Original Article

Education And Prevention: Strategies To Prevent Adolescent Suicide

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DOI: 10.47750/pnr.2022.13.S08.207

Abstract

Gatekeepers Training (GKT) is one of the most widely used and disseminated programs worldwide to train personnel in suicide prevention. The purpose of the program is to acquire the necessary skills and competencies to detect psychoemotional and mental health problems that could lead to self-destructive behaviors. In this research work, the level of risk related to suicide was evaluated by means of the ISO-30 psychometric test in high school students, then the effectiveness of a gatekeeper training program applied in the Tepatitlan Regional Preparatory School (TRPS) and some of its modules was evaluated. The results of the ISO-30 psychometry showed that 64.5% of the students evaluated have a high-risk factor for suicide related to the inability to cope with emotions. In addition to the above, a statistically significant difference was found (Mann-Whitney U Statistics = 4322.000; $p<0.001$) in the level of competence of the participants in relation to a pre-training evaluation. It is important to note that the effect of the difference found is strong (Rosenthal's $r=0.67$) so it is concluded that the GKT drastically improved the skills and competencies of the participants.

Keywords: Gatekeepers, suicidal behavior, gatekeeper training**,** health personnel, health service.

Introduction

The 2019 novel CoV, now named Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) emerged in Wuhan, China, in December 2019 (Ochani et al., 2021). The global spread of the virus led the World Health Organization (WHO) to declare the outbreak a public health emergency of international concern and a pandemic on the 11th of March 2020 (Onyeaka et al., 2021). The disease has compelled governments and authorities to enforce measures including enforced lockdowns, social distancing, self-isolation, and quarantine to slow down the spread of the virus (Shah et al., 2020). The restricted movement and instructed confinements to homes; limited the daily interactions between humans (Onyeaka et al., 2021), and the fact that most of the SARS-CoV-2 infected children were either asymptomatic or had mild to moderate disease, put the focus on closing the schools (López-Bueno et al., 2021) to reduce social contacts between students and disrupt the transmission of the virus between students and thereby reduce the introduction of the virus into households (Viner et al., 2022). These measures had multiple consequences on the lives of adolescents such as chronic and acute stress, worry for their families, unexpected bereavements, worry for the economic future of their families (Guessoum et al., 2020), an abrupt shift from face-to-face to online classes (Camargo et al., 2020), increase TV, personal computers, tablets, and mobile phones viewing; sedentary behaviors, a

decrease of physical activity, and physical fitness, bad eating habits (López-Bueno et al., 2021), poor mental health and lower health-related quality of life (Kharel et al., 2022), stressors that could increase suicide risk on scholar students.

It has been observed that suicide rates generally increase after disasters, a study during the SARS outbreak in Taipei reported an increase in suicides after strict quarantine measures were imposed (Raj et al., 2021); admission data from hospitals in the United States, Europe, and the Middle East showed an increase in self-harm, suicidal ideation, and attempts during the pandemic (Thompson et al., 2021); an online survey conducted during the SARS-CoV-2 revelated that 37% of the adolescents reported having suicidal ideation or behavior (Murata et al., 2021). Another study shows that 47.90% of university students were at risk of suicidal behaviors after one year of the pandemic (Q. M. Rahman et al., 2022); Xu (Xu et al., 2021) with the aim of evaluating the pattern and risk factors of mental health and suicidal behavior among students who experienced long-term school closure during the pandemic, found that 2.0% of the university students had suicidal behaviors. Other reports correlate SARS-CoV-2 and specific suicidal thoughts and behaviors (Burke et al., 2021; Mayne et al., 2021; M. E. Rahman et al., 2021).

Early detection and prevention of suicidal ideation or behavior have become an international priority; suicide prevention programs in educational institutions are classified according to the type of intervention:

a) Programs that incorporate psycho-education on depression and/or suicidal behavior in school curricula.
b) Screening programs for the detection of suicidal risk.
c) Training for teachers or schoolchildren to detect adolescents at risk, identified as "gatekeepers" (GK) (Bustamante & Florenzano, 2013).

