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DIETARY HABITS AMONG HEALTH CARE WORKERS DURING WORKING HOURS

BY

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Abstract

Introduction: Unhealthy dietary habits among healthcare workers (HCWs) pose significant risks to their health and productivity, exacerbated by long working hours, shift work, and workplace stressors. **Aim of Work:** To assess dietary habits, identified barriers to healthy eating, and evaluated the impact of poor nutrition on productivity among HCWs at Tanta University Hospitals, Egypt. **Materials and Methods:** A cross-sectional study was conducted from June to December 2024, involving 500 HCWs (250 physicians, 250 nurses) selected via stratified convenience sampling. Data were collected using a validated questionnaire covering socio-demographics, dietary habits, workplace barriers, perceived impacts on health and performance. Results: Both physicians and nurses reported poor dietary habits, including meal skipping (28.4% physicians, 37.6% nurses), high consumption of sweets (21.2% versus 38.4%), and reliance on caffeine (39.6% versus 45.6%). Long working hours (38% physicians, 44% nurses) and shift work were key barriers. Over 70% agreed that poor diets impaired physical health, energy, and productivity. Nurses reported stronger associations between unhealthy eating and productivity loss ($p = 0.001$). Abnormal Body Mass Index (BMI) correlated with worse perceptions of dietary impacts on energy ($p = 0.023$) and absenteeism ($p = 0.021$). Most participants endorsed workplace interventions like healthier food options (83.2% physicians, 74.8% nurses). **Conclusion and Recommendations:** HCWs at Tanta University Hospitals exhibit unhealthy eating patterns linked to occupational demands, negatively affecting their health and performance. Institutional measures, such as improved meal access and nutrition programs, are urgently needed to support HCP (Health Care Professionals) well-being and enhance patient care.

Keywords: Dietary habits, Healthcare workers, Productivity, Shift work and Workplace nutrition.

Introduction

Unhealthy eating habits, such as an imbalanced diet, are significant risk factors for numerous illnesses worldwide, including cardiovascular disease, diabetes, and various cancers leading to higher healthcare costs (Al-Jawaldeh and Abbass 2022; Znyk and Kaleta2024).

Healthcare workers (HCWs) face work-related challenges that impact their health, diet, and lifestyle. Shift work schedules can disrupt regular eating habits, making it difficult for HCWs to decide what, when, and where to eat during work hours (Migdanis et al., 2024). They often consume convenience meals, high-fat, and sugary foods instead of the recommended fruits and vegetables (Gupta et al., 2019; Wolska et al., 2022). Although total calorie consumption may not differ significantly between shift workers and daytime workers, shift workers tend to have poorer eating habits (Betancourt-Nuñez et al., 2018). Various studies have shown that shift workers have different nutritional patterns and food preferences (Al Hazmi et al., 2018). Factors such as long working hours, shift work, fast food availability, stress-related eating, and environmental influences contribute to poor dietary habits among HCWs, potentially reducing their productivity (Monaghan et al., 2018).

Faugier et al. (2021) identified workload, insufficient breaks, and limited access to nutritious food as barriers to healthy eating in the nursing profession. Monaghan et al. (2018) noted that HCWs often engage in unhealthy eating habits due to heavy workloads and prioritizing patient needs over their own, making it difficult to take meal breaks.

Inadequate workplace nutrition negatively impacts HCWs' personal wellness, professional performance, and productivity. Unhealthy diets can lead to low energy levels, making it challenging for physicians to concentrate and work efficiently. Consuming processed foods and sugar can cause blood sugar fluctuations, leading to fatigue and drowsiness. Poor diets can also increase absenteeism, as physicians with diet-related chronic illnesses may miss work for medical treatment or recovery (Pineda et al., 2022).

Aim of Work

To assess dietary habits, identified barriers to healthy eating, and evaluated

the impact of poor nutrition on productivity among HCWs at Tanta University.

Material and Methods

Study design: It was an observational cross-sectional design.

Place and duration of study: the study was conducted at Tanta University Hospitals, El Gharbia, Egypt, from June to December 2024.

Study sample: the study involved 500 HCWs at Tanta University including 250 physicians and 250 nursing staff who were chosen by convenient sampling (non-probability sampling). The sample size was calculated using an Open Epi epidemiologic calculator based on 95% confidence interval and 80% power of the study and effect size 2 with the expected prevalence of junk food consumption among healthcare workers according to Bielsky et al., study. The calculated sample was 404 that were increased to 500.

Study methods: Data was collected via predesigned **self-administrated questionnaire** sheet to explore the various dietary habits among the studied group that was adapted from Bielsky et al., (2022). The questionnaire sheet is composed of :

- **Part I:** Included four questions about socio-demographic data and occupational related characteristics: e.g. age, sex, residence, marital status and five questions about specialty, duration of work, weight and height, working shift and covering on calls.
- **Part II:** Included seven questions to assess dietary habits of the participants during working hours and at home: e.g. Number of meals during working hours: 1) None 2) One meal 3) Two meals 4) Three meals 5) More than three meals, Binge eating at home after work: 1) Always 2) Frequently 3) Rarely 4) Never.
- **Part III:** Included degree of opinion of the participants about five statements reflecting their opinion about barriers to healthy dietary habits at work: e.g. long working hours.

