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A descriptive cross-sectional study on eating disorders, suicidal thoughts, and behaviors among adolescents in the Valencian community (Spain). The pivotal role of school nurses

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ABSTRACT

Purpose: The aims of this study were: 1) to describe the rates of risk of having an Eating Disorder (ED) and the rates of suicidal thoughts and behaviors, and 2) to examine the relationship between the risk of having an ED with suicidal thoughts and behaviors in adolescents enrolled in educational centers in the Community of Valencia (Spain).
Design and methods: A cross-sectional study was conducted with 718 adolescents between September 2019 and July 2020 in five schools in the Community of Valencia (Spain).
Results: The adolescents studied, mostly females, are at risk of having an ED (18.6% to 30.8%) and experiencing suicidal thoughts (23% to 30.7%) and behaviors (2.2% to 6.2%). A strong association was found between EDs and suicidal thoughts and behaviors in both sexes. This association was higher in females with positive EAT-26 scores (OR: 2.09; 95% CI: 1.35–3.24) and in males with positive SCOFF scores (OR: 4.66; 95% CI: 2.40–9.02). Suicidal behaviors were positively associated with both EAT-26 (OR: 2.58; 95% CI: 1.17–5.67) and SCOFF (OR: 1.89; 95% CI: 1.21–2.26) scores in females.
Conclusions: A considerable number of adolescents, females in particular, are at risk of having an ED and of experiencing suicidal thoughts and behaviors, establishing a strong link between EDs and suicidal tendencies.
Practical implications: The study highlights the importance of establishing national and regional regulations to ensure the availability of school nurses in the Community of Valencia (Spain). Collaboration between school nurses, educators, and policy makers is critical to the early detection of problems and the provision of support to both adolescents and families.

Introduction

Eating Disorders (EDs) are serious illnesses characterized by changes in eating patterns and weight and body shape perception disorders (Alfoukha et al., 2019). They interfere with an individual's nutrition, a crucial factor influencing normal growth and development at all stages of life (Alfoukha et al., 2019; Smith et al., 2018). According to the American Psychiatric Association (2013), the main eating related disorders are: Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED), Other Specified Eating Disorder (OSFED), and Unspecified Eating Disorder (UFED). Eating disorders are more prevalent during adolescence, a period of increased vulnerability in both personal and family development, with AN and BN among the most common (Mora et al., 2022). International prevalence rates for AN and BN in adolescents range from 0.6% to 7.8% (Arija Val et al., 2022; Herpertz-Dahlmann, 2015; Smith et al., 2018; World Health Organization [WHO], 2021). In terms of differences between the sexes, several studies have shown that EDs are more common in females (Arija Val et al., 2022). However, there is now an increase in the number of males with EDs (Smith et al., 2018). This increase could be explained by insecurity about their physical appearance and the desire to be in control of their image and physical performance (Smith et al., 2018; Yao et al., 2016). The etiopathogenesis of EDs is multifactorial, with both genetic and environmental factors playing a role (Arija Val et al., 2022). Environmental factors include the impact of social

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pressures and aesthetic values, in particular the prevailing notion of the perfect body, which is endorsed by the media and fuelled by social networks (Martínez Baquero et al., 2017; Mora et al., 2022).