The term GK is used in the suicide prevention context to describe individuals who can identify individuals at risk of suicide by recognizing risk warning signs (Burnette et al., 2015), gatekeeper training programs provide knowledge, skills, and strategies to help the individuals better recognize and inquire about the risk for suicide and intervene appropriately (Holmes et al., 2019).

In educational institutions, gatekeepers could be managers, teachers, administrative staff, or even the students, who are in a natural position to carry out surveillance, detection, and informal assistance for those requiring support, they receive formal training to improve their knowledge, attitudes, and skills to identify risk and the possible level of risk (Cross et al., 2007).

Scientific evidence recognizes cases of success related to gatekeeper training programs; in 2003 (Stuart et al., 2010), Stuart, Waalen & Haelstromm demonstrated through a training program directed to students, the achievement of skills, attitudes, and knowledge; Rutz et al. (1992 through a quasi-experimental study reported a significant decrease in the tendency of suicidality; Knox, Litts, & Talcott (Knox et al., 2003), concluded that the intervention with gatekeepers decreased the risk of suicide in the intervened patients by 33%; May, Serna, & Hurt (May et al., 2005) reported a 73% decrease in self-destructive acts (attempts and gestures) after an intervention project with gatekeepers; Hegerl, Althaus & Schmidtke (Hegerl et al., 2006) through a cross-sectional study could identify a decrease in suicidal acts (attempts and terminations) by 24%.

On the other hand, Gómez-Delgado and collaborators (Gómez-Delgado et al., 2022) applied in 2020 a psychometric called KIDSCREEN-52 in the Tepatitlan Regional Preparatory School and its campuses, which aims to evaluate the quality of life of students through 10 different dimensions, a high average in this questionnaire translates into an adequate perception of quality of life. Particularly, it was found that students refer to a low level in the dimensions "mood and emotions" and "friends and social support", these results could be correlated with suicidal tendencies. 33.3% of the students reported low perception of quality of life in the dimension of psychological well-being, which refers to psychoemotional problems and dissatisfaction. In the dimension of mood and emotions, 49.3% of the students

manifested negative experiences, depressive states and stressful emotions, a finding that permeates an emotional health problem in the students. These findings require appropriate and immediate actions on the part of the institution in order to address these psycho-emotional problems and prevent and detect suicidal behaviors in time.

Given the significant and alarming increase in suicidal behavior during SARS-CoV-2 confinement, it is essential to manage and implement proactive measures to improve the mental health of high school students; early detection of suicide behaviors and providing proper and timely interventions are vital to prevent the tragedy of suicide. In the Tepatitlan Regional Preparatory School of the University of Guadalajara, Jalisco, Mexico, there have been no studies that have investigated the effectiveness of gatekeeper training. The objective of this study was to develop and investigate the effectiveness of gatekeeper training in administrators, teachers, and some students, all of them were selected because they will be in touch with the students daily. We hypothesized that providing a gatekeeper-training program would improve their competencies and confidence to identify students with suicidal behaviors through education on risk factors, signs, and warning signs.

Method

The present study was reviewed and received acceptance status by the High School Education System (SEMS) of the University of Guadalajara (UDG) review board, through the "Program for Promotion of Educational Research of the SEMS, UDG, 2020" call for proposals.

With the approval of the school authorities, pre-experimental research was conducted, without a control group and a pretest-posttest designed to assess declarative knowledge of a suicide prevention program for administrators, teachers and students enrolled at the Tepatitlan Regional Preparatory School, and its campuses (Acatic, Cañadas de Obregon, Valle de Guadalupe, and Yahualica) between August to November 2020.

Participants

A convenience sample was selected for gatekeeper training, three administrative staff, six management staff, six students, and thirty TRPS teachers from the University of Guadalajara were recruited through an online survey (Google Forms) directed to the school community, participants were identified, and selected by the teaching and student community for their empathy, assertive communication, and reliability.

