major public health problem worldwide, being a partially preventable event. The prevalence of suicidal ideation is high among university students, especially in health careers. The objective of this study was to measure the prevalence of high suicidal risk in this specific group and to identify associated factors, aiming to provide empirical evidence for the construction of effective suicide prevention strategies.

METHODS A cross-sectional study was conducted based on an online survey directed to healthcare students near the end of the first year of the COVID-19 pandemic to learn about the frequency of suicidal risk and its associated factors. The sample consisted of 477 students (70.8% female, mean age 21.7 ± 2.5 years) from eight healthcare majors. The data were collected in January 2021.

RESULTS 22.6% of the young people reported a high suicide risk on the Okasha scale, and 3.4% made a suicide attempt in the previous year. Factors associated with high suicidal risk were having a non-heterosexual orientation, an irregular academic trajectory, experiences of physical and/or psychological violence, higher levels of depressive and anxious symptomatology, as well as lower levels of social support from friends and family.

CONCLUSIONS Suicide risk and attempt levels are high in this group of students, and there is a group of factors that could guide more effective actions, such as support for higher-risk groups and screening to identify and provide support to young people at high suicidal risk and with mental health conditions.

KEYWORDS Suicide, mental health, adolescent, undergraduate medical education

INTRODUCTION

Suicide attempts and consummated suicides are tragic events that have a great impact on the lives of those close to the person who attempts suicide and can have negative effects on their physical and mental health. Worldwide, the suicide mortality rate is 11.4 per 100 000 inhabitants (15 among men and 8 among women). Around 800 000 people die from this cause annually [1]. Suicide is the second leading cause of death in people between 15 and 29 years of age [1,2] and ranks fifth among the causes that generate the most years of potential life lost due to disability in the Americas [3]. There is no single element that is sufficient to explain the cause of suicide; rather, it corresponds to a complex phenomenon that is affected by various stressors and risk factors that are related to each other, expressing the interaction between biological, psychological, social, environmental and cultural factors [1].

According to the World Health Organization (WHO), suicide is considered a partially preventable event [1,4,5]; hence, every suicide death is a failure of the country's public health policies [6]. In Chile, the suicide mortality rate in the general and adolescent population showed a sustained and pronounced increase between 2000 and 2008, then reduced its growth rate and reached a stable condition with high figures [2,4,7], being the fifth cause of premature death in our country [6].

In the population aged 15 to 19 years, the specific mortality rate by suicide in 2017 was 6.4 suicides per 100 000 inhabitants, 13.8 in the segment of 20 to 24 years, and 12.5 in the range between 25 and 29 years [8]. In particular, a higher ratio of attempts to complete suicides is described in adolescents,

* **Corresponding author** ruben.alvarado@uv.cl
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Postal address Av. Angamos 655, Viña del Mar, Región de Valparaíso, Chile

MAIN MESSAGES

- Suicide is a complex phenomenon that is affected by several stressors and risk factors.
- In Chile, suicide mortality in the general and adolescent population is the fifth leading cause of premature death.
- A higher prevalence of mental health problems has been described among students of healthcare careers, which may affect their performance as professionals and the care of their patients.
- This study has the limitations of a cross-sectional design and an online survey. Even so, it allows us to identify risk and protective factors preliminarily.

reaching even 100 attempts per suicide death in this age group [1].

A study that measured the prevalence of suicidal behavior and psychological distress in 5572 university students from 12 countries showed that 29% had experienced suicidal ideation and 7% reported having attempted suicide [9]. In particular, among students in health careers (such as medicine and nursing), a higher prevalence of mental health problems has been described, which may affect their performance as professionals and the care they provide to their patients [10]. In a recent systematic review on suicidality in medical students (2020), a lifetime prevalence of 2.2% for suicide attempts and 1.6% for the last 12 months was estimated [11].

Due to the importance of this problem, in August 2020, a group was formed with students, academics, and non-academic staff at the Faculty of Medicine of the University of Chile to conduct a situation analysis on mental health and the presence of suicidal ideas and attempts among students of all careers taught there. It also sought to identify risk and protective factors that could guide subsequent actions to address this problem more effectively.