Several authors have noted that adolescents with EDs may also suffer from anxiety, mood swings, and alcohol and psychoactive substance abuse (Hambleton et al., 2022; Smith et al., 2018). As a result, this group is affected not only by complications arising from the disorder itself, but also from associated behaviors (Zeppegno et al., 2021). More than any other mental illness, AN is associated with a higher rate of premature mortality due to medical complications and suicide (WHO, 2021; Zeppegno et al., 2021). The literature suggests that 20–40% of people with EDs have reported suicidal thoughts and behaviors (Ahn et al., 2019; Martínez Baquero et al., 2017; Smith et al., 2018). In fact, as the second leading cause of death among adolescents, suicidal behavior has become a major issue worldwide (Smith et al., 2018; Sohn et al., 2018; Yao et al., 2016). Among the available explanatory theories, Joiner (2005) Interpersonal Psychological Theory of Suicide (IPTS) may serve as a starting point for establishing the relationship between EDs and suicidal thoughts and behavior. The IPTS is based on the interaction of three elements: a) Thwarted Belongingness (TB), b) Perceived Burdonsomeness (PB), and c) Acquired Capability for suicide (AC). In terms of the relationship with EDs, adolescents with EDs are thought to have a higher AC than the rest of the population (Van Orden et al., 2010). Therefore, suicidal thoughts and behaviors in people with EDs are mainly driven by three factors: a) the link between mood disorder (negative perception of self-image) and suicide, b) the relationship between engaging in self-harming behaviors (purging and binge eating) and suicidal behaviors, and c) perceived low social support and suicidal thoughts (Smith et al., 2018).

At this point, it is important to note that of those who meet the criteria for having an ED, only 49.4%–67.9%, have sought professional help for their eating-related problems (Mohler-Kuo et al., 2016). Schools are therefore an ideal setting for the delivery of health promotion and prevention programs, for both physical and psychosocial well-being (Puhl et al., 2016). These programs are designed to educate students, families, and school staff to promote healthy lifestyles and recognize risk factors and warning signs of health problems, such as EDs and suicidal thoughts and/or behaviors (Pestaner et al., 2021; Ross et al., 2017; Smith et al., 2018). The school nurse is considered to be the ideal professional for this purpose. The school nurse's goal is to achieve optimal health for all students from childhood through adolescence through the promotion of healthy habits and behaviors that are easier to acquire at an early age (Consejo General de Enfermería [CGE], 2019; Puhl et al., 2016). These habits can empower students to make healthier choices, reduce risky behaviors in adulthood, and prevent diseases caused by unhealthy habits (CGE, 2019). The skills of school nurses extend beyond clinical and educational functions to include management, administration, and research (CGE, 2019; 2022). They also work closely with teachers, families, and within the students' wider social environment (CGE, 2019). In addition, healthcare centers and specialized healthcare units, such as mental health clinics, can be accessed by working in partnership with other psychosocial professionals (Cowell, 2019; Pestaner et al., 2021). Fig. 1 illustrates the relationship between adolescents and school nurses in the school setting, as well as potential implications for adult health.

Unfortunately, however, there are significant differences in the way these professionals are deployed on an international level (CGE, 2022). The National Association of School Nurses (NASN) recommends a nurse-to-student ratio of 1:750 for the general school population, while the United Kingdom has a ratio of 1:1155, Japan 1:1000, Finland 1:600, and Sweden 1:451. However, Spain, with an average ratio of 1:8047, deviates from international standards and has an insufficient number of school nurses, with variation between regions: for example, Madrid has a ratio of 1:700, Asturias 1:131,480, and the Community of Valencia 1:12,000. These data, reported by the General Nursing Council (CGE, to use its Spanish acronym), reveal the inadequacy and almost total absence of school nurses in certain autonomous communities. Moreover, in our country central government has enacted no national legislation requiring there to be nurses in school facilities, or a specific qualification that certifies their professional competence. Consequently, the role of the school nurse is "*anecdotal and clearly insufficient*", given that there are only 963 school nurses in Spain, with 67 of them in the Community of Valencia (CGE, 2022).

To the best of our knowledge, although studies on EDs and suicidal thoughts and behaviors are not uncommon in adult and clinical populations, they are few and far between in adolescents in the Community of Valencia (Spain) (Arija Val et al., 2022; Qian et al., 2022). Therefore, the aims of this study were: 1) to describe the rates of risk of having an Eating Disorder (ED) and the rates of suicidal thoughts and behaviors, and 2) to examine the relationship between the risk of having an ED with suicidal thoughts and behaviors in adolescents enrolled in educational centers in the Community of Valencia (Spain). There were two underlying motivations behind these main aims. The first was to highlight the need to integrate school nurses into educational centers in the Community of Valencia (Spain), using the results of this study as a reference. The second was to recommend interventions for the successful management of EDs and suicidal thoughts and behaviors that have been shown to be effective internationally and that could be of benefit within the educational system in the Community of Valencia (Spain).

