

Risk of Eating Disorders between Exercisers and Non-Exercisers among Nursing Personnel: A Cross-Sectional Analytical Study

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ABSTRACT: Background: Eating disorders are mental health conditions characterized by unhealthy eating behaviors that adversely affect physical and emotional well-being. This study assessed the risk of eating disorders among nursing personnel, comparing exercisers and non-exercisers, and explored associations between selected factors and eating disorder risk in both groups. Methodology: A cross-sectional analytical study was conducted among nursing personnel. The risk of eating disorders was assessed using the SCOFF Questionnaire. A total of 422 participants who met the inclusion criteria and consented to participate were included. Statistical analysis was performed using STATA version 14. Descriptive statistics were used to summarize the data, and the Chi-square test was used to assess associations, with statistical significance set at $p < 0.05$. Results: A total of 422 participants were included, with a mean age of 32.98 ± 1.38 years. Among non-exercisers, 33.22% were at risk of eating disorders compared with 24.79% among exercisers. Overall, 30.81% of participants were at risk, while 69.19% had no risk. A significant association was observed between BMI and eating disorder risk among non-exercisers ($p < 0.001$), with a higher proportion of risk among participants with $BMI \geq 25$. Conclusion: The findings suggest that eating disorder risk was associated with higher BMI and marital status among non-exercisers. Regular screening, promotion of physical activity, and education on healthy dietary practices may help improve the well-being of nursing personnel.

KEYWORDS: *Exerciser, non-exerciser, nursing personnel, SCOFF, risk of eating disorder.*

Introduction

Food plays an important role in our health and well-being, but for some people, eating habits can become unhealthy and harmful.

Many people exercise to stay healthy, but sometimes the pressure to look fit can lead to disordered eating behaviors.

Eating disorders are mental health conditions marked by harmful eating patterns, including anorexia nervosa, bulimia nervosa, and binge eating disorder, which affect diet, weight, and emotional well-being [1-2].

Anorexia involves extreme food restriction and body image distortion, while bulimia features binge eating followed by purging behaviors [3-4].

Binge eating disorder includes overeating without purging [5].

Around 56.3% of exercisers are at risk of such disorders, with body dissatisfaction being a key factor [6-7].

This study investigates the risk of eating disorders among nursing personnel, a professional group exposed to occupational stress and irregular work schedules, and compares exercisers with non-exercisers, addressing a gap in the literature and highlighting the need for targeted interventions in this underrepresented group [8].

Objective

This study aimed to assess the risk of eating disorders among nursing personnel by comparing exercisers and non-exercisers, and to examine the association between selected demographic, anthropometric, and lifestyle factors and eating disorder risk in both groups.

Methods

This cross-sectional study was conducted at a tertiary care teaching institution in South India.

The study included 422 nursing personnel working at the institute during the study period.

Based on the study by Sathyanarayana et al. [9], which reported a 52% prevalence of eating disorders among exercisers, the required sample size was calculated as 384 using a 95% confidence interval.

Considering a 10% non-response rate, the final sample size was adjusted to 422 participants.

After obtaining approval from the Undergraduate Research Monitoring Committee and clearance from the Institute Ethics Committee, data collection was carried out between July and August 2024.

At the time of data collection, approximately 1,830 nursing personnel were employed at JIPMER.

Participants who met the inclusion criteria and voluntarily consented were included in the study. Eligible participants included nursing personnel currently working at JIPMER, of both sexes, who were willing to participate.

Individuals with mobility limitations, chronic diseases, or those who declined participation were excluded.

Data were gathered through interviews conducted by the first author using the English version of the SCOFF questionnaire, which screens for eating disorder risk. The questionnaire also collected demographic information such as age, gender, job position, income, marital status, religion, domicile, type of family, dietary patterns, exercise routines, frequency and duration of exercise, and relevant health parameters (height, weight, BMI, and blood pressure).

Height was measured using a portable stadiometer, ensuring that participants were barefoot and standing upright, with their calves, upper back, and head against the wall, and the head positioned according to the Frankfurt horizontal plane, recorded to the nearest 0.1cm.

Weight was assessed using a digital scale, with participants in lightweight clothing and barefoot, recorded to the nearest 100g [10].

Asian BMI cut-off values were applied, categorizing participants as overweight if their BMI was between 23.0 and 24.9kg/m² and obese if their BMI was ≥25.0kg/m² [11].