Detailed explanations about the study procedure were provided to the participants, and all of them voluntarily gave their written informed consent.

Ethical considerations

All the procures in this study complied with the ethical standards of the national and international committees on human experimentation, and with the Helsinki Declaration of 1975.

Measures

Assessment of suicide risk factors in the school community. Before the beginning of the guarding training sessions, and in order to provide theoretical-scientific support on the existence of problems related to suicide risk in the school community, and the imminent need for a training program, the risk factors related to suicide in high school students were evaluated through the ISO-30, a self-administered psychometric, designed by King & Kowalk (King & Kowalchuk, 1994) that assesses suicidal orientation. The development of this instrument is based on the cognitive-behavioral assumption that suicide behaviors in youth are triggered by a progressive belief system that culminates in specific plans for engaging in self-harm behaviors (Osman et al., 2005). The Spanish version was adapted and validated by Fernandez and Casullo (Casullo & Fernandez, 2006), and includes five negative risk factors that are frequently linked to adolescent suicidal behavior. These five dimensions, based on the aforementioned theoretical assumptions,

include Hopelessness (items 2, 7, 12, 17, 22 y 27), Low Self- Esteem (items 1, 6, 11, 16, 21, 26), Inability to Cope with Emotions (items 3, 8, 13, 18, 23 y 28), Social Isolation and Withdrawal (items 4, 9, 14,19, 24 y 29), and Suicide Ideation (items 5,10, 15, 20, 25, 30).

The ISO-30 items are rated on a 4-point scale, ranging from 1 (I am sure I disagree) to 4 (I am sure I agree). It yields a total score that allows the subject to be classified into three categories of suicidal risk: low, moderate, and high. In addition, six of the items are considered critical (5, 10, 15, 20, 25, 30): this means that, regardless of the score obtained, the presence of three or more of these items answered with 2 or 3 may imply the existence of high risk (Casullo & Fernandez, 2006).

The level of risk is obtained by adding the scores, when the value corresponds to 0-29, with less than three critical items scoring 2 or 3, it is identified as low risk; if the raw score is between 30 and 44 and the critical items scoring less than three, it is recognized as moderate risk and the score is between 45 to 90 or the critical items, scoring 2 or 3, are three or more than three, the risk is recognized as high risk (Casullo & Fernandez, 2006).

Gatekeeper training program curriculum. During the 2020-B school calendar of the University of Guadalajara, a standardized community gatekeeper suicide prevention training was conducted by a certified instructor in adolescent suicide care, a neurologist, and three psychologists, they provided standardized cognitive-behavioral training through semi-face-to-face educational seminar and teaching-learning activities hosted on the Google Classroom platform for sixty hours divided into eight weeks. The face-to-face educational intervention was adjusted to the instructor's requirements (schedules, logistics, and special conditions due to the COVI-19 pandemic).

The curricular design of the seminar was proposed with the objective of studying, analyzing, and reflecting on suicide in adolescence. The specific objectives were focused on providing participants with theoretical and methodological tools to recognize and identify suicide in adolescence, raise their level of knowledge, and competencies, and promote its use by managing comprehensive strategies for timely care; this was addressed through the following thematic content:

1. Adolescence and contextualization of suicide.
1.1. Generalities of human development in adolescence.
1.2. Characteristics of the brain during adolescence and its relationship with suicide.
1.3. Contextualization of suicide in adolescence.
2. Gatekeeper competencies(Cross et al., 2007).
2.1 Knowledge (Specific areas of competency: Knowledge of suicide facts and trends, Understanding the complexity of suicidal behavior, Understanding of risk and protective factors, Knowledge of warning signs and their importance for response and intervention, Knowledge of the critical role of lived experience in suicide prevention).
2.2 Skills and abilities (Specific areas of competency: Ability to recognize suicidality (including warning signs), Being able to engage and connect with the suicidal person, Identifying appropriate response(s) to a person in crisis, Strong interpersonal skills (Assertive communication, Teamwork, Empathy, and Leadership), Ability to identify and access resources for help and referral, Ability to maintain confidentiality)
2.3 Attitudes (Specific areas of competency: Positive attitudes about the efficacy of suicide prevention (intervening will positively affect the individual), Positive attitudes toward self-preparedness and likelihood to intervene)
2.3 Self-efficacy (Specific areas of competency: Confidence in intervention behavior, Ability to identify factors contributing to interventionist negative emotions and well-being, Development of aptitude for personal development and insight, Understanding the importance of personal management and self-care when working with people with suicidal ideation)
3. The performance of the gatekeeper
3.1 Suicide risk behaviors.
3.2 Crisis intervention.