Method

Design and setting

We conducted a multicenter, descriptive, cross-sectional, observational study in accordance with STROBE guidelines (Vandenbroucke et al., 2014) between September 2019 and July 2020. The study included high school students from five schools in the Community of Valencia (Spain) without a school nurse.

Sample

Participants were selected using non-probability convenience sampling. The sample size was calculated assuming an unfavorable situation on the basis of previous similar studies (Alfoukha et al., 2019; Lipson & Sonneville, 2020). For a confidence level of 95%, proportion of 50%, and precision of 1.6%, a sample size of 700 participants is required. Incomplete cases and cases that did not meet the inclusion criteria were excluded. The final sample consisted of 718 participants. The inclusion criteria were a) students aged 12–18 years at the time of the study, b) enrolled in school as a mainstream student, and c) with parental/guardian voluntary informed consent to participate. The exclusion criteria were: a) students over 18 years of age.

Study variables and assessment instruments

Sociodemographic variables

-Age (as a continuous variable in years); sex (male or female); nationality (Spanish or other); and perceived social support, with the availability of tangible support in specific situations. For this purpose, we asked the following question: How many people can you count on when you have a problem or difficulty? (No, I can't count on anyone, or yes, I can count on one or more people).

Clinical variables

-Body Mass Index: Underweight <18.5, Healthy 18.5–24.9, Overweight 25–29.9, and Obese >30 (WHO, 2010).

Psychosocial variables

-Eating Attitudes Test (EAT-26): developed by Garner et al. (1982) and validated for the Spanish context by Gandarillas et al. (2002). This is a self-report instrument that measures negative attitudes towards