METHODS

This research's design corresponds to a cross-sectional study, and the surveys were conducted in the second half of January 2021.

In September 2020, a work team of eight people was formed: four students from different careers of this faculty, the director and secretary of the Directorate of Student and Community Affairs, and two academics who coordinated the study. All of them met weekly through videoconferencing platforms.

Once the first version of the survey was prepared, a pilot test was carried out to evaluate its semantic validity and duration [12], including seven health students from other universities, three men, and four women between 19 and 24 years of age. It was observed that the time to answer the survey ranged from 12 to 15 minutes. There were no difficulties in understanding the survey components. Subsequently, institutional authorizations were obtained for this online survey.

The universe of this study includes all students in the undergraduate years of all the majors of the Faculty of Medicine of the University of Chile during the second semester of 2020, who were 18 years old at the time (a total of 367 participants). Students from the first to the fourth year of nursing, kinesiology, phono audiology, nutrition and dietetics, obstetrics and child care, occupational therapy, and medical technology, as well as students from the first to the fifth year of medicine, were invited to participate. There were no previously established exclusion criteria.

All students were invited to participate through institutional e-mails and a formal invitation from the Directorate of Student and Community Affairs and the team coordinating the study. The invitation informed the objectives, the voluntary nature of their participation, and the confidential data handling. The survey was accessed through a link and hosted on a platform specially designed for this study. The informed consent document was presented in the first step, which could be downloaded once accepted. The survey was then accessed. This survey was available during the second half of January 2021. This was after approval by the Human Research Ethics Committee of the Faculty of Medicine, University of Chile.

The information was stored in two different databases to ensure the privacy and security of the data in the platform. Each participant used a separate type of identifier (ID). The database containing the e-mails and the personal identifier was stored on a computer without the Internet, which was password protected and in charge of one of the academic researchers. The other database contained the independent identifier and all the answers given by the participants.

The first part of the survey inquired about sociodemographic characteristics (sex, gender, sexual orientation, age, nationality, second occupation, people with whom he/she lives, place of residence, among other data), university trajectory (career, history of failing courses, etc.), perception of academic burden [13], experiences during the pandemic by COVID-19 (questionnaire created by researchers, which includes having been sick, illness and death of a family member, tolerance to confinement and quarantines, etc.), and experiences of violence in the previous year (based on the Questionnaire of the National Survey of Domestic Violence, 2020, educational setting) [14].

The Okasha Suicidality Scale, previously validated in Chile and which has shown good psychometric indicators, was used to assess suicidal risk [15]. To measure mental health status, we used the Depression, Anxiety, and Stress Scale (DASS-21), which has been validated for use in Chile and university students [16]. Perceived social support was assessed with the Multidimensional Scale of Perceived Social Support (MSPSS) by Zimet, Dahlem, Zimet, & Farley, also validated in Chile [17–19]. This

scale has three dimensions: social support from friends, family, and a close (or significant) person.

To classify suicidal risk, we followed the indications based on the validation done in our country, where the scores of questions 1, 2, and 3 are added together, with suicidal risk being a score equal to or greater than five. The fourth question of this scale asks about one or more suicide attempts [15]. We defined a case as "high suicidal risk" (HSR) when the student had five or more points in the first three questions and/or had made one or more suicide attempts in the previous year. In case of detecting suicidal ideation or high suicidal risk, at the end of the survey, a message appeared inviting to seek professional help, in addition to giving the option of being contacted by a professional of the research team to receive direct help and counseling.

We analyzed the data using the IBM Corp program released in 2016, IBM SPSS Statistics for Windows, 24.0 version. Descriptive analysis was performed for all variables, followed by bivariate analysis with high suicidal risk (tables 1 and 2). The Chi-square test was used for categorical variables. Quantitative variables, such as mental health status and social support, were dichotomized by dividing the groups based on the median value. The results of the bivariate analyses were used to establish the conditions that were associated with high suicidal risk and thus dichotomize all variables.

