

THE PREVALENCE OF EATING DISORDERS IN HEALTHCARE STUDENTS

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Summary

Eating disorders are an increasing global health concern. While clinically diagnosed eating disorders remain relatively uncommon in the general population, screening studies suggest that disordered eating and eating-disorder symptomatology may be relatively common among health care students. This narrative review summarises recent evidence on disordered eating and eating-disorder symptomatology among health care students (medicine, nursing, nutrition/dietetics). PubMed was searched for English-language human studies published from 2021 onwards, supplemented by one relevant 2019 meta-analysis. In total 20 publications were included. Across studies, screening-positive disordered eating was commonly reported, with substantial heterogeneity by country, instrument, and cut-off. Female sex, higher body mass index, earlier training stage, elevated perceived stress and internalising symptoms (anxiety/depression), and body-image dissatisfaction in the context of sociocultural pressure were the most consistently reported correlates. Orthorexic tendencies also appeared frequent in nutrition-related training. Medical and health sciences faculties should strengthen awareness and prevention, ensure confidential access to support, and consider low-threshold screening using validated tools, while future research should prioritise longitudinal designs and diagnostic assessment to clarify incidence and causal pathways.

Introduction

Epidemiological evidence suggests that clinically diagnosed eating disorders (EDs) are relatively uncommon in general population, but they still affect a clinically meaningful minority and appear to be an increasing burden over time. ED prevalence has roughly doubled over recent decades

(1,2). Community studies applying DSM/ICD criteria estimate the pooled lifetime prevalence of any ED at 1.69% (12-month 0.72%). EDs are substantially more common in women than men (2.58% vs 0.74% lifetime) and vary by region, with higher prevalence reported in Western than Asian countries (1.89% vs 0.22%) (1,2). Reviews further indicate rising prevalence over recent decades, which may partly reflect improved recognition and more widespread screening (1,2). Consistent with this, screen-detected disordered eating is detected in roughly 13% of high-school students (3) and 20% of university students (4). Female sex, older age, and higher body mass index have been associated with an increased risk of disordered eating (5).

Aim of this study is to synthesise recent evidence on the prevalence of screening-positive disordered eating and eating-disorder symptomatology, and their associated correlates, among health care students (medicine, nursing, and nutrition/dietetics).

Research materials and methods

Database PubMed was searched using combinations of keywords – “eating disorders AND medical students”, “eating disorders AND nursing students”, “eating disorders AND dietetics students”, “anorexia nervosa AND medical students”, and related terms. The primary search was restricted to human studies published in English from 2021 onwards. In addition, one relevant meta-analysis published in 2019 was included due to its comprehensive synthesis of earlier evidence. Non-full-text publications and studies not involving health care students or not reporting prevalence and/or risk factors of eating disorders were excluded. In total, 20 publications were included.

Discussion

International evidence suggests that health care students – particularly those studying medicine, nursing and nutrition or dietetics – experience eating-disorder symptoms and di-

sordered eating more frequently than people in the general population worldwide. Two quantitative syntheses in medical students suggest that disordered eating is frequent: Fekih-Romdhane et al. reported a pooled prevalence of feeding and eating disorder symptomatology of about 16–17% in more than 21,000 students from 20 countries, with higher rates in non-Western settings, while an umbrella review by Jahrami et al. found broadly similar pooled estimates of around 15–16% despite marked heterogeneity between primary studies (6,7). Such as feeding and eating disorders (FEDs). Cross-sectional survey studies from India, Saudi Arabia, Romania, France, several MENA (Middle East and North Africa) countries and Uganda broadly support these estimates, reporting that between about 13% and 37% of medical students screen at high risk for an eating disorder on instruments such as the EAT-26, SCOFF or EDI-3, with the highest figures generally observed in Eastern European and Middle Eastern samples (8–13). Eating disorders are some of the most under-researched and difficult to diagnose psychiatric conditions, with a high mortality rate, especially among the adolescent age group. The aim of this study is to determine the prevalence and risk factors for eating disorders among students of a medical college hospital in South India. Materials and methods, An observational, cross-sectional study was conducted among 332 students of four constituent colleges of a tertiary-care hospital selected by simple random sampling. Their height and weight were recorded. Four major questionnaires were distributed among the students - Demographic details, Eating Attitudes Test (EAT26). Across these studies, female sex, earlier academic years, higher body mass index, body dissatisfaction and symptoms of stress, anxiety or depression consistently emerge as correlates of disordered eating (8–12).

Findings in nursing students are comparable or, in some settings, even higher. In a Nepal sample, approximately 17% of undergraduate nursing students met the EAT-26 cut-off, with a notable proportion reporting moderate or marked concern about body shape (14). In a Mexican university, almost three-quarters of nursing and non-health students screened positive on the EAT-26, and nursing students had more than double the odds of being at risk compared with non-health peers, partly explained by low self-esteem and anxiety (15).

Nutrition and dietetics students also appear notably vulnerable: a scoping review reported that between 4% and 32% meet eating-disorder risk criteria and that body-image dissatisfaction is common (37–86%) (16), in the meanwhile, European primary studies indicate that roughly 15–20% score above the EAT-26 threshold, with around half meeting at least one criterion warranting further clinical assessment and eating-disorder symptom scores closely related to depressive, anxiety and stress symptoms (17,18) an increase in the inci-

dence of eating disorders has been noted. An increase in the pace of life, an increase in the availability of a wide variety of food products, and, to a large extent, the involvement of mass media are cited as reasons for this phenomenon. The promotion of a slim figure by the mass media is equated with achieving success in life, but also the advertising of a wide selection of food products (often highly processed). Recent orthorexia-focused reviews consistently report very high rates of orthorexic behaviours in dietetics students and dietitians, with levels generally higher in students than in practising dietitians (19,20).