The SCOFF questionnaire is a validated five-item screening tool. A score of 0 or 1 indicates no risk for eating disorders, while a score of 2 or higher suggests a potential risk for anorexia nervosa or bulimia nervosa, warranting further evaluation by a qualified health professional [12,13].

The tool was previously validated in a study by Sathyanarayana P and Joshi DG on the prevalence of eating disorders in the general population of Bangalore [9].

Statistical analyses were performed using STATA version 14. Descriptive statistics, including mean, standard deviation (SD), and proportions, were used to summarize the data.

The Chi-square test was employed to assess the association between eating disorder risk and various variables. Statistical significance was set at p<0.05, corresponding to a 95% confidence level.

Results

The socio-demographic analysis revealed that the majority of nursing personnel were aged between 31 and 40 years (62.80%), with a predominant female representation (71.33%).

Most participants held the position of Nursing Officer (99.53%) and earned between ₹41,000 and ₹80,999 per month (69.91%).

A significant portion of the sample was married (77.73%), with Hinduism being the dominant religious affiliation (77.01%).

Urban residents comprised 90.52% of the sample, and most participants belonged to nuclear families (77.01%).

These demographic characteristics provide a comprehensive understanding of the sample distribution, which may influence the analysis of eating disorder risk among exercisers and non-exercisers (Table 1).

Table 1. Socio-demographic, lifestyle, and anthropometric characteristics of participants (N=422).

Variables	Frequency	Percentage
Age (in years)	21-30	141 33.41
	31-40	265 62.80
	41-50	16 3.79
Gender	Female	301 71.33
	Male	121 28.67
Job position	Nursing Officer	420 99.53
	Senior Nursing Officer	2 0.47
Income per month (Rupees)	41000-60999	145 34.36
	61000-80999	150 35.55
	81000-100000	121 28.67
	>100000	6 1.42
Marital status	Married	328 77.73
	Unmarried	94 22.27
Religion	Hindu	325 77.01
	Muslim	18 4.27
	Christian	75 17.77
	Others	4 0.95
Domicile	Urban	382 90.52
	Rural	40 9.48
Type of Family	Nuclear	325 77.01
	Joint	97 22.99
Type of diet	Vegetarian	60 14.22
	Non Vegetarian	274 64.93
	Mixed	88 20.85
Special Diet	Normal diet	399 94.55
	High Protein	10 2.37
	Low Carbohydrates	10 2.37
	Others	3 0.71
Exercise	Non Exerciser	301 71.33

Status	Exerciser	121	28.67
Body mass index (kg/m ²)	<18.5	18	4.27
	18.5-22.9	116	27.49
	23-24.9	92	21.80
	≥25	196	46.45
Co-morbidity	Absent	359	85.07
	Present	63	14.93

A majority of nursing personnel reported following a non-vegetarian diet (64.93%), while a smaller proportion identified as vegetarians (14.22%) or consumed a mixed diet (20.85%).

Most participants adhered to a normal diet (94.55%), with only a minority following specific dietary regimens, such as high-protein or low-carbohydrate diets (2.37% each).

In terms of physical activity, a large proportion of the sample were non-exercisers (71.33%), while only 28.67% engaged in regular

exercise. These dietary and exercise habits are crucial factors in assessing the risk of eating disorders among exercisers and non-exercisers.

Responses to the SCOFF questionnaire indicated that a proportion of participants reported behaviors associated with potential eating disorder risk.

Specifically, 14.45% of participants reported making themselves sick after feeling uncomfortably full (Q1), while 21.56% expressed concern about losing control over their eating habits (Q2). Only 4.27% reported losing more than 6.35 kg within a three-month period (Q3). Regarding body image, 30.09% believed themselves to be fat when others said they were too thin (Q4).

Additionally, 25.12% reported that food dominated their lives (Q5) (Table 2).

Table 2. SCOFF Questionnaire scoring among nursing personnel (N=422).

Items	No		Yes	
	Frequency	Percentage	Frequency	Percentage
Q1- Do you make yourself Sick because you feel uncomfortably full?	361	85.55	61	14.45
Q2- Do you worry you have lost Control over how much you eat?	331	78.44	91	21.56
Q3- Have you recently lost more than One stone (6.35 kg) in a three-month period?	404	95.73	18	4.27
Q4- Do you believe yourself to be Fat when others say you are too thin?	295	69.91	127	30.09
Q5- Would you say Food dominates your life?	316	74.88	106	25.12

A high percentage of participants responded affirmatively to several key questions: 85.55% for Q1, 78.44% for Q2, 95.73% for Q3, 69.91% for Q4, and 74.88% for Q5. These findings suggest that a considerable proportion of the sample may be at risk for eating disorders, necessitating further evaluation based on these responses.