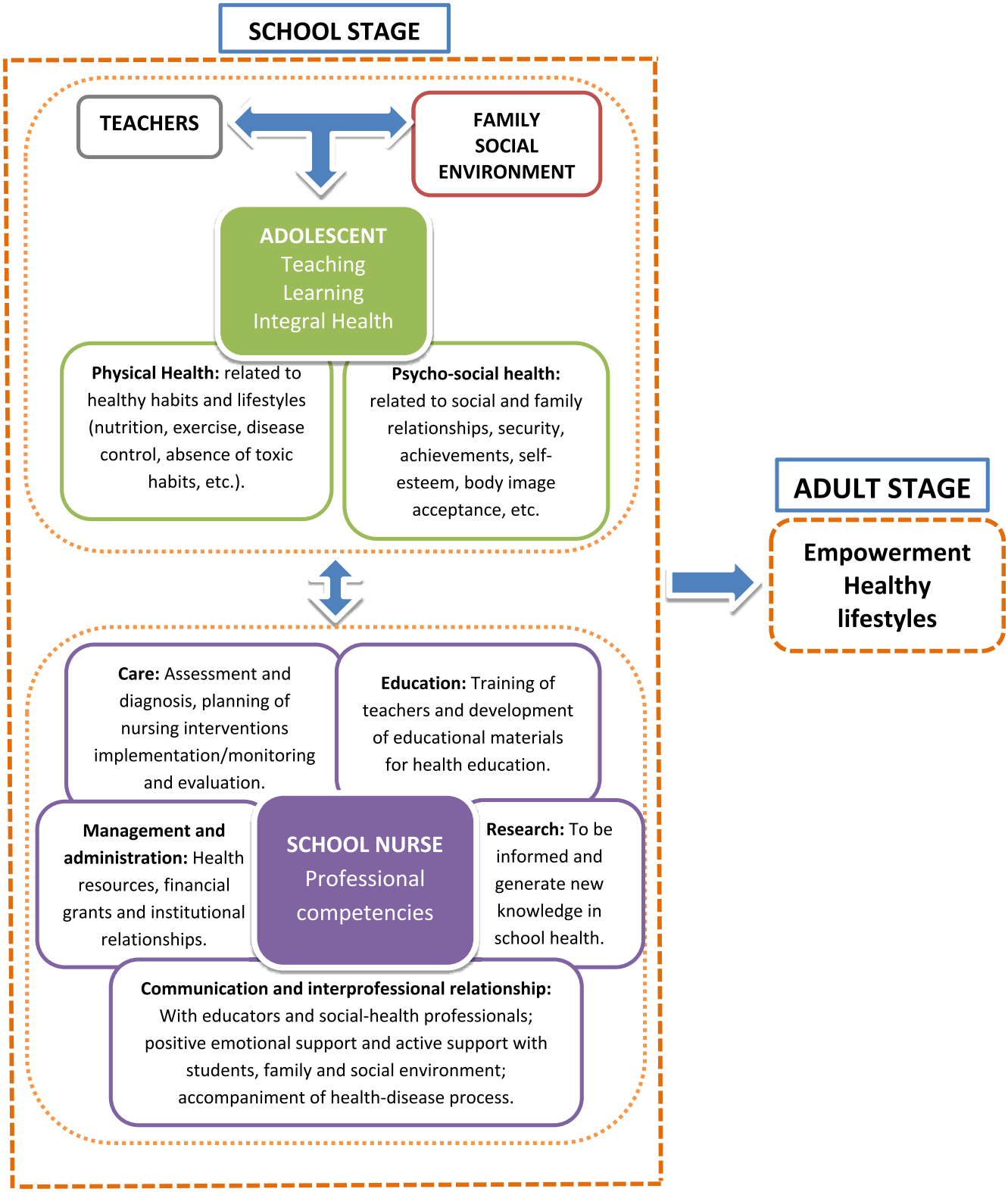

Fig. 1. Relationship in the school context between adolescents, school nurses and potential impact on health in adulthood.
Source: Own elaboration based on CGE, 2019; 2022.

eating. It is made up of 26 items and has three dimensions: a) Dieting (13 items assessing attitudes towards the avoidance of fattening foods and concerns about being thin); b) Bulimia and food preoccupation (six items assessing bulimic behaviors and thoughts about food); and c) Oral control (seven items assessing self-control about food intake and social pressure to gain weight). Answers are given on a 4-point Likert-type scale (0 = never to 3 = always). A score above 20 indicates a risk of having an ED. The scale has adequate internal consistency internationally (>0.80) (Constaín et al., 2014; Garner et al., 1982; Siervo et al., 2005).

-SCOFF Questionnaire: developed by Morgan et al. (1999) and validated for the Spanish context by Rueda Jaimes et al. (2005). This is a unidimensional instrument consisting of five questions assessing aspects relating to the risk of having an ED, answered on a dichotomous (yes/no) scale. Positive cases are those in which the person answers affirmatively to two or more questions. The instrument has been found to have adequate sensitivity and specificity for identifying the risk of having an ED. Internationally, internal consistency ranges between 0.4 and 0.7, which is considered acceptable for discriminatory tools (Cronbach, 1951; Morgan et al., 1999; Rueda Jaimes et al., 2005).

-Suicidal Thoughts: To assess this variable, the authors relied on previous studies similar to their intended study (Espinoza-Gómez et al., 2010; Osnaya et al., 2019) and the *"Expectations about Living-Dying"* scale developed by Okasha et al. (1981). Specifically, the following yes/no questions were asked: a) In the past month, have you had the feeling that life is not worth living? b) Have you ever wanted to die? and c) Have you ever thought that it would be better to die than to live? Participants who met at least one of these criteria were considered to be experiencing suicidal thoughts.