- **Part IV:** Included degree of opinion of the participants about seven statements reflecting their opinion about the impact of bad dietary habits during work.

Questions from part III and IV were measured using a 5-point Likert scale (1 to 5) from strongly disagree to strongly agree. The questionnaire was evaluated by three experts, one in statistics and two in Occupational Medicine. The tool was tested in a pilot study with 35 healthcare

workers from various specialties before being finalized. The pilot testing aimed to ensure the questionnaire's relevance and reliability prior to comprehensive data collection. Minor modifications were implemented to enhance the clarity of questions and ensure cultural appropriateness, based on the input received. Internal consistency was evaluated using Cronbach's alpha, which yielded a value of 0.86.

In the current study, healthy dietary habits were defined based on participants› self-reported perceptions, which may have included regular consumption of fruits, vegetables, whole grains, legumes, nuts, and seeds; moderate intake of lean proteins such as fish, poultry, and plant-based sources; limited consumption of processed foods, added sugars, and refined grains; adequate hydration primarily with water rather than sugary beverages. An unhealthy diet is defined by a high intake of processed foods, including sugary snacks, fast food, refined grains, and packaged meals loaded with artificial additives. It also involves excessive consumption of sweetened beverages (Pineda et al., 2022).

Consent

Subjects were informed about the purpose of the study and benefits of sharing in it. Written informed consents were signed by all participants before being enrolled in the study.

Ethical Approval

The present study was approved by the Faculty of Medicine Tanta University Research Ethics Committee with approval code 36264PR636/4/24 and was conducted following the ethical guidelines of the Declaration of Helsinki October 2013. Confidentiality was ensured.

Data Management

Statistical analysis was performed using SPSS for Microsoft Windows version 27. Categorical data was presented as number and percentage. Numerical data was presented by mean and slandered deviation. Chi square was used to assess the difference between the categorical data. Statistical significance was adopted at $p < 0.05$.

Results

The study involved 500 healthcare workers (250 physicians and 250 nurses). The mean age of physicians was 30.1 ± 5.9 years, while nurses had a similar mean age of 29.8 ± 5.8 years, with no significant difference between the two groups (p=0.58). Regarding to gender distribution, a 62.0% of nurses were female compared to 54.0% physicians, though this difference was not statistically significant (p=0.15). There was no significant difference in marital status between physicians and nurses (p = 0.82). Among physicians, 40.0% were married, 34.0% single, 24.0% engaged, and 2.0% divorced/widowed. Nurses showed a similar distribution: 39.2% married, 37.2% single, 20.0% engaged, and 3.6% divorced/widowed (non-tabulated data).

Table (1): Occupational characteristics of the studied health care professionals.

Characteristics	Physicians (No=250)	Nurses (No =250)	p-value
Specialty/Departments			
Internal Medicine	85 (34.0%)	48 (19.2%)	**0.01***
General Surgery	50 (20.0%)	26 (10.4%)	
Obstetrics/Gynecology	15 (6.0%)	22 (8.8%)	
Pediatrics	40 (16.0%)	36 (14.4%)	
Emergency Medicine	25 (10.0%)	15 (6.0%)	
Others	35 (14.0%)	103 (41.2%)	
Working hours/ day			
>8	162 (64.8%)	169 (67.3%)	0.602
≤8	88 (35.2%)	81 (32.7%)	
Shift type			
Day shift	158 (63.2%)	110 (44.0%)	**0.004***
Night shift	92 (36.8%)	141 (56.4%)	
On-call coverage			
Yes	128 (51.2%)	181 (72.4%)	**<0.001***
NO	122 (48.8%)	69 (27.6%)	

*: Statistically significant

Others: cardiology, chest, tropical, neuropsychiatry, neurosurgery and urology departments

Table (1) showed that there were significant differences in specialty/ department distribution (p=0.01), with physicians more frequently working in Internal Medicine (34.0%) and General Surgery (20.0%), while nurses were more likely to be assigned to other departments (41.2%). Regarding work-related factors, most participants worked more than 8 hours per day, with no significant difference between physicians and nurses (p=0.602). However, shift type differed significantly (p=0.004), with a higher proportion of nurses working night shifts (56.4%) compared to physicians (36.8%). Additionally, on-call coverage was significantly more common among nurses (72.4%) compared to physicians (51.2%, p<0.001).

Table (2): Dietary habits of the participants during working hours.

