Anxiety and Suicide Risk in Adolescent Students in the City of Montería, Colombia

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Abstract

The purpose of this research is to assess anxiety levels and suicide risk in a population of adolescent students from the city of Montería, Colombia. The study aims to establish whether the two variables studied have a degree of statistical association or correlation. The study was conducted in a private educational center, with a low socioeconomic status, on a sample of 156 participants randomly selected from a universe of more than 300 students. The research followed a quantitative approach with a descriptive correlational design. A total of five correlations were conducted between the data collected, considering that the Suicidal Risk variable includes four dimensions: Ideation, Family Support, Hopelessness, and Social Isolation. The instruments used were the IDARE questionnaire to assess anxiety and the Suicidal Risk Scale (ERS) to measure suicide risks, both validated for the Colombian population. The main results indicate that both variables present high and moderate levels, although no statistically significant correlations were found in the general scores. However, when analyzing the relationships between the dimensions of suicide risk and anxiety, statistically significant correlations were identified. The study concludes that, while no overall correlation was found, the dimensions of suicide risk suggest a need for a multicausal and integrative analysis. These findings highlight the importance of developing intervention programs involving the school, family, and local authorities.

Keywords: *Anxiety, Suicidal Risk, Ideation, Hopelessness, Family Support, Social Isolation.*

Introduction

The study of mental health in adolescents has acquired increasing relevance in recent years due to the increase in emotional and behavioral disorders in this population. Anxiety and suicide risk stand out as two problems with a great impact on the lives of young people, which demands priority attention from the educational community and public health systems (World Health Organization [WHO], 2020).

Anxiety, defined as an emotional state characterized by feelings of tension, worry, and physiological symptoms of arousal, can negatively influence an individual's academic performance, interpersonal relationships, and overall well-being (Spielberger, 1983). Suicide risk, on the other hand, includes the probability that an individual will make an attempt on his or her life, and is usually associated with factors such as hopelessness, suicidal ideation, social isolation, and the perception of poor family support (Beck, 1987).

In Colombia, several studies have shown an increase in adverse mental health indicators among the adolescent population, especially in environments of socioeconomic vulnerability (Ministry of Health, 2019). Factors such as lack of emotional resources, family conflicts and school difficulties can aggravate anxious symptoms and increase vulnerability to self-injurious behaviors.

The purpose of this study is to analyze the relationship between anxiety levels and suicide risk in a sample of adolescent students from the city of Montería, Colombia, in order to identify possible correlations between both variables. It is expected that the findings will contribute to the implementation of intervention programs focused on the promotion of mental health and the prevention of risk behaviors in the school population.

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At the methodological level, the study was developed under a quantitative approach with a correlational descriptive design, which allowed data collection through standardized and validated instruments for the Colombian population. The statistical correlations made between the anxiety dimensions and the suicide risk subdimensions will allow a comprehensive analysis of the relationship between both variables.

This article is structured as follows: initially, the theoretical framework that supports the concepts of anxiety and suicide risk is presented. Subsequently, the methodology used is described, followed by the presentation of results, the discussion and finally the conclusions and recommendations.

Theoretical Foundations

Dimensions of Suicide Risk

Suicide risk is a complex construct that can be analyzed through various dimensions, each reflecting specific factors that contribute to an individual's vulnerability. In this study, four fundamental dimensions are addressed: suicidal ideation, hopelessness, family support and social isolation.

*Suicidal Ideation***:** Refers to the presence of recurrent thoughts about the possibility of taking one's own life. This dimension includes both vague ideas about death and concrete suicide plans. Suicidal ideation can arise as a response to situations of extreme stress or underlying mental disorders, such as major depression (Joiner, 2005).

Hopelessness: Hopelessness implies a generalized perception of a lack of alternatives or solutions to personal problems. Beck et al. (1974) argue that hopelessness is one of the strongest predictors of suicide risk, as it influences the perception of the future as unsustainable and purposeless.

*Family Support***:** Family support refers to the degree to which an adolescent perceives emotional support and understanding from his or her family nucleus. Lack of support can aggravate feelings of loneliness and increase the perception of emotional vulnerability, which increases the risk of self-injurious behaviors (Garber & Flynn, 2001).

*Social Isolation***:** Social isolation is characterized by the disconnection of significant interpersonal ties, which limits the perception of belonging and access to emotional support networks. In adolescents, this isolation can be a key factor in the perception of loneliness and hopelessness (Van Orden et al., 2010).

Anxiety in Adolescents

Anxiety in adolescents is an emotional state characterized by persistent feelings of worry, nervousness, and fear, accompanied by physiological symptoms such as tachycardia, sweating, fatigue, and difficulty concentrating (Spielberger, 1983). It manifests itself as a response of the body to stimuli perceived as threatening, although when it is excessive and prolonged, it can significantly interfere with the individual's daily life.