The analysis indicated that a higher percentage of non-exercisers (33.22%) were at

risk of eating disorders compared to exercisers (24.79%). Overall, 30.81% of participants were identified as being at risk of developing eating disorders, while the majority (69.19%) exhibited no risk. The risk of eating disorders appeared higher among non-exercisers than exercisers.

However, this difference was not statistically significant ($\chi^2=2.8768, P=0.090$) (Table 3).

Table 3. Risk level of eating disorder among exercisers and non-exercisers (N=422).

Risk level of eating disorder	Non-exerciser		Exerciser		Over all	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
No risk (Total <2)	201	66.78	91	75.21	292	69.19
Risk (Total ≥2)	100	33.22	30	24.79	130	30.81
Total	301	100	121	100	422	100

Not statistically significant ($\chi^2=2.8768, P=0.090$).

The analysis of socio-demographic variables revealed some associations with eating disorder risk. For non-exercisers, marital status demonstrated a significant association, with

married participants being more likely to have a no-risk profile ($p=0.037$).

However, other variables, including age, gender, income, religion, domicile, and type of family, did not show statistically significant

associations with the risk of eating disorders in either group.

In both exercisers and non-exercisers, the majority of participants who were married, had

higher incomes, or belonged to nuclear families exhibited no significant difference in the risk level of eating disorders (Table 4).

Table 4. Association of socio-demographic variables with the risk level of eating disorder among exercisers and non-exercisers (N=422).

Variables	Non- Exercisers (n=301)		X ² & p-value	Exercisers (n=121)		X ² & p-value
	No risk of eating disorder Interpretation (Total <2) Frequency (%)	Risk of eating disorder (Total: ≥2) Frequency (%)		No risk of eating disorder Interpretation (Total <2) Frequency (%)	Risk of eating disorder (Total: ≥2) Frequency (%)	
Age (in years) ≠						
21-30	76 (37.81)	25 (25)	5.12, p-0.07*	25 (27.47)	15 (50)	5.247 p-0.07*
31-40	120 (59.70)	71 (71)		60 (65.93)	14 (46.67)	
41-50	5 (2.49)	4 (4)		6 (6.59)	1(3.33)	
Gender						
Female	164 (81.59)	74 (74)	2.325, p-0.12	44 (48.35)	19 (63.33)	2.0291 p-0.154
Male	37 (18.41)	26 (26)		47 (51.65)	11 (36.67)	
Job position ≠						
Nursing Officer	201 (201)	99 (99)	2.0167, p-0.332	90 (98.9)	30 (100)	0.3324 p-0.75
Senior Nursing Officer	0	1 (1)		1 (1.1)	0	
Income per month (Rupees) ≠						
41000-60999	72(35.82)	40 (40)	1.0872, p-0.79	24) 26.37)	9 (30)	0.6420,p-0.92
61000-80999	75 (37.31)	33 (33)		31(34.07)	11 (36.67)	
81000-100000	50 (24.88)	26 (26)		35 (38.46)	10 (33.33)	
>100000	4 (1.99)	1 (1)		1 (1.10)	0 (0)	
Marital status						
Married	152 (72.62)	86 (86)	4.345, p-0.037*	70 (76.92)	20 (66.67)	1.245, p-0.19
Unmarried	49 (24.38)	14 (14)		21 (23.08)	10 (33.33)	
Religion ≠						
Hindu	153 (76.12)	74 (74)	2.195, p-0.471	74 (81.32)	24 (80)	0.254, p-0.83
Muslim	6 (2.99)	6 (6)		4 (4.4)	2 (6.67)	
Christian	40 (19.9)	18 (18)		13 (14.29)	4 (13.33)	
Others	2 (1)	2 (2)		0	0	
Domicile						
Urban	181 (90.05)	91 (91)	0.069, p-0.48	83 (91.21)	27 (90)	0.039, p-0.54
Rural	20 (9.95)	9 (9)		8 (8.79)	3 (10)	
Type of Family						
Nuclear	155 (77.11)	76 (76)	0.046, p-0.82	72 (79.12)	22 (73.33)	0.43, p-0.51
Joint	46 (22.89)	24 (24)		19 (20.88)	8 (26.67)	

X²- Chi-Square Test, ≠- Fisher's Exact Test

BMI was significantly associated with the risk of eating disorders in non-exercisers (p<0.001). Participants with a BMI ≥25 showed a higher risk (64%) of eating disorders compared to those with lower BMIs.