4. Algorithms gatekeeper in the TPRS.
4.1 Knowledge of institutional follow-up for students at risk of suicide.
4.2 How to persuade someone to get help.
4.3 How to get help.

Data collected

To identify the existing level of knowledge of the topic to be addressed, a pretest was adapted and applied at the beginning of each session based on questions similar to those used in previous gatekeeper training studies (Cross et al., 2007).

At the end of each training session, participants were asked to analyze the information hosted on Google Classroom platform and were given 7 days to respond to the post-test adapted from instruments previously used to evaluate declarative knowledge and gatekeeper program efficacy.
Declarative knowledge, defined as information of a factual nature and provided in relation to the knowledge acquired after the training, and perceived knowledge, defined as a self-assessment of one's own knowledge of the topic, items were adapted for this study from a previous intervention(Wyman et al., 2008) to measure knowledge about suicide. Self-efficacy about suicide prevention was assessed with a ten-item scale, which asked respondents to rate their ability to identify and intervene with an individual at risk for suicide individual. Feelings of self-efficacy have been shown to be related to post-training changes in behavior. All the items included multiple choice and true/false questions (Cross et al., 2007), and each evaluation was weighted at zero as the minimum value and ten as the maximum value.

Statistics

Data were entered into Microsoft Excel, the information was processed in SigmaPlot Statistics version 11.0, pre-test surveys assessed extant perceived knowledge and declarative knowledge regarding suicide and suicide prevention; post-test surveys assessed for changes after the gatekeeper training. Descriptive statistics were applied (frequencies, percentages, averages, and standard deviation), Cronbach´s alpha coefficient was used to measure the internal consistency reliability of the Inventory of Suicide Orientation-30 (ISO-30) (≥ 0.7 considered satisfactory), Shapiro-Wilk Test was used as an inferential test of normality (if the result were statistically significant ($p \geq 0.05$) data were not normally distributed), to check the effectiveness of the program for differences in group means, we used Mann-Whitney U test, and the effect size was calculated with the Rosenthal's r test.

Results

Students´ risk factors related to suicide

1716 students (47.8% of the school enrollment) answered, completed, and submitted the ISO-30 psychometry. The Average age of 15.7±1.0 was identified (Table 1); concerning gender, 65.2% of females were evaluated with an average age of 16.1±0.9 and 34.8% of males with 16.4±0.8. The risk of suicide presented a prevalence of 15.5% (54.4±7.8).

The evaluation of the reliability of the ISO-30 scale was excellent, with Cronbach's alpha scores greater than 0.8, with the exception of Suicide Ideation (Cronbach's alpha = 0.77) (Table 1); the mean scores of the ISO-30 corroborated the expected differences with respect to gender; in males, statistically, significantly lower scores were observed compared to their female peers.

Table 1. Psychometric characteristics (ISO-30), stratified by gender.