-Suicidal Behavior: To evaluate this variable, the authors relied on previous studies similar to their intended study (Espinoza-Gómez et al., 2010; Osnaya et al., 2019). The question asked was: Have you ever tried to take your own life in the last five years? (yes or no). An affirmative response was deemed to be suicidal behavior.

Data collection procedure

All participants who expressed interest in taking part in the study were given a consent form to take home in order to obtain parental or guardian consent. This document contained information about the title of the study, its purpose and significance, and a statement on data confidentiality. Participants received an "*ad hoc*" document containing all the research variables (sociodemographic, clinical, psychosocial, and the assessment instruments). The completed form was placed in a sealed envelope to ensure confidentiality. The research team was responsible for the collection and safekeeping of all paperwork.

Statistical analysis

Data analysis was performed using the Statistical Package for the Social Sciences (Windows SPSS 24.0). The analysis was segmented by sex. Descriptive analysis was used, with continuous variables expressed as means and standard deviations, and categorical variables expressed as frequencies and percentages. The normality distribution of the sample was verified using the Kolmogorov-Smirnov test. For bivariate analysis, the chi-square test or Fisher's exact statistic for small samples was used for categorical variables, the t-student statistic for normally distributed continuous variables, and the Mann-Whitney U statistic for continuous variables that did not satisfy the normality assumption. Binary logistic regression models were used to quantify the association between the risk of having an ED (positive EAT-26 and positive SCOFF), suicidal thoughts, and suicidal behavior. The logistic regression models were adjusted for the age, social support, and country of origin variables. The adjusted odds ratio (AOR) was calculated with a 95% confidence interval (95% CI). AORs with wide CIs suggest a large heterogeneous effect in the AOR.

Ethical considerations

All participants agreed to take part in the study on a voluntary basis. The study obtained a favorable report from the center's research ethics committee (Registration No. 2016/0794). Data privacy and confidentiality were guaranteed in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016. The study complied with the Declaration of Helsinki (Barrios Osuna et al., 2016).

Table 1
Descriptive analysis of the variables studied.

	Boys ($n = 280$)	Girls ($n = 438$)	P- value
Sociodemographic Characteristics			
Age (mean, standard deviation)	14.4 (1.8)	14.7 (2.0)	0.37
Country of Origin	261 (93.2)	403 (92.0)	
Spanish n (%)	19 (6.8)	35 (8.0)	0.55
Other n (%)			
Social Support			
Yes social support n (%)	267 (95.4)	425 (97)	0.24
No social support n (%)	13 (4.6)	13 (3.0)	
BMI			
Underweight n (%)	12 (4.3)	20 (4.6)	
Healthy weight n (%)	226 (80.7)	352 (80.4)	0.98
Overweight n (%)	28 (10.0)	42 (9.6)	
Obese n (%)	14 (5.0)	24 (5.5)	
Psychosocial Variables			
Eating Disorders			
EAT-26 Positive n (%)	71 (25.6)	131 (30.8)	0.13
EAT-26 Negative n (%)	209 (74.4)	307 (69.2)	
SCOFF Positive n (%)	52 (18.6)	118 (26.9)	0.01
SCOFF Negative n (%)	228 (81.4)	320 (73.1)	
Suicide			
Suicidal thoughts Positive n (%)	64 (23.0)	133 (30.7)	0.02
Suicidal thoughts Negative n (%)	216 (77)	305 (69.3)	
Suicidal behavior Positive n (%)	6 (2.2)	27 (6.2)	0.01
Suicidal behavior Negative n (%)	274 (97.8)	411 (93.8)	

Notes: EAT-26 (Eating Attitudes Test).