Taken together, health care students, particularly young women in the early stages of medical, nursing and nutrition/dietetics training, appear to constitute a high-risk group for eating disorders. In this population, restrictive patterns, including anorexia nervosa, binge-eating and orthorexic behaviours are common and warrant systematic recognition and targeted preventive efforts.

In health care student populations, factors associated with disordered eating and elevated eating-disorder symptomatology appear to be multifactorial, spanning sociodemographic characteristics, training-related stressors, and psychosocial vulnerability. Across studies, the most consistently reported correlates include female sex and earlier training stage, higher perceived stress and internalizing symptoms (e.g., anxiety/depression), and body-image disturbance alongside sociocultural pressures to conform to a thin ideal (11). Similar patterns have been reported in a Romanian medical-student cohort: ED risk (EDI-3) was higher among women and was associated with higher BMI and self-reported sleep difficulties, importantly, in the multivariable model, family pressure remained a statistically significant predictor (10). In a cross-sectional study of medical and paramedical students in South India, higher EAT-26-defined eating-disorder risk was associated with higher perceived stress, severe body-shape concerns, peer pressure and extreme exercise patterns (daily rigorous exercise or none) (8). In this Mexican undergraduate cohort, EAT-26-defined eating behaviour disorder (EBD) risk was more frequent among students reporting low self-esteem and among those with anxiety symptoms (15).

Interpretation of the findings should consider several limitations of the available evidence. Most studies are cross-sectional, which precludes causal inference and does not clarify whether disordered eating predates medical training or emerges during it. In addition, prevalence is commonly estimated using screening instruments (e.g., EAT-26 or SCOFF) rather than diagnostic interviews, which may overestimate clinically diagnosed disorders by capturing subclinical symptoms. Finally, direct comparison groups are often lacking, and comparisons frequently rely on external population data

that differ in methodology, culture, and measurement tools, weakening between-group conclusions.

Conclusions

1. Health care students demonstrate a considerable level of screening-positive disordered eating and eating-disorder symptomatology. Estimates vary across countries and by instrument and cut-off, but many studies report rates in the mid-teens up to approximately one quarter of students.

2. The most frequently reported correlates include female sex, higher BMI, greater perceived stress and internalising symptoms (anxiety/depression), and body-image dissatisfaction in the context of sociocultural pressure. Orthorexic tendencies also appear common in nutrition-related training, although conceptual and measurement heterogeneity should be considered.

3. Medical and health sciences faculties should strengthen awareness and prevention, implement confidential, low-threshold screening using validated instruments, and ensure timely access to support services. Future research should prioritise longitudinal designs and diagnostic assessment to clarify incidence and causal pathways.

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VALGYMO SUTRIKIMŲ PAPLITIMAS TARP SVEIKATOS MOKSLŲ STUDENTŲ: LITERATŪROS ANALIZĖ

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Raktažodžiai: valgymo sutrikimai, medicinos studentai, paplitimas, literatūros apžvalga.

Santrauka

Valgymo sutrikimai yra visame pasaulyje didėjanti sveikatos problema. Nors kliniškai diagnozuotų atvejų skaičius išlieka pastovus ir nedidelis, apklausos rodo, kad studentų populiacijoje gali būti stebimi valgymo sutrikimams būdingi bruožai. Ši literatūros apžvalga remiasi naujausiais įrodymais pagrįstais moksliniais straipsniais, nagrinėjančiais valgymo sutrikimų paplitimą tarp sveikatos mokslų studentų, įskaitant medicinos, slaugos, mitybos ir dietologijos. Iš „PubMed“ duomenų bazės buvo atrinkti nuo 2021 metų publikuoti straipsniai anglų kalba, papildomai įtraukiant vieną 2019 metais paskelbtą metaanalizę. Iš viso į literatūros analizę įtraukta 20 mokslinių šaltinių. Analizuojant literatūrą nustatyta, kad valgymo sutrikimų paplitimas reikšmingai skiriasi priklausomai nuo šalies, pasirinktų tyrimo priemonių ir ribinių reikšmių. Įvairiose sveikatos mokslų disciplinose moteriška lytis, didesnis kūno masės indeksas, ankstyvas studijų etapas, padidėjęs patiriamas stresas, nerimas ar kiti neigiami simptomai, taip pat nepasitenkinimas išvaizda sociokultūrinio spaudimo kontekste buvo nustatyti kaip reikšmingiausi predisponuojantys veiksniai. Ortoreksinio elgesio požymiai dažniau stebimi su mityba susijusių studijų programų studentų grupėse. Sveikatos mokslų įstaigos turėtų skatinti informuotumą ir užtikrinti konfidencialią prieigą prie pagalbos. Be to, jos turėtų apsvarstyti atrankines programas, padedančias anksti identifikuoti padidėjusią riziką ir polinkį išsivystyti valgymo sutrikimams. Siekiant pagerinti ilgalaikių tyrimų rezultatus ir aiškiau nustatyti paplitimą bei galimus jo priežastinius ryšius, būsimuose tyrimuose turėtų būti naudojamos patvirtintos objektyvios vertinimo priemonės.

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