VARIABLES	**TOTAL** Mean±SD	**Girls** Mean±SD (Min-Max)	**Boys** Mean±SD (Min-Max)	**t-test** p

	(Min-Max) (Cronbach's Alpha Coefficient)			
	1716	1120	596	
Age	15.7±1.0 (15-20)	16.1±0.9 (15-19)	16.4±0.8 (15-20)	
ISO-30	28.8±14.7 (0-84)	30.5±15.2 (0-84)	25.5±13.0 (0-73)	<0.001
ISO-30 Subscales				
Low Self-Esteem	5.5±3.4 (0-18) (0.90)	5.7±3.5 (0-18)	5.3±3.2 (0-18)	<0.001
Inability to Cope with emotions	8.4±3.0 (0-18) (0.90)	8.8±3.0 (0-18)	7.7±2.8 (0-18)	<0.001
Hopelessness	5.0±3.2 (0-17) (0.85)	5.4±3.2 (0-16)	4.4±3.1 (0-17)	<0.001
Social Isolation and Withdrawal	6.1±4.3 (0-18) (0.88)	6.7±4.4 (0-18)	5.1±3.8 (0-18)	<0.001
Suicide Ideation	3.2±3.4 (0-18) (0.77)	3.7±3.5 (0-18)	3.0±3.1 (0-18)	<0.001

Table 1. The level of risk was quantified for each of the ISO-30 subscales and, the ranges indicated by Rubio, Cardona, Medina, Garzón, Garzón, and Rodríguez (Rubio et al., 2014) were used, scores between 0 to 5 corresponded to low risk, moderate risk in values of 6 to 7 and high risk in scores equal to or greater than 8. Based on the above, the inability to cope with emotions (64.5%) was identified as the main risk factor for suicide, followed by social isolation and withdrawal (35.7%), low self-esteem (28%), hopelessness (21.2%) and suicide ideation (13.3%) (Table 2).

Table 2. Suicide risk assessment stratified by ISO-30 subscales

ISO-30 Subscales	**Low risk Mean±SD (min-max) %**	**Moderate risk Mean±SD (min-max) %**	**High risk Mean±SD (min-max) %**
Low Self-Esteem	2.9 ±1.5 (0-5) 53.5%	6.5±0.4 (6-7) 18.5%	10.0±2.2 (8-16) 28%
Inability to Cope with emotions	3.7±1.3 (0-5) 16%	6.5±0.4 (6-7) 19.5%	10.1±2.0 (8-16) 64.5%
Hopelessness	2.8±1.6 (0-5) 58%	6.4±0.4 (6-7) 20.8%	9.9±1.9 (8-18) 21.2%
Social isolation and Withdrawal	2.5±1.6 (0-5) 49.3%	6.5±0.4 (6-7) 15%	11.0±2.5 (8-18) 35.7%
Suicide Ideation	2.0±1.4 (0-5) 79.2%	6.3±0.4 (6-7) 7.5%	10.6±2.5 (8-18) 13.3%

Gatekeeper training, knowledge, and identification measures. A total of 45 participants enrolled at Tepatitlan Regional Preparatory School completed the gatekeeper training, in terms of school roles, 6 students, 30 teachers, 3 administrative staff, and 6 management staff participated in the gatekeeper program. Participants ranged in age from 16-56 (38 ± 12.1) years old, and the majority of participants were female (60%, n = 27). None of the participants reported having experience as a gatekeeper or had some previous training in suicide prevention (Table 3).

Table 3. Sample demographics of gatekeeper training at Tepatitlan Regional Preparatory School.

Demographics	**Participants**

	(n = 45)
Age (range 16-56)	38 ± 12.1
Previous training as a gatekeeper	0% (n = 0)
Role in the school	
Students	13.3% (n = 6)
Teachers	66.6% (n =30)
Administrative staff	6.7% (n = 3)
Management staff	13.4% (n = 6)

Table 3. For a more objective assessment, we used the Shapiro-Wilk Test (Table 4) as an inferential test of normality, the results showed that the null hypothesis (H_0: the sample distribution does not differ from a normal distribution) was rejected at a 5% level of significance ($\alpha = 0.05$), indicating that the data varies significantly from the pattern expected if the data was drawn from a population with a normal distribution, except for the pre-test of the performance of the gatekeeper variable.

Table 4. Shapiro-Wilk Normality test statistics.