Results

The descriptive analyses are shown in Table 1. Of the 718 participants, 61% were female. The mean age was similar for both males and females (14.4 ± 1.8 for males and 14.7 ± 2 for females). Approximately 90% of respondents were Spanish. Almost the entire sample of both sexes perceived having good social support (95.4% for males and 97% for females). In terms of BMI, a healthy weight was the predominant category (80.7% for males and 80.4% for females). With regard to the risk of having an ED, it was found that 25.6% of males and 30.8% of females scored positively on the EAT-26 questionnaire. There was a positive SCOFF score in 18.6% of males and 26.9% of females. In relation to suicide, statistically significant sex-related differences were found: higher percentages of females than males had had suicidal thoughts (30.7% in females and 23% in males, $p = 0.02$) and had engaged in suicidal behavior (6.2% in females and 2.2% in males, $p = 0.01$).

A statistically significant association was found between the risk of having an ED (EAT-26 positive and SCOFF positive) and suicidal thoughts and behavior in both sexes (Table 2). Table 3 shows the multivariate analysis between suicidal thoughts and behaviors and the risk of having an ED and how this differs by sex. Suicidal thoughts are directly associated with both positive EAT-26 and SCOFF scores. In particular, the association is higher in females with a positive EAT-26 (AOR: 2.09; 95% CI: 1.35–3.24) and in males with a positive SCOFF (AOR: 4.66; 95% CI: 2.40–9.02). Suicidal behavior was directly associated with both positive EAT-26 and SCOFF scores for females (AOR: 2.58; 95% CI: 1.17–5.67 and AOR: 1.89; 95% CI: 1.21–2.26, respectively).

Table 2
Association between Suicidal Behavior/Thoughts and risk of having EDs.

	EAT-26 Positive		SCOFF Positive	
	Boys ($n = 71$)	Girls ($n = 131$)	Boys ($n = 52$)	Girls ($n = 118$)
Variables suicide positive				
Suicidal thoughts n (%)*	19 (27.1)	55 (42.3)	25 (50.0)	48 (41.0)
Suicidal behavior n (%)*	4 (5.7)	14 (10.8)	4 (8.0)	13 (11.1)

Notes: EAT-26 (Eating Attitudes Test), *p-value<0.05.

Table 3
Multivariate Analysis between Suicidal Behavior/Thoughts and risk of having EDs.

	EAT-26 Positive		SCOFF Positive	
	Boys ($n = 71$)	Girls ($n = 131$)	Boys ($n = 52$)	Girls ($n = 118$)
Suicide Variables	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**
Suicidal thoughts	1.35 (0.72–2.53)	2.09*(1.35–3.24)	4.66*(2.40–9.02)	1.89*(1.21–2.26)
Suicidal behavior	6.24*(1.07–36.4)	2.58*(1.17–5.67)	20.6*(2.14–197.8)	2.62*(1.19–5.76)

Notes: AOR (Adjusted Odds Ratio), EAT-26 (Eating Attitudes Test), *p-value<0.05.
The logistic regression models are adjusted for the variables: age, social support, and country origin.

Discussion

To the best of our knowledge, this is the first study to assess the risk of having an ED, the rates of suicidal thoughts and behaviors, and their relationship in adolescents enrolled in educational centers in the Community of Valencia (Spain).

Firstly, our results indicate that the risk of having an ED is similar to that found in other studies using self-report questionnaires. This risk varies from about 20% to 35% in adolescents (Goel et al., 2020; Najjar et al., 2018). However, it is important to note that our figures are higher than clinically diagnosed EDs, which in Europe range from 0.6% to 7.8% (Arija Val et al., 2022; Mohler-Kuo et al., 2016; Tong et al., 2014; Wong et al., 2014). This variation in results between studies can be attributed to the use of different measurement methods, questionnaires, reference and diagnostic criteria, and the diversity of social and cultural environments (Goel et al., 2020; Najjar et al., 2018).