However, this association was not significant among exercisers. Co-morbidities were not significantly associated with eating disorder risk in either group, although non-exercisers with co-morbidities exhibited a higher risk (22%) compared to those without (p=0.076) (Table 5).

Table 5. Association of anthropometric measurements with risk level of eating disorder (N=422).

Variables	Non- Exercisers (n=301)		X ² & p-value	Exercisers (n=121)		X ² & p-value
	No risk of eating disorder Interpretation (Total<2) Frequency (%)	Risk of eating disorder (Total: ≥2) Frequency (%)		No risk of eating disorder Interpretation (Total<2) Frequency (%)	Risk of eating disorder (Total: ≥2) Frequency (%)	
Body mass index (kg/m²) ≠						
<18.5	9 (4.48)	2 (2)	19.82, p<0.001*	6 (6.59)	1 (1.33)	2.237, p-0.59
18.5-22.9	64 (31.84)	23 (23)		24 (26.37)	5 (16.67)	
23-24.9	52 (25.87)	11 (11)		22 (24.18)	7 (23.97)	
≥25	76 (37.81)	64 (64)		39 (42.86)	17 (56.67)	
Co- morbidity						
Absent	173 (86.07)	78 (78)	3.139,	83 (91.21)	25 (83.33)	1.459, p- 0.22
Present	28 (13.93)	22 (22)	p-0.076	8 (8.79)	5 (16.67)	
Type of diet ≠						
Vegetarian	28 (13.93)	14 (14)	0.835, p-0.65	16 (17.58)	2 (6.67)	3.917, p- 0.16
Non Vegetarian	130 (64.68)	69 (69)		52 (57.14)	23 (76.67)	
Mixed	43 (21.39)	17 (17)		23 (25.27)	5 (16.67)	
Special Diet ≠						
Normal diet	196 (97.51)	98 (98)	0.499, p-1	82 (90.11)	23 (76.67)	5.133, p-0.09
High Protein	2 (1)	1 (1)		5 (5.49)	2 (6.67)	
Low Carbohydrates	2 (1)	1 (1)		3 (3.3)	4 (13.33)	
Others	1 (0.50)	0 (0)		1 (1.1)	1 (3.33)	
Type of diet ≠						
Vegetarian	28 (13.93)	14 (14)	0.835, p-0.65	16 (17.58)	2 (6.67)	3.917, p- 0.16
Non Vegetarian	130 (64.68)	69 (69)		52 (57.14)	23 (76.67)	
Mixed	43 (21.39)	17 (17)		23 (25.27)	5 (16.67)	
Special Diet ≠						
Normal diet	196 (97.51)	98 (98)	0.499, p-1	82 (90.11)	23 (76.67)	5.133, p-0.09
High Protein	2 (1)	1 (1)		5 (5.49)	2 (6.67)	
Low Carbohydrates	2 (1)	1 (1)		3 (3.3)	4 (13.33)	
Others	1 (0.50)	0 (0)		1 (1.1)	1 (3.33)	

X²- Chi-Square Test, ≠ Fisher's Exact Test

No significant association was found between diet type and the risk of eating disorders in non-exercisers (p=0.65) or exercisers (p=0.16).

Among exercisers, those following a normal diet had a higher proportion at risk (76.67%), although this was not statistically significant (p=0.09).

Participants adhering to low-carbohydrate diets also demonstrated a relatively higher risk in the exerciser group (13.33%), suggesting that specific dietary habits may influence risk, particularly among exercisers.

In the univariable logistic regression analysis, participants aged 31-40 years showed significantly higher odds of being at risk for eating disorders

compared to those aged 21-30 years (OR=1.80, 95% CI: 1.05-3.08, P=0.033). Similarly, being married was associated with lower odds of eating disorder risk (OR=0.50, 95% CI: 0.26-0.97, P=0.039), and individuals with BMI ≥25kg/m² exhibited higher, though not statistically significant, odds (OR=3.79, P=0.096).