Finally, to advance in the possible causes of the problem under study, a model was constructed using binary logistic regression analysis to identify the factors associated with high suicidal risk. For this purpose, a main effects model included all the variables studied. To obtain the parsimonious model, we started with the complete model that included 25 variables and progressively eliminated those that were not significantly associated (14-step backward method). In addition, the likelihood ratio test was applied to compare the model obtained with the initial full model. Goodness-of-fit was tested with the Hosmer-Lemeshow test. The ability of the parsimonious model to predict cases that are true positives or true negatives of high suicidal risk, based on the Okasha test score described previously, was also evaluated.

RESULTS

Description of variables in the sample

The sample for this study consisted of 477 students whose surveys were answered completely (response rate: 15.6%). The characteristics of the sample are presented in tables 1, 1 and 2. The age ranged from 18 to 49 years, with an average of 21.7 years and a standard deviation of 2.5 years. Some 70.8% were female, and 29.2% were male (sex assigned at birth). Some 69.8% identified themselves as female, 28.3% as male, and 1.9% as another gender. Regarding sexual orientation, 65.2% defined themselves as heterosexual, and 34.8% with a different orientation. Only 5.7% identified themselves as belonging to native people.

76.5% reside in the Metropolitan Region. 48.6% reside with both parents, 36.7% have only one parent (mostly with the mother only), 14.3% look after someone else, and 10.9% work in addition to their studies.

Most of the parents of those who responded to the survey had a higher education level (technical, university, and postgraduate): 67.5% and 68.6%, respectively.

Regarding their majors, 8.3% were studying occupational therapy, 3.8% in kinesiotherapy, 8.9% in obstetrics and childcare, 45.1% in medicine, 14% in nursing, 7% in nutrition and dietetics, 8.1% in medical technology, and 4.9% in phono audiology. Regarding the course, 9.7% were in their first year, 33.3% in their second year, 28.4% in their third year, 25% in their fourth year, and 3% in their fifth year. There were three sixth and seventh-year medical students (0.6%).

In relation to their academic trajectory, 41.5% of the students were irregular: they reported having failed or dropped a subject or having suspended their studies.

Concerning their perceived academic burden, 69.5% perceived it as "high" or "very high", 26.9% as "moderate", and only 3.6% perceived it as "low" or "very low". The situations that generated the greatest academic burden were an overload of homework and assignments (88.4%), assessments (70.3%), limited time for assignments (61.3%), and the type of assignments asked of them (59.9%).

At the time of the survey, only 5.9% reported having suffered COVID-19, and 35.8% reported having had a family member or loved one with the disease. Some 6.1% of respondents reported having had a close person die from COVID-19.

Nearly half of the respondents (48.1%) reported that it had been "difficult" or "extremely difficult" to endure the lockdown imposed during the pandemic. The conditions that affected them the most were "not seeing friends" (87.2%), "being locked up at home" (63.6%), "living with my family or those I live with" (52%), and "not being able to see my family" (49.1%).

30% of respondents reported having experienced some form of physical or psychological violence during the past year (within and outside the couple). Additionally, 13.3% reported having experienced cyberbullying (mainly through messaging groups or WhatsApp).

Among those who had a partner within the last year (n = 263), 16% reported having experienced intimate partner violence of any kind. Among these, 13.4% reported suffering from psychological violence, 3.5% from sexual violence, and 2.3% from physical violence.

Mental health status was assessed using the three subscales of the Depression, Anxiety, and Stress Scale (DASS-21). The depression subscale range fluctuated between 0 and 21 points, with an average of 6.7 and a standard deviation of 5.0 points. Fifty percent scored between 0 and 5 points, and 50% scored between 6 and 21 points. The range for the anxiety subscale was also between 0 and 21 points, with an average of 5.6 and a standard deviation of 4.5 points. 49.4% scored between 0 and 4 points, and 50.6% scored between 5 and 21 points. Finally, the range in the stress subscale was between 0 and 21 points, with an average of 9.5 and a standard deviation of 4.8 points.

Table 1. Distribution of the sample for sociodemographic variables and high suicide risk.