In terms of the various methods used to assess the risk of having an ED and to make a diagnosis, we believe it is crucial to emphasize that focusing solely on clinical diagnostic criteria for EDs may lead to a failure to recognize individuals with less severe symptoms and behaviors (Saeedzadeh Sardahaee et al., 2019). Milder forms of EDs are common among adolescents (Glazer et al., 2019). In fact, adolescents who do not meet strict clinical diagnostic criteria for EDs may not receive the necessary early intervention, which could negatively impact their long-term health (Glazer et al., 2019; Saeedzadeh Sardahaee et al., 2019). Therefore, the introduction and use of simple self-report questionnaires as an initial screening measure to assess adolescents' risk of having an ED, under the guidance of school nurses, may have significant benefits.

In terms of sex, our findings show that females are at greater risk of having an ED than males. This is consistent with the literature reviewed (Arija Val et al., 2022; Castejón & Berengüí, 2020; Cruz-Sáez et al., 2015; Stephen et al., 2014). This may be because females are more likely than males to have body dissatisfaction, an obsession with being thin, interpersonal insecurity, low self-esteem, and a greater tendency towards perfectionism (Castejón & Berengüí, 2020). Nevertheless, our findings support the hypothesis that more and more males are affected by this problem. Recent research has suggested that this increase may be due to a desire by males to control their appearance, as they experience increasing psychological and physical insecurity during the transition from childhood to adolescence (Smith et al., 2018; Yao et al., 2016). Some authors have suggested that the obsession with being thin and body dissatisfaction are closely linked to contemporary body aesthetic models. There is evidence that today's negative body aesthetic models have led to an overvaluation of thinness and the stigmatization of being overweight (Castejón & Berengüí, 2020).

Secondly, with regard to rates of suicidal thoughts and behaviors, our findings are similar to those obtained internationally in populations with similar characteristics to those in our study. In the case of suicidal thoughts, the study carried out by Martínez Baquero et al. (2017) shows 43% for the total sample and Sohn et al. (2018) found variations ranging from 6.8% in males to 14.6% in females. In terms of suicidal behavior, figures of 6.14% for males and 9.24% for females have been reported (Martínez Baquero et al., 2017).

Thirdly, the hypothesis that adolescents at risk of having an ED are more prone to develop suicidal thoughts and behaviors is confirmed. Suicidal thoughts and self-harming behaviors have been described in the literature as a symptom associated with people diagnosed with or at risk of having an ED (Kim & Seo, 2021; Varela-Besteiro et al., 2017). Extreme fasting, starvation, vomiting, and other purging practices may be a sign of self-harm and therefore an increased risk of suicidal thoughts and behavior (Zeppegno et al., 2021). In line with the conceptual framework proposed in Joiner's IPTS (Joiner, 2005), it is confirmed that adolescents at risk of having an ED have a higher AC than the rest of the population. This significantly increases the likelihood of suicide. It is therefore feasible that EDs are a direct cause of suicidality. It is also likely that an individual is more susceptible to both EDs and suicidality as a result of coexisting biological and psychological disorders (Smith et al., 2018).

Fourthly, this study's findings show that females at risk of having an ED are twice as likely as males to have suicidal thoughts and behaviors. This has been confirmed and is consistent with the findings of other studies (Martínez Baquero et al., 2017; Smith et al., 2018). These data may be corroborated by the review study conducted by Arija Val et al. (2022). These authors report that EDs are often simultaneously associated with psychiatric and medical pathologies. There is a specific association with anxiety, depression, obsessive-compulsive disorder, self-harm, suicidal behavior, personality disorders, Attention Deficit Hyperactivity Disorder (ADHD), and substance abuse. The study highlights that females have higher rates of psychiatric comorbidity and a strong association between ADHD and EDs, which are more common in people with compulsive-purgative AN. Finally, it should be noted that the absence of school nurses in the five centers studied may have contributed to the differences in the results of this study compared to other studies. Existing research strongly supports the inclusion of content on EDs and suicide prevention in school curricula (Aimé et al., 2017; Puhl et al., 2016) and the implementation of educational policies in partnership with school nurses, teachers, school counselors, administrators, coaches, parents, and students (Puhl et al., 2016). Systematic reviews by Fonseca Pedrero et al. (2022) and Pursey et al. (2021) show that educational interventions are effective at preventing EDs and suicide, with sustained preventive effects in the medium and long term. In Asturias, Spain, a multicenter program was delivered with very positive results: after 12 months, no adolescent involved in the program had committed suicide (Wasserman et al., 2015). The absence of programs based on detection, education, management, and partnership working with other educational and social health professionals could explain the results and differences found with other studies (CGE, 2019; Cowell, 2019; Pestaner et al., 2021).