In the multivariable model that included age, marital status, and BMI, none of the individual variables retained statistical significance; however, the overall model was statistically significant (LR χ^2 =24.66, P=0.0004), suggesting that these factors together have a meaningful association with the risk of eating disorder among non-exercisers.

Table 6. Univariable and Multivariable Logistic Regression for Risk of Eating Disorder among Non-Exercisers (n=301).

Variable	Category	Univariable		Multivariable	
		Odds Ratio (95% CI)	P-value	Odds Ratio (95% CI)	P-value
Age (years)	21-30			(Ref)	
	31-40	1.80 (1.05-3.08)	0.033	1.28 (0.65-2.53)	0.469
	41-50	2.43 (0.61-9.77)	0.210	1.54 (0.34-6.96)	0.571
Model Statistics		LR $\chi^2=5.24$, P=0.0727		Pseudo R²=0.0137	
Marital Status	Unmarried			(Ref)	
	Married	0.50 (0.26-0.97)	0.039	0.63 (0.28-1.41)	0.259
Model Statistics		LR $\chi^2=4.58$, P=0.0323		Pseudo R²=0.0120	
BMI (kg/m ²)	<18.5			(Ref)	
	18.5-22.9	1.62 (0.33-8.05)	0.557	1.54 (0.31-7.77)	0.601
	23.0-24.9	0.95 (0.18-5.03)	0.954	0.79 (0.15-4.25)	0.782
	≥25.0	3.79 (0.79-18.18)	0.096	3.17 (0.65-15.56)	0.155
Model Statistics		LR $\chi^2=20.39$, P=0.0001		LR $\chi^2=24.66$, P=0.0004	
		Pseudo R²=0.0533		Pseudo R²=0.0644	

This indicates that while no single factor was dominant in isolation, the combination of age, marital status, and BMI contributed collectively to the variation in eating disorder risk (Table 6).

Discussion

This discussion interprets the findings on eating disorder risk among nursing personnel by comparing them with existing literature and examining potential lifestyle, occupational, and demographic influences. The results of the present study indicate a higher risk of eating disorders among obese individuals within the nursing profession. This observation is consistent with previous research demonstrating that body dissatisfaction and higher BMI are closely linked to an increased risk of disordered eating behaviours. Earlier studies have reported that approximately 25% of participants exhibited altered eating behaviours and nearly half experienced body dissatisfaction, findings that align with the 30.81% overall risk observed in the present study.

In addition, a higher proportion of risk was identified among non-exercisers (33.22%) compared with those who engaged in regular exercise, suggesting that lower levels of health-promoting behaviour may contribute to vulnerability to disordered eating patterns [14].

However, contrasting findings have also been reported. In one study conducted among healthcare professionals in Morocco, individuals

with a normal BMI demonstrated the highest risk of eating disorders, followed by overweight and obese individuals [15].

Such discrepancies may be attributed to contextual and occupational differences between study populations. Nursing professionals in the present setting frequently experience demanding work schedules, long shifts, high levels of occupational stress, irregular meal patterns, and limited opportunities for self-care. These conditions may contribute to emotional eating, unhealthy dietary patterns, and increased preoccupation with body weight and appearance.

Furthermore, the predominance of female participants in the current study may also influence the findings, as women are generally more susceptible to body dissatisfaction and societal pressures related to body image. Cultural attitudes toward body weight in healthcare environments may further intensify these concerns, particularly among individuals with higher BMI.

The association between elevated BMI and eating disorder risk observed in the present study is also supported by earlier research conducted among hospital-based nurses, which identified links between higher BMI, reduced job performance, and increased vulnerability to disordered eating behaviours [16].

Studies conducted among nursing students have reported a comparatively lower prevalence of eating disorder risk, suggesting that the

occupational stress experienced by practicing nurses may play a significant role in increasing susceptibility [17].

The overall prevalence observed in the present study is comparable to findings reported in other Indian populations, where approximately one-quarter of individuals were identified as being at risk for eating disorders [18].

Similar patterns have also been noted in adult populations, indicating that eating disorder risk is not limited to adolescents but extends across different age groups and professional settings [19].

Evidence from fitness-related professions has also demonstrated gender-related differences in eating disorder risk, with females showing greater vulnerability; however, such differences were not observed in the present study, possibly due to cultural or occupational variations [20].