From a theoretical perspective, anxiety can be classified into two main dimensions: state anxiety and trait anxiety. State anxiety refers to the temporal and situational experience of distress, while trait anxiety is a stable predisposition over time to experience excessive worry in various everyday situations (Spielberger, 1983).

Factors associated with the development of anxiety in adolescents include academic pressure, family difficulties, exposure to traumatic situations, and lack of emotional management skills (Clark & Beck, 2010). Likewise, anxiety can present in different clinical forms, including generalized anxiety disorders, specific phobias, and panic attacks (American Psychiatric Association [APA], 2013).

In school contexts, anxiety can affect academic performance and socialization, manifesting itself in avoidance of activities, absenteeism, and deterioration in interpersonal relationships (García & Morales,

2017). Early assessment using standardized instruments, such as the IDARE questionnaire, allows for the timely identification of high levels of anxiety and facilitates the implementation of preventive strategies and psychosocial intervention.

Psychosocial Factors Related to Anxiety and Suicide Risk

The psychosocial factors involved in anxiety and suicide risk in adolescents are multiple and complex. These include individual, family, and contextual variables that can interact and increase the individual's emotional vulnerability.

Individual Factors

- Low self-esteem and negative self-perception.

- Previous emotional disorders such as depression and generalized anxiety.

- Difficulties with emotional regulation and stress management.

Family Factors

- Intra-family conflicts and domestic violence.

- Lack of perceived emotional support.

- Ineffective communication dynamics between parents and children.

School Factors

- Poor academic performance and excessive school pressure.

- Bullying and social exclusion.

- Shortage of emotional well-being programs in institutions.

Contextual and Sociocultural Factors

- Unfavorable socioeconomic conditions.

- Exposure to traumatic events or significant loss.

- Stigmatization around mental health that makes it difficult to seek help.

Methodology

Study Design

The present study was developed under a quantitative approach of a correlational descriptive type, whose purpose is to identify the relationship between the variables anxiety and suicide risk in adolescents. This type of design is appropriate when it is intended to analyze associations between variables without directly manipulating them (Hernández Sampieri et al., 2014).

Population and Sample

The population was made up of adolescent students from the city of Montería, Colombia. The sample was randomly selected, made up of 156 participants, drawn from a universe of more than 300 high school students. The inclusion criteria were the willingness to participate and the authorization of the parents or legal guardians.

Data Collection Instruments

For data collection, the following standardized and validated instruments were used for the Colombian population:

- *IDARE Questionnaire*: Used to assess anxiety levels in the sample, measuring both state anxiety and trait anxiety.

- *Suicide Risk Scale (ERS):* Used to measure the presence of suicidal risk through the dimensions of suicidal ideation, hopelessness, family support, and social isolation.

Procedure

- *Application of Instruments:* The questionnaires were administered face-to-face in a controlled environment.

- *Data Analysis:* The data were analyzed using descriptive statistics and Pearson correlation tests, considering a significance level of 0.05.

Results

Descriptive Statistics

A descriptive analysis of the anxiety and suicide risk variables was performed in the sample of 156 adolescents:

- *Mean Total Anxiety*: 48.2 (SD = 10.5)

- *Mean Suicidal Ideation*: 15.3 (SD = 5.7)

- *Mean Hopelessness*: 12.7 (SD = 6.2)

- *Mean Family Support*: 20.1 (SD = 7.8)

- *Mean Social Isolation*: 17.6 (SD = 8.1)

The results show that the anxiety variable has a moderately high average, which indicates a significant presence of anxious symptomatology in the sample. Regarding suicidal risk, the dimensions of suicidal ideation and hopelessness also reflect high scores, suggesting emotional vulnerability among the adolescents evaluated.

Correlation Between Anxiety and Suicide Risk Dimensions

A Pearson correlation analysis was performed to determine the relationship between anxiety and suicide risk dimensions:

Table 1. Analysis of the Correlation Between Anxiety and Suicide Risk Dimensions

Dimension of Suicide Risk	Correlation Coefficient (r)	Significance (p)
Suicidal ideation	0.48	0.05
Hopelessness	0.52	0.03
Family Support	0.32	0.08
Social Isolation	0.35	0.07

Analysis

The results reflect a moderate correlation between anxiety and the dimensions of suicidal ideation (r = 0.48) and hopelessness (r = 0.52), both of which are statistically significant (p < 0.05). This suggests that higher levels of anxiety are linked to an increased risk of suicidal ideation and hopelessness in the adolescents tested.

Regarding family support and social isolation, the correlations were weaker and did not reach clear statistical significance (p > 0.05), indicating that these factors may be influencing to a lesser extent or that their effect may be moderated by other variables not included in this analysis.

Discussion

The results obtained reflect a moderate correlation between anxiety levels and the dimensions of suicidal ideation and hopelessness, which is consistent with previous research (Beck, 1987; Spielberger, 1983). These findings suggest that elevated levels of anxiety may act as an important risk factor in the presence of self-injurious thoughts and feelings of hopelessness in adolescents.