Gatekeeper training program curriculum	Shapiro-Wilk Normality Test			
	Pre-Test		Post-Test	
	W-Statistic	p-value	W-Statistic	p-value
Adolescence and contextualization of suicide	.839	<0.001	.946	0.024
Gatekeeper competencies	.912	0.007	.902	0.004
The performance of the gatekeeper	.926	0.061*	.879	0.005
Algorithms gatekeeper in the TRPS	.902	0.015	.809	<0.001

*Normality Test passed

Table 4. To assess changes in declarative knowledge and perceived knowledge, participant´s pre- and post-training scores were compared (Table 5), we identified that the gatekeeper training program curriculum increased significantly after the training (6.5±1.6) compared to the first measurement (4.7±1.6), we specifically identified that participants recognize the performance of the gatekeeper in an educational institution, which means competencies in recognizing suicidal risks behaviors and how to intervene during a crisis of suicidal intent (6.6±1.1); however, they reported a very low level (5.8±1.2) of knowledge of institutional follow-up for students at risk of suicide, how to persuade someone to get help, and how to get help (algorithms gatekeeper in the TRPS).

Table 5. General characteristics of gatekeeper training at the Regional High School of Tepatitlán.

	PRE-TEST					POST-TEST				
Gatekeeper training program curriculum	Mean ± SD	Std. Error	Med	C.I. of mean	95% Conf	Mean ± SD	Std. Error	Med	C.I. of mean	95% Conf
General	4.7±1.6	0.13	4	0.27	0.36	6.5±1.6	0.13	7	0.27	0.35
Specific areas of competency										
Adolescence and contextualization of suicide	4.9±1.4	0.20	4.5	0.41	0.41	6.4±1.7	0.24	7	0.49	0.49
Gatekeeper competencies	4.0±1.1	0.19	4	0.38	0.38	6.6±1.7	0.28	7	0.58	0.58

The performance of the gatekeeper	6.6±1.1	0.22	7	0.47	0.47	7.5±1.0	0.20	9	0.43	0.43
Algorithms gatekeeper in the TRPS	3.7±1.3	0.25	4	0.53	0.53	5.8±1.2	0.24	6	0.50	0.50

* Acronyms: SD: Standard deviation; Std. Error: Standard Error; Med: Median; C.I. of Conf: Confidence interval of the mean; 95% Conf: 95% confidence; TRPS: Tepatitlan Regional Preparatory School

Table 5. Mann Whitney U Test was used to identify if participants experienced a change from pre-training to post-training; significant changes were noted in declarative and perceived knowledge, results indicated that the gatekeeper program increased significantly the general level of competencies of the participants (Mann-Whitney U Statistics = 4322.000; $p<0.001$), this trend was observed when running the statistical test for each of the areas of the training program (Table 6). We also measure the self-efficacy of the program, 93% of the participants reported confidence in the ability to identify, care for, and refer students with suicidal behaviors to specialists.

Table 6. Mann-Whitney U Statistics for a gatekeeper training program, stratified by areas of competency

Gatekeeper training program curriculum	**Mann-Whitney Rank Sum Test**				
	Median Pretest-Posttest	**Mann-Whitney U Statistics**	**p – Value**	**Z**	**r**
General	4 - 7	4322.000	<0.001	7.91	0.67
Specific areas of competency					
Adolescence and contextualization of suicide	4.5 - 7	636.500	<0.001	4.01	0.60
Gatekeeper competencies	4 - 7	157.000	<0.001	4.71	0.70
The performance of the gatekeeper	7-9	187.500	0.005	3.56	0.53
Algorithms gatekeeper in the TRPS	4 - 6	104.000	<0.001	3.89	0.58

Discussion

Our findings show a highly significant prevalence of mental health-related problems. Family and friends relationships, aggressive behaviors, and depressive symptomatology previously reported (Gómez-Delgado et al., 2022) are evidence of the existence of risk factors related to suicidal ideation behaviors.

It was possible to train 45 participants on academic dependency, the program began by contextualizing the participants so that they could assimilate suicide as a process that begins with ideation in its different expressions (self-destructive preoccupation, planning a lethal act, desire for death), then goes through the suicide attempt and ends with the consummated suicide.