The complex relationship between BMI, body image, and disordered eating has been highlighted in previous research, where body shape concerns were associated with BMI even when eating attitudes were not directly affected [21].

Lifestyle behaviors such as physical inactivity also appear to play a significant role. Studies among healthcare professionals have reported higher risk among individuals who do not engage in regular exercise compared with those who maintain active lifestyles [22].

These findings are consistent with the present study, where non-exercisers demonstrated a higher prevalence of eating disorder risk.

Comparable prevalence rates have also been observed in other populations with higher BMI levels, where overweight individuals showed a significantly increased risk of disordered eating behaviors [9].

Lifestyle factors such as irregular sleep patterns, stress, and unhealthy dietary habits have been identified as contributing factors, particularly among healthcare workers [23].

Such behavioral patterns are also reflected in the SCOFF responses observed in the present study, including concerns related to body image, loss of control over eating, and compensatory behaviors.

Overall, the present findings reinforce existing evidence that higher BMI, limited physical activity, and occupational stress may contribute to an increased risk of eating disorders among

nursing personnel. These results highlight the importance of workplace-based health promotion strategies, including structured wellness programmes, nutritional counselling, and stress-management interventions aimed at improving both physical and psychological well-being among healthcare professionals. Similar influences related to lifestyle behaviors and body-image pressures have also been reported in other populations, suggesting that broader sociocultural and environmental factors may contribute to the development of disordered eating patterns [24].

Strengths and limitations

This study provides unique insights by being the first to assess eating disorder risk specifically among nursing personnel, a group likely affected by occupational stress, irregular shifts, and limited time for self-care. It contributes new knowledge by comparing exercisers and non-exercisers and examining BMI-related risk. The use of a validated screening tool enhances the credibility of the findings.

However, the study had limitations, including a limited sample size-particularly among senior nursing staff-due to non-participation. The cross-sectional nature of the study limits causal inference, and since the study assessed only risk and not confirmed diagnoses, the actual prevalence may be over- or underestimated.

Another limitation relates to the self-reported nature of the SCOFF questionnaire. Participants' responses may have been influenced by personal interpretation of the questions or recall bias, which could have affected the accuracy of reporting certain eating-related behaviors.

Future research should focus on clinical confirmation of diagnoses using structured tools and larger, more diverse nursing populations. Longitudinal studies could explore the causal links between occupational stress, lifestyle behaviors, and eating disorders.

Intervention programs promoting healthy coping skills, physical activity, and balanced nutrition should be designed and evaluated to support nursing professionals' well-being.

Conclusion

This study suggests that approximately one-third of nursing personnel were at risk of eating disorders, with a higher proportion among non-exercisers.

BMI ≥ 25 and marital status showed associations with eating disorder risk among non-exercisers.

These findings highlight the importance of regular screening, promotion of physical activity, and workplace-based health interventions to support the well-being of nursing professionals.

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Author Contributions

Conceptualization, V.K.; Methodology, V.K. and A.Y.; Investigation and data collection, A.Y.; Data analysis, V.K. and A.Y.; Manuscript writing and initial draft preparation, A.Y.; Manuscript review and editing, V.K.; Supervision, V.K.

All authors read and approved the final manuscript.

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Conflict of Interest

The author declares no competing interests.

Institutional Review Board Statement

The study was conducted according to the guidelines of the ICMR National Ethical Guidelines for Biomedical and Health Research involving Human Participants (2017) and approved by the Institutional Ethics Committee of Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry (Approval No.: JIP/IEC-OS/2024/84; Date: 08.06.2024).

Consent Statement

Written informed consent was obtained from all participants prior to their participation in the study.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