	Frequency		High suicide risk frequency for each variable category	
Variables	**n**	**%**	**%**	**P value**
Assigned sex at birth				0.189
Male	139	29.2%	26.6%	
Female	338	70.8%	22.1%	
Gender				< 0.001[1]
Male	135	28.3%	24.4%	
Female	333	69.8%	19.9%	
Other	9	1.9%	100%	
Sexual orientation				< 0.001[2]
Heterosexual	311	65.2%	16.8%	
Homosexual	32	6.7%	28.1%	
Bisexual	78	16.4%	37.2%	
Other	56	11.7%	33.3%	
Belonging to a native community				0.174
Yes	27	5.7%	33%	
No	450	94.3%	22%	
Residence				0.682
Metropolitan region	365	76.5%	22.3%	
Other region	112	23.5%	24.1%	
Cohabitants				0.018[3]
Both parents	232	48.6%	18.7%	
Mother	153	32.1%	25%	
Father	22	4.6%	22.7%	
Other relatives	22	4.6%	36.4%	
Partner (with or without children)	11	2.3%	18.2%	
Other situation	37	7.8%	32.4%	
Caring for another person (child, father, mother, grandparent, other)				0.273
Yes	68	14.3%	27.9%	
No	409	85.7%	21.9%	
Do you work in addition to your studies?				0.265
Yes	52	10.9%	28.8%	
No	425	89.1%	22%	
Father's educational level				0.006[4]
Basic education	24	5.1%	39.1%	
Secondary education	109	22.8%	28.4%	
Higher education (technical, university, and postgraduate)	322	67.5%	20.2%	
Doesn't know	22	4.6%	14.3%	
Mother's educational level				< 0.001[4]
Basic education	25	5.2%	24.0%	
Secondary education	122	25.6%	33.1%	
Higher education (technical, university, and postgraduate)	326	68.6%	18.7%	
Doesn't know	[4]	0.8%	33.3%	

[1]The P value corresponds to the comparison of the three types of gender identity. However, when comparing only the male gender with the female gender, the P value is 0.280.
[2]The P value corresponds to comparing heterosexual orientation with the other three groups.
[3]The P value corresponds to comparing those who live with both parents or their partner (with or without children) with the other groups (lives only with the mother, only with the father, with other relatives, and other situations).
[4]The P value compares the group with higher education to those with basic and intermediate education. The "Doesn't know" group is excluded from the analysis to reduce the error due to misclassification.
The frequency of high suicide risk for the categories of each variable is presented.
Source: Prepared by the authors.

Some 51.5% scored between 0 and 9 points, and 48.5% scored between 10 and 21 points.

Social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) scale. For the dimension of perceived support from friends, the average was 23.1 ±

Table 2. Sample distribution for high and low social support and high suicide risk.

	Frequency		High suicide risk frequency for each variable category	
Variables	**n**	**%**	**%**	**P value**
Academic record				0.001
Irregular (having failed or dropped a subject or having suspended their studies)	198	41.5%	30.5%	
Regular	279	58.5%	17.3%	
Perceived academic burden				0.077
High or very high	330	69.5%	23.6%	
Moderate	128	26.9%	18%	
Low or very low	17	3.6%	41.2%	
Have had COVID-19				0.555
Yes	28	5.9%	25%	
No	449	94.1%	22.5%	
A close family member has had COVID-19 disease				0.600
Yes	171	35.8%	22.6%	
No	306	64.2%	23.1%	
A family member has died of COVID-19				0.752
Yes	29	6.1%	24.1%	
No	448	93.9%	21.6%	
Perceived level of difficulties during lockdown				0.002
Difficult or extremely difficult	229	48.1%	28.3%	
Had no problems or adapted well	248	51.9%	16.9%	
Have you been a victim of any type of physical and/or psychological violence in the last year?				0.011
Yes	143	30%	30.1%	
No	334	70%	19.5%	
Have you been a victim of violence (physical and/or psychological) by your partner (n = 263) in the last year?				0.444[a]
Yes	42	16%	28.6%	
No	221	84%	23.1%	
Had experienced some form of cyber-bullying				0.025
Yes	62	13.3%	33.9%	
No	415	86.7%	21%	
DASS-21 Depression subscale[b]				< 0.001
Low score (0 to 5 points)	238	50%	8.8%	
High score (6 to 21 points)	238	50%	36.6%	
DASS-21 Anxiety subscale[b]				< 0.001
Low score (0 to 4 points)	241	50.6%	12.3%	
High score (5 to 21 points)	235	49.4%	32.8%	
DASS-21 Stress subscale[b]				< 0.001
Low score (0 to 9 points)	231	48.5%	15.1%	
High score (10 to 21 items)	245	51.5%	30.7%	
MPSS Support from friends subscale				< 0.001
Low support (0 to 23 points)	217	45.5%	30%	
High support (24 to 28 points)	260	54.5%	16.5%	
MPSS Family support subscale				< 0.001
Low support (0 to 21 points)	240	50.3%	33.3%	
Low support (0 to 21 points)	237	49.7%	11.8%	
High support (22 to 28 points)				< 0.001
MPSS Subscale Support from close person	234	49.1%	29.5%	

