Prevalence of Eating Disorder Risk Among Medical Students in a United States Medical School

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Introduction

Eating disorders are among the most severe psychiatric illnesses, often conferring increased mortality compared to other psychiatric disorders. The high-stress environment of medical school makes medical students more vulnerable to the development of various psychiatric conditions, including eating disorders[1]. Few studies have included eating disorder risk in assessing medical student wellness, and few have measured the prevalence of eating disorder risk in United States medical schools.

Aims and Objectives

This study aims to identify the prevalence of eating disorder risk among medical students at Oakland University William Beaumont (OUWB) School of Medicine.

Methods

All OUWB medical students received anonymous, voluntary online surveys via email. IRB approval was obtained (IRB-FY2023-335). Surveys included a demographic questionnaire, two validated tools to assess eating disorder risk, including the EAT-26 (Eating Attitudes Test)[2] and SCOFF 6.0 (Sick, Control, One, Fat, Food)[3], and 14 supplemental questions written by the authors in Qualtrics. Supplemental questions were written to assess current mental healthcare seeking and treatment, and factors potentially related to increased eating disorder risk in respondents.

Results

Table 1. Demographics of respondents.

		Respondents n (%)
Race	White	43 (62.3)
	Black	3 (4.3)
	Asian	21 (30.4)
	Native Hawaiian or Pacific Islander	1 (1.4)
	Other	4 (5.8)
Ethnicity	Not Hispanic or Latino	69 (100)
Gender	Male	22 (31.9)
	Female	46 (66.7)
	Non-binary	1 (1.4)
Sexual orientation	Heterosexual or straight	62 (89.9)
	Bisexual	5 (7.2)
	Lesbian	1 (1.4)
	Queer	1 (1.4)
Year in school	M1	15 (21.7)
	M2	21 (30.4)
	M3	25 (36.2)
	M4	8 (11.6)

Results (Continued)

An average of 19.6% of respondents (n=69) were found to be at high risk for an eating disorder (EAT-26: 14.5%, SCOFF: 24.6%). Students who were identified as "at risk" based on the EAT-26 had a higher mean score on SCOFF than those not at risk (1.5 vs 0.7, p=0.0445). Approximately 30% of all respondents reported worrying they have lost control of how much they eat on the EAT-26, with 40% of this group being students that were not identified as being at risk. Of those at high risk for an eating disorder, 28.6% reported not currently receiving mental health treatment of any kind and 55% did not feel they were currently struggling with their mental health.

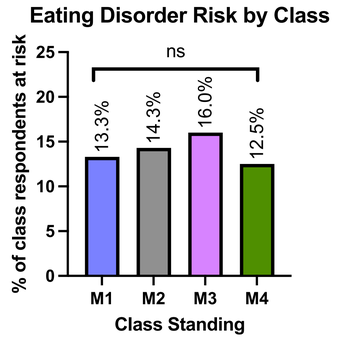

Figure 1. Percentage of respondents identified as high risk for an eating disorder by EAT-26 by class (M1-M4; p=1.000, Fisher Exact p-value).

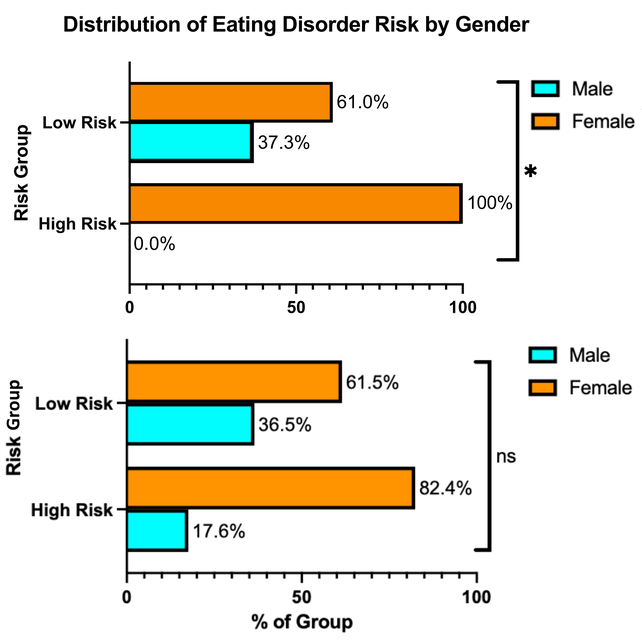

Figure 2. Distribution of risk between male- and female-identifying medical students (n=69) according to EAT-26 (top; p=0.0278, Fisher Exact p-value) and SCOFF (bottom; p=.4200, Fisher Exact p-value).

Table 2. Student responses to the SCOFF questionnaire separated by results of their EAT-26 responses ("at risk" or "not at risk").

			At Risk Based on EAT-26 (N=10)	Not At Risk Based on EAT-26 (N=59)
S	Do you make yourself **SICK** (vomit) because you feel uncomfortably full?	**Yes**	2 (20)	8 (13.6)
		No	8 (80)	51 (86.4)
C	Do you worry that you have lost **CONTROL** over how much you eat?	**Yes**	5 (50)	15 (25.4)
		No	5 (50)	44 (74.6)
O	Have you recently lost more than **ONE** stone in a 3 month period?	**Yes**	0 (0)	5 (8.5)
		No	10 (100)	54 (91.5)
F	Do you believe yourself to be **FAT** when others say you are too thin?	**Yes**	4 (40)	11 (18.6)
		No	6 (60)	48 (81.4)
F	Would you say that **FOOD** dominates your life?	**Yes**	4 (40)	5 (8.5)
		No	6 (60)	54 (91.5)

In comparing "Yes" responses between "at risk" and "not at risk groups" based on EAT-26 for each of the SCOFF questions, all are not statistically significant except for the final (FOOD) question (p=0.0207, Fisher Exact p-value).

Table 3. Characteristics of at-risk respondents.

		At risk based on EAT-26 (N=10)	At risk based on SCOFF (N=17)
		n (%)	
Presence of recent life stressor	Yes	7 (70)	10 (58.8)
	No	3 (30)	7 (41.2)
Personal history of eating disorder	Yes	1 (10)	2 (12.5)
	No	9 (90)	14 (87.5)
Non-mental health diagnosis impacting daily life	Yes	4 (40)	6 (35.3)
	No	5 (50)	11 (64.7)
Family history of eating disorder	Yes	1 (10)	2 (11.8)
	No	9 (90)	15 (88.2)
Currently receiving mental health treatment	Yes	7 (70)	12 (70.6)
	No	3 (30)	5 (29.4)
Currently seeking mental health provider	Yes	3 (30)	5 (29.4)
	No	6 (60)	12 (70.6)

Conclusions

Medical students are an at-risk population for eating disorders. Female medical students demonstrate greater risk compared to their male counterparts, but male students still have a non-negligible risk.

Discussion

Eating behaviors should be included in discussions related to wellness and burnout in healthcare. It is suggested that medical schools integrate improved curricula related to eating disorders and enhance the infrastructure of their programs to facilitate students' access to and engagement with mental healthcare services. Future studies should include more medical schools and investigate models that may be protective for students.

Acknowledgements

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