References

1. Almoraie NM, Alothmani NM, Alomari WD, Al-amoudi AH. Addressing nutritional issues and eating behaviours among university students: a narrative review. *Nutr Res Rev*, 2025, 38(1):53-68.
2. Fairburn CG, Harrison PJ. Eating disorders. *Lancet*, 2003, 361(9355):407-416.
3. Vilela JEM, Lamounier JA, Dellaretti Filho MA, Barros RJ, Horta GM. Transtornos alimentares em escolares. *J Pediatr (Rio J)*, 2004, 80(1):49-54.
4. Diniz ZMA. Transtornos alimentares: epidemiologia, etiologia e classificação. *Nutr Prof*, 2007, 11(1):12-20.
5. National Institute of Mental Health, 2023, Eating disorders [online]. Available at: <https://www.nimh.nih.gov/health/topics/eating-disorders> [Accessed 12.10.2023].
6. Liu Y, Cao Y. The effect of exercise motivation on eating disorders in bodybuilders in social networks: the mediating role of state anxiety. *Comput Math Methods Med*, 2022, 2022:7426601.
7. Mond JM, Owen C, Hay P, Rodgers B, Beumont P. Assessing quality of life in eating disorders. *Aust N Z J Psychiatry*, 2005, 39(6):546-553.
8. Resende ADS, Vieira DAdS, Mendes-Netto RS. Dissatisfaction-related food behavior is associated with a risk of eating disorders in physically active women. *Nutr Clin Diet Hosp*, 2017, 37(1):141-148.
9. Sathyanarayana P. Risk of eating disorders among different categories of population residing in Bangalore city-a cross-sectional survey. *World J Pharm Med Res*, 2021, 7(6):229-233.
10. Krishnasamy V, Jayaram KM, Jayaseelan V. Protocol of randomized controlled trial to evaluate the effectiveness of nurse-led intervention on weight reduction among adults with obesity in urban areas of Puducherry. *Indian J Endocrinol Metab*, 2023, 27(2):154-154.
11. Lim JU, Lee JH, Kim JS, Hwang YI, Kim TH, Lim SY, Kim YH, Rhee CK, Yoo KH, Jung KS, Kim YK, Uh ST, Shim JJ, Park CS, Kim KU, Lee SH, Lee SD, Oh YM. Comparison of World Health Organization and Asia-Pacific body mass index classifications in COPD patients. *Int J Chron Obstruct Pulmon Dis*, 2017, 12:2465-2475.
12. PsychTools, 2023, SCOFF questionnaire [online]. Available at: <https://www.psychtools.info/scoff> [Accessed 12.10.2023].
13. Morgan JF, Reid F, Lacey JH. The SCOFF questionnaire: assessment of a new screening tool for eating disorders. *BMJ*, 1999, 319(7223):1467-1468.
14. Mazzaia MC, Santos RM. Risk factors for eating disorders among undergraduate nursing students. *Acta Paul Enferm*, 2018, 31(4):456-462.

15. Lahlou L, Ziouziou I, Abdelnaby A, Kharroubi A, Wakrim S, Mouhadi K, Lamrani H, Boubkr S. Depression and eating disorders among health care professionals in Morocco during the COVID-19 pandemic. *Electron J Gen Med*, 2022, 19(5):em388.
16. Ku B, Phillips KE, Fitzpatrick JJ. The relationship of body mass index (BMI) to job performance, absenteeism and risk of eating disorder among hospital-based nurses. *Appl Nurs Res*, 2019, 49:77-79.
17. Shrestha A, Maharjan SK, Mehta M, Pradhan R, Dhungana S, Joshi P. Assessment on risk of developing eating disorder and body shape concern among undergraduate nursing students. *J Chitwan Med Coll*, 2024, 14(47):84-88.
18. Nivedita N, Sreenivasa G. Eating disorders: prevalence in the student population of Mysore, South India. *Indian J Psychol*, 2018, 60(4):433-437.
19. França-Botelho C, Silva A, Mesquita J. High risk of eating disorders in adults shows the need for more nutritional education actions. *Int J Innov Educ Res*, 2018, 6(5):103-108.
20. Bratland-Sanda S, Nilsson MP, Sundgot-Borgen J. Disordered eating behavior among group fitness instructors: a health-threatening secret? *J Eat Disord*, 2015, 3(1):22-28.
21. Balhara YP, Mathur S, Kataria DK. Body shape and eating attitudes among female nursing students in India. *East Asian Arch Psychiatry*, 2012, 22(2):70-74.
22. Mohammed Hussien R, Riad Al Khalifa A. Eating disorders and associated risk factors among healthcare providers at Al-Qassim Region, Saudi Arabia. *Egypt J Health Care*, 2024, 15(1):589-602.
23. Halmi KA, Falk JR, Schwartz E. Binge-eating and vomiting: a survey of college population. *Psychol Med*, 1981, 11(4):697-706.
24. Al-Jumayan AA, Al-Eid NA, AlShamlan NA, AlOmar RS. Prevalence and associated factors of eating disorders in patrons of sport centers in Saudi Arabia. *J Family Community Med*, 2021, 28(2):94-102.

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