(Continued)

(Continued)

	Frequency		High suicide risk frequency for each variable category
Low support (0 to 21 points)	243	50.9%	16%

DASS-21, Depression, Anxiety, and Stress Scale. MSPSS, Multidimensional Scale of Perceived Social Support.
[a]Comparisons are made only in the group that had a partner within the last year (n = 263). [b]One case has incomplete data, so analyses are made for 476 cases.
Notes: Variables related to academic status, the impact of the pandemic, experiences of violence, mental health, and social support are detailed, and the frequency of high suicide risk is presented for the categories of each variable.
Source: Prepared by the authors.

4.9 points (range between 4 and 28, median 24 points); from family members was 20.8 ± 5.5 points (range between 4 and 28, median 21 points); and from a close person was 23.6 ± 4.4 points (range between 4 and 28, median 25 points). The group distribution for high and low social support is presented in Table 2.

Need and search for psychological care

75.5% of the students said they needed psychological care during 2020, but only 58% of these sought it (in the public, private system, or the services provided by the university). Therefore, 42% of students who thought they needed psychological help did not seek any mental health care.

High suicidal risk prevalence

Out of the total sample, 107 students were classified as high suicide risk (22.4%). Some 32.6% showed no indicators related to suicidal risk (zero score on the Okasha Suicidality Scale questions).

Of the total sample, 16 young people reported attempting suicide within the previous year (3.4%). If one takes the subgroup of the 107 students at high suicidal risk, 15 of them reported a suicide attempt (14%). On the other hand, of the 16 cases with a suicide attempt, 15 of them were classified as high suicide risk (93.8%), which confirms the usefulness of this scale for population screening strategies.

Bivariate analysis for factors associated with high suicidal risk

tables 1 and 2 present the results of the bivariate analyses comparing the categories of studied variables regarding high suicidal risk. The categories of variables that showed a statistically significant association with this condition are listed below:

a. Having a gender identity other than male or female.
b. Having a sexual orientation other than heterosexual.
c. Living with other family members or in an "other situation" (other than living with both parents, one parent, or a partner).
d. The father has a primary or secondary school education.
e. The mother has a primary or secondary level of education.
f. Having failed or dropped a subject or having suspended their studies.
g. Perception that the lockdown had been difficult or extremely difficult to endure.
h. Having been a victim of physical and/or psychological violence within or outside their partner.
i. Having suffered some form of cyber-bullying.
j. High level of depressive symptoms.
k. High level of anxious symptoms.
l. High level of stress symptoms.
m. Low level of social support from friends.
n. Low level of support from family.
o. Low level of support from a close (or significant) person.

Multivariate analysis to identify factors associated with high suicidal risk

Table 3 presents the variables that were included in the parsimonious model and their indicators for the multiple logistic regression equation. To obtain this model, we started by incorporating all the variables considered in this study and described in tables 1 and 2 (the detail of the dichotomous categories in each variable is described in an additional table as supplementary material). The final model achieves a robust goodness of fit (Hosmer-Lemeshow test, with $P = 0.209$) and includes seven variables. This parsimonious model correctly predicts 78.6% of the true positive and negative cases of high suicide risk, based on the agreement of the diagonal of predicted cases with those according to Okasha test results. As this is the first attempt to build an empirical model for this problem in our setting, we have decided to leave two variables that have a $P > 0.05$, as they contribute to a strong goodness of fit and provide information to guide more effective interventions to reduce suicide among these young people.