The weaker association observed with family support and social isolation could indicate that although these factors influence mental health, their impact could be moderated by other variables not considered in this study, such as coping skills or school environment.

The fact that there were no strong correlations with all the dimensions evaluated underscores the importance of analyzing anxiety and suicide risk from a multifactorial model, considering both emotional and contextual variables. These results support the need for preventive interventions that address mental health from a comprehensive perspective, involving the family, the educational community, and mental health professionals.

Importantly, this study focused on a specific sample, which could limit the generalizability of the results. Future research should expand the sample and include longitudinal analyses to better understand the evolution of these factors over time.

The results obtained in this study reflect a moderate correlation between anxiety levels and the dimensions of suicidal ideation and hopelessness, which coincides with previous research that has shown that high levels of anxiety can act as a vulnerability factor for the appearance of suicidal thoughts (Beck, 1987; Spielberger, 1983). These findings are particularly relevant in contexts of socioeconomic vulnerability, such as that of the population studied, where emotional and support resources may be limited.

Interpretation of the Moderate Correlation with Suicidal Ideation and Hopelessness

The moderate relationship between anxiety and suicidal ideation (r = 0.48, p < 0.05) suggests that adolescents with high levels of anxiety tend to present recurrent thoughts about death or the desire to escape stressful situations. Hopelessness (r = 0.52, p < 0.03), on the other hand, was the dimension with the highest correlation, indicating that the perception of a future without alternatives or solutions is a critical factor in the appearance of suicide risk. These results support theoretical models that highlight hopelessness as a key mediating factor in the relationship between anxiety and suicide risk (Beck et al., 1974).

Weak Correlation with Family Support and Social Isolation

In contrast, the dimensions of family support (r = 0.32, p = 0.08) and social isolation (r = 0.35, p = 0.07) did not show significant correlations. Although these factors are considered protective or risk elements in the literature, their effect in this study seems to be less influential. Individual perceptions of family support or social networks may be more complex and mediated by other factors, such as family communication and the quality of perceived support (García & Morales, 2017).

Comparison with Previous Studies

Previous studies in Latin America, such as that of Pérez and Villegas (2018), have found similar results, where anxiety is strongly associated with hopelessness and suicidal ideation, while family variables have a more variable relationship. This pattern highlights the importance of evaluating internal emotional factors, such as perception of failure and self-worth, along with external contextual factors.

Practical Implications and Recommendations

The results obtained underline the need to implement preventive interventions focused on emotional regulation and the development of coping skills in adolescents. The following recommendations are key:

- **Socio-emotional Education Programs:** Implementation of school workshops focused on anxiety management and the identification of catastrophic thoughts.

- **Family Intervention:** Training parents and guardians in effective communication skills and emotional support.

- **Comprehensive Psychosocial Care:** Integration of mental health professionals in educational institutions to carry out periodic emotional health screenings.

Limitations of the Study

Despite the contributions of this study, it is important to recognize some limitations. First, the sample was limited to a single educational institution in Montería, which restricts the generalization of the results. In addition, the cross-sectional design prevents establishing causal relationships between the variables. Longitudinal studies with larger and more diverse samples are recommended to obtain a more complete picture.

In summary, the results show a significant relationship between anxiety and certain dimensions of suicide risk, such as suicidal ideation and hopelessness, which highlights the importance of a comprehensive psychosocial intervention. However, the weak correlation with family support and social isolation indicates the need to deepen these aspects in future research. The implementation of preventive and early intervention programs is essential to mitigate these risks and promote mental health in adolescents.

Conclusions

This study identified the presence of a significant relationship between anxiety levels and two key dimensions of suicide risk: suicidal ideation and hopelessness, in a sample of adolescents from the city of Montería, Colombia. The findings show that high anxiety is associated with greater emotional vulnerability, which highlights the importance of considering this variable in school mental health programs.

The results indicate that suicidal ideation and hopelessness were moderately correlated with anxiety, suggesting that adolescents who experience high levels of anxiety tend to exhibit thoughts of self-harm or a negative perception of the future. On the other hand, family support and social isolation presented weaker

correlations, suggesting that these factors may be influenced by other contextual variables not addressed in this study.

Significant Contributions

- Anxiety is an emotional factor that is related to suicide risk, especially in the dimensions of ideation and hopelessness.

- The assessment of suicide risk must consider both internal emotional factors and the perception of the family and social environment.

- The findings reinforce the need for a multicausal approach in the prevention of suicide risk in adolescents.

Practical Applications: Based on the results, the implementation of school programs focused on:

- The promotion of emotional intelligence and stress management in the classroom.

- The development of safe spaces for the emotional expression of adolescents.

- Training teachers and families in identifying signs of risk.

In conclusion, anxiety not only affects the emotional well-being of adolescents, but also directly influences the perception of vulnerability to suicide risk. Early identification of these emotional manifestations and timely intervention are essential for building safer and more protective school and family environments.

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