The participants analyzed adolescence as a stage of life and changes in physical, psychological, and social ailments, as well as the functioning of the adolescent brain (which conditions it to solve and understand certain circumstances of daily life). Subsequently, participants were given the tools to acquire the specific competencies of Gatekeepers, forming them as leaders who can influence the way of thinking and acting in others; skills such as empathy and assertive communication were worked on to empower listening and communication in an appropriate way, as well as the skill of teamwork, involving collaboration and organization to achieve a common goal.

After the analysis and exercise of the first materials, it was designed the gatekeeper's algorithm; detection, identification, intervention, care, protection, follow-up and prevention. The participants showed significant progress

in the evaluations, and it was then that those involved showed greater interest in knowing the step-by-step to intervene at a critical moment.

Crisis intervention and suicide risk behaviors were the closings of the program to train gatekeepers, the interested participants showed progress in their training, they evidenced skills and new tools for the accompaniment of an adolescent at risk of suicide.

The psychometric results previously shown in Table 1, highlight a difference between the subscales of the ISO-30 test between men and women. In general, it was observed that women have a higher average in the five dimensions evaluated by the test, which makes them more likely to fall into behaviors that can become self-destructive. These results are of particular importance as they allow not only to distinguish predisposition by gender but also to identify exactly the areas on which gatekeepers should focus when seeking to improve the student's quality of life.

On the other hand, it was found that the Inability to Cope with emotions showed the highest average in both men and women, which coincides with the information presented in Table 2, where it is shown that this dimension evaluated by the ISO-30 test is the most important to consider. Of the total sample, 64.5% presented a high risk of suicide due to this factor. At the other extreme, we can find Suicide Ideation in the subscales of the ISO-30 test as the dimension with the lowest risk factor in the population analyzed, counterintuitively we can affirm that those who present suicidal ideas are not the ones who are most at risk of committing suicide.

It is evident that there are significant changes in the means of the different areas of the Gatekeeper training program curriculum, but even more important is the magnitude of that difference, since the greater the magnitude, the greater the success in saving lives. In this study, Rosenthal's r was calculated to verify how different the evaluation of the gatekeepers was after the training. It was found that in general the training program strongly changed ($r = 0.67$) the competencies of those who took the training.

During the development of this project, the participants acquired the necessary skills to perform the role of Gatekeeper similar to those reported by Cross (Cross et al., 2007) and Matthieu (Matthieu et al., 2008). Correlating to the possibility of saving a life and contributing to the improvement of the personal quality of life of our students. Our long-term goals include continuing to train more gatekeepers and thus having more people who are able to support others, thereby working on the prevention and emergence of mental disorders in the population of Tepatitlan de Morelos Jalisco.

Conlusions

The present research focused on developing and implementing a training seminar for teachers and students of the EPRT and its Modules (Acatic, Cañadas de Obregon, Valle de Guadalupe, and Yahualica) that would implement the development of competencies to identify students with suicidal ideation through education on risk factors, signs, and warning signs.

EPRT students are marked by a variety of physical, psychological, and social problems that were accentuated by a pandemic that came as a surprise. In some students, these problems can lead to suicidal behaviors, attitudes, or thoughts. Particularly students show a high risk due to their inability to cope with their emotions, so it is considered that future efforts should focus on providing tools for students to learn to identify their emotions and become aware of them, act according to the severity, and finally seek help when emotions are difficult to fight. It is finally in this third step where gatekeeper training becomes vitally important.

In general, an improvement of the gatekeeper training program curriculum was observed after the training in relation to the pre-training evaluation. This exposes a viable alternative for its application in educational institutions, with the objective of contributing to the correct and rapid detection of mental health problems in students. The gatekeeper

training improved all the evaluated competencies, however, these competencies were not all developed at the same level, so it is important to apply other techniques to develop the gatekeeper's skills in the most adequate way possible.

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