DISCUSSION

Our results show that 22.6% of this sample reported having a high suicidal risk on the Okasha scale, and 3.4% made a suicide attempt in the previous year. One of the main difficulties in

Table 3. Variables and indicators of the multiple logistic regression model for high suicide risk.

Variable	ß	Standard error	P value	OR	95% confidence interval
Sexual orientation other than heterosexual	0.850	0.258	0.001	2.34	1.41 to 3.88
Uneven academic record	0.552	0.253	0.029	1.74	1.06 to 2.85
Experience of physical and/or psychological violence	0.461	0.262	0.078	1.56	0.95 to 2.65
High depression symptom score	1.180	0.302	< 0.001	3.26	1.80 to 5.88
High anxiety symptom score	0.530	0.282	0.061	1.70	0.98 to 2.95
Low score on social support from friends	0.576	0.259	0.026	1.78	1.07 to 2.95
Low score on social support from family	0.742	0.274	0.007	2.10	1.23 to 3.60
Constant	-3.744	0.379	< 0.001		

OR: Odds Ratio.
Source: Prepared by the authors.

making comparisons of these results is how this condition is measured, as it is not the same in different studies, and many of them use only the report of suicidal ideation. Despite this, our results do not differ significantly from those reported in other studies conducted in Chile and abroad.

Within Chile, a study based on 551 medical students using questions on suicidal behavior from the National Health Survey estimated a prevalence of 25.2% [20]. In another study conducted at a different university, based on 632 university students, 20.7% reported that they had wished to kill themselves and 7.4% that they had tried to do so [21].

Moreover, our data are also similar to those reported in studies and systematic reviews conducted in other countries on the prevalence of suicidal ideation and attempts, both in medical students [11,22–25] and in university students in general [9,26,27].

An interesting finding is that 14% of those at high risk of suicide have attempted to take their own life, compared to 3.4% of the total sample, yielding a 4.1 times higher proportion. This suggests that in this specific population, screening (and subsequent intervention) of young people at high suicidal risk using the Okasha Suicidality Scale could be an effective strategy to prevent suicide, as has been proposed in several systematic reviews [28,29].

In addition, our findings allow us to build a profile of characteristics and/or conditions in some groups of young people that would be associated with a higher likelihood of high suicide risk, thus making it possible to target actions and/or services to these groups, or to develop specific preventive programs for them.

As described in the results of the multiple logistic regression analysis, the following categories of variables showed a significant association with high suicidal risk:

- Having a sexual orientation other than heterosexual.
- Irregular academic record: having failed or dropped a subject or having suspended their studies.
- Experiences of physical and/or psychological violence during the previous year.
- Mental health: high levels of depressive and anxious symptoms.
- Social support: lower perceived social support from friends and family.

The association of high suicide risk with most of these characteristics has been reported in other studies and systematized in the WHO report [1].

Being a member of minority groups, including sexual minorities, is associated with increased experiences of violence, discrimination, and stigma, which in turn are risk factors for suicide [1,2,5,30]. Also, some studies have shown in their results that suicide ideation and attempts in university students are associated with greater academic pressure [31,32], stress produced by career performance [27], and poor academic performance [20], which in our study appears to be an irregular academic trajectory.

On the other hand, social support (both from family and friends) is an important protective factor for mental health problems, including suicidal ideation and attempts [2]. Previous studies in Chile have also reported such findings among university students, as well as an inverse relationship with depressive, anxious, and stress symptoms [32,33]. Many studies have reported this association, especially with depressive symptoms and disorders [1,34], which is why one of the strategies that has been used in the educational field is the detection of these conditions in order to offer professional support and treatment when required [1,34]. In turn, difficulties with family, friends, or partners can be triggers for suicidal behavior or crisis [2,4,5].