Limitations

Despite the findings, it is important to remember the inherent limitations of this research. First and foremost, the results should be interpreted with caution due to the nature of the sample selection process. For future studies, multistage sampling for the institutions and random sampling for selecting the classrooms would be preferred.

Secondly, this was a cross-sectional study, so no conclusions can be drawn about causality. Thirdly, no distinction was made between the different subgroups of EDs. As such, the precise relationship between suicidal thoughts and behaviors and subtypes of EDs could not be explored. Fourthly, although the sample size was considerable, all participants were from the same place, *i.e.*, the Community of Valencia (Spain), so the transferability of the results should be treated with caution. Finally, it should be noted that self-report instruments were used to investigate the risk of having an ED, suicidal tendencies, and their associations with suicidal thoughts and behaviors. Future research should use the Diagnostic and Statistical Manual criteria to ensure greater accuracy.

Practical implications

As change agents and educators on health issues, school nurses play a vital role in preventing EDs and suicide. They also provide support to adolescents, families, and communities and help raise their awareness of these issues (Najjar et al., 2018). However, in the Community of Valencia (Spain), school nurses are scarce (CGE, 2022; Pursey et al., 2021). The first step towards solving this problem would be the enactment of a national law regulating the incorporation of nurses in educational centers and the development of a competency framework, determining a specific qualification. In this way, these professionals will be able to deliver prevention and health promotion programs. Only through the delivery of such programs will it be possible to detect risk factors and increase protective factors (Fonseca Pedrero et al., 2022; Pursey et al., 2021). Other authors argue that the prevention of EDs and suicide in adolescents should focus on a greater understanding of the meaning of life, with interventions aimed at improving perceptions of body image and controlling impulsivity and specific self-destructive behaviors (Zeppegno et al., 2021). It should be recognized that EDs and suicide are significant problems in the school setting requiring immediate and coordinated solutions (CGE, 2022; Puhl et al., 2016). Therefore, a policy approach that includes the involvement of these professionals in the school environment is needed to address health-related problems and the acquisition of healthy lifestyles.

Conclusions

This study focuses on EDs and suicide among adolescents in the Community of Valencia (Spain). The results show that a considerable number of adolescents, mostly females, are at risk of having an ED and of experiencing suicidal thoughts and behaviors, with a strong association established between the two. The study emphasizes the need for legislation and regulations at the national and regional levels to ensure the availability of school nurses. In order to identify these problems at an early stage and provide support to adolescents, their families, and their wider social environment within the school context, it is essential that these professionals coordinate and collaborate with educational, social, health, and political institutions.

CRediT authorship contribution statement

Mª. Rosario Gómez-Romero: Funding acquisition, Investigation, Project administration, Resources, Writing – review & editing, Conceptualization. **Néstor Montoro-Pérez:** Conceptualization, Data curation, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. **David Martín-Baena:** Data curation, Formal analysis, Investigation, Methodology, Writing – review & editing, Conceptualization. **Marta Talavera-Ortega:** Funding acquisition, Investigation, Writing – review & editing. **Raimunda Montejano-Lozoya:** Conceptualization, Investigation, Supervision, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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