One interesting finding is the association of suicidal risk with perceived difficulty in coping with the pandemic lockdown. Some studies have reported an increase in depressive, stress, and anxiety symptoms among university students during the pandemic, as well as an increase in the prevalence of suicidal thoughts [35]. It has been hypothesized that deprivation of socialization is particularly harmful to the mental health of young people, as it is a necessity for their development at this early stage of life [36] and may explain some of the problems that are currently being reported [35]. In addition, the difficulties associated with the pandemic must be considered in addition to those inherent to the university context under normal conditions, which challenge young people due to the multiple changes to which they must adapt [37].

In this study, 75.5% of the students surveyed reported needing psychological care during 2020, but only 42.8% requested it. Similar results were reported regarding the request for psychological care in the institution's psychological care services. In this case, 85.4% of students reported needing psychological help, but only 45.2% requested it from the faculty. This failure to seek psychological help by students has been described in several studies, with fear of stigmatization considered to be the main cause [23,38]. Other reasons for not seeking support at the university include a lack of mental health literacy in the academic and student community and a lack of awareness of such services within the university [39].

This study has limitations that must be considered to correctly interpret the results. First, the cross-sectional design does not allow us to establish causality between suicide risk and the analyzed variables but only to establish initial associations. Second, given that the study was conducted through an online survey with an open invitation, it is difficult to establish whether or not there was any selection bias. Despite this, the response rate was around 15.6%, which is high for studies based on online surveys in the context of the pandemic. Third, we did not include other variables that might have been of interest (such as problematic drug and substance use, sleep quality, level of self-esteem or family functioning, etc.) so as not to extend the survey more than is desirable. We believe that in the future, other studies should include these other aspects to achieve a broader and more complete picture of the complexity of this problem.

CONCLUSIONS

Our results confirm a high prevalence of suicidal ideation (22.6%) and suicide attempts during the previous year (3.4%) among healthcare students.

Likewise, some characteristics are associated with high suicide risk, such as (personal conditions, irregular academic trajectory, experiences of violence, poorer mental health compared to their peers, and low social support. All of this makes it possible to guide specific actions to prevent suicide among these young people.

The Okasha Suicidality Scale showed good indicators for use in population screening strategies for young people.

Finally, we suggest that future studies include aspects such as problematic drug and substance use, sleep quality, level of self-esteem, and family functioning, among others, in order to achieve a broader and more complete view of the complexity of this problem.

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Factores asociados al riesgo e intentos suicidas en estudiantes de carreras de la salud: estudio transversal

RESUMEN

INTRODUCCIÓN Las muertes por suicidio en jóvenes han ido en aumento en las últimas décadas y se considera un problema de salud pública prioritario a nivel mundial, siendo un evento parcialmente prevenible. La prevalencia de ideas suicidas es alta entre estudiantes universitarios, especialmente en carreras de la salud. El objetivo de este estudio fue medir la prevalencia de alto riesgo suicida en este grupo específico e identificar factores asociados, con la finalidad de aportar evidencia empírica para la construcción de estrategias efectivas de prevención del suicidio.

MÉTODOS Se realizó un estudio transversal basado en una encuesta en línea a estudiantes de carreras de la salud, casi al final del primer año de la pandemia de COVID-19, para conocer la frecuencia del riesgo suicida y sus factores asociados. La muestra fue de 477 estudiantes (70,8% mujeres, edad promedio 21,7 ± 2,5 años), de ocho carreras de la salud. Los datos se recogieron en enero de 2021.

RESULTADOS Un 22,6% de los jóvenes reportó un alto riesgo suicida en la escala de Okasha y 3,4% hizo un intento suicida en el año previo. Los factores asociados al alto riesgo suicida fueron: tener una orientación no-heterosexual, una trayectoria académica irregular, experiencias de violencia física y/o psicológica, mayores niveles de sintomatología depresiva y ansiosa, así como menores niveles de apoyo social de amigos y de la familia.

CONCLUSIONES Las cifras de riesgo e intentos suicidas son elevadas en este grupo de estudiantes y existe un perfil de factores que podrían orientar acciones más efectivas, tales como apoyo a grupos de mayor riesgo y hacer tamizaje para identificar y dar ayuda a jóvenes con alto riesgo suicida y con problemas de salud mental.