Dietary habits No.		Physicians (No =250)		Nurses (No =250)		X^2 (P value)
		%	No.	%		
Skip any meal	NO	57	22.8	30	12.0	**0.02***
	Breakfast	65	26.0	65	26.0	
	Lunch	23	9.2	28	11.2	
	Diner	34	13.6	33	13.2	
	More than one meal	71	28.4	94	37.6	
Bringing food from home.	Always	53	21.2	18	7.2	**0.001***
	Frequently	70	28.0	101	40.4	
	Rarely	81	32.4	95	30.0	
	Never	46	18.4	36	14.1	
Buying food from hospital catering.	Always	54	21.6	32	12.8	**0.015***
	Frequently	123	49.2	118	47.2	
	Rarely	56	22.4	81	32.4	
	Never	17	6.8	19	7.6	
Food items usually consumed during working hours.	Fruits and vegetables	53	21.2	73	29.2	0.25
	Dairy products	34	13.6	55	22.0	
	Sweets	53	21.2	96	38.4	
	Cereals/bread	45	18.0	62	24.8	
	Meat /fish/eggs	22	8.8	61	24.4	
Drinks usually consumed during working hours.	Coffee	99	39.6	114	45.6	**0.06***
	Tea	86	34.4	117	46.8	
	Energy drinks	21	8.4	28	11.2	
	Natural juice	17	6.8	49	19.6	
	Milk	4	1.6	24	9.6	
	Soft drinks	11	4.4	44	17.6	
	Others	12	4.8	44	17.6	

*: Statistically significant.

Table 2 revealed that physicians were significantly more likely to skip meals compared to nurses (22.8% versus 12.0%, p=0.02), particularly lunch, though breakfast skipping rates were equal (26%). Nurses missed multiple meals more frequently (37.6% versus 28.4%). Meal patterns differed substantially, with half of physicians (50.4%) eating just one meal at work versus only 10.4% of nurses, while more nurses ate three meals (37.6% versus 5.6% physicians, p=0.002). Nurses were significantly more likely to bring food from home (40.4% versus 28% physicians, p=0.001) and showed different food preferences, consuming more sweets (38.4% versus 21.2%), meat/fish/eggs (24.4% versus 8.8%), and beverages including tea, coffee, soft drinks, and natural juice.

Table (3): Barriers to healthy dietary habits at the workplace among the studied participants.

Factors	Profession	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	P-value
Long working hours	**Physicians**	8 (3.2%)	31(12.4%)	34 (13.6%)	82 (32.8%)	95 (38.0%)	**0.013***
	Nurses	16 (6.4%)	12 (4.8%)	37 (14.8%)	75 (30.0%)	110 (44.0%)	
Shift work	**Physicians**	9 (3.6%)	15 (6.0%)	39 (15.6%)	103 (41.2%)	84 (33.6%)	0.08
	Nurses	4 (1.6%)	9 (3.6%)	60 (24.0%)	98 (39.2%)	79 (31.6%)	
Availability of fast food	**Physicians**	14 (5.6%)	21 (8.4%)	76 (30.4%)	81 (32.4%)	58 (23.2%)	0.38
	Nurses	7 (2.8%)	28(11.2%)	82 (32.8%)	83 (33.2%)	50 (20.0%)	

Eating as coping mechanism	**Physicians**	12 (4.8%)	55(22.0%)	61 (24.4%)	90 (36.0%)	32 (12.8%)	0.18
	Nurses	7 (2.8%)	49(19.6%)	77 (30.8%)	75 (30.0%)	42 (16.8%)	
Putting patients› needs first	**Physicians**	11 (4.4%)	12 (4.8%)	53 (21.2%)	117 (46.8%)	57 (22.8%)	0.52
	Nurses	13 (5.2%)	21 (8.4%)	52 (20.8%)	106 (42.4%)	58 (23.2%)	

*: Statistically significant.

Table 3 showed that both physicians (38%) and nurses (44%) strongly agreed that lengthy working hours affected healthy eating, with a statistically significant difference (p=0.013). Both groups agreed that shift work was a barrier to healthy eating, reactions to the availability of fast food at work were more neutral, the tendency to use food as a maladaptive coping method under stress was also investigated, putting patients' needs first emerged as another common barrier to healthy eating; but the difference was not statistically significant.

Table (4): Impact of dietary habits at the workplace on health and performance.

Response	Profession	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	P-value
Negative impact on physical health	**Physicians**	0 (0.0%)	12(4.8%)	20 (8.0%)	124(49.6%)	94(37.6%)	**0.001***
	Nurses	7 (2.8%)	4 (1.6%)	28(11.2%)	133(53.2%)	78(31.2%)	
Negative impact on mental health	**Physicians**	2 (0.8%)	10(4.0%)	65(26.0%)	118(47.2%)	55(22.0%)	0.80
	Nurses	4 (1.6%)	14(5.6%)	59(23.6%)	119(47.6%)	54(21.6%)	

Negative impact on concentration	**Physicians**	1 (0.4%)	4 (1.6%)	45(18.0%)	117(46.8%)	83(33.2%)	0.17
	Nurses	2 (0.8%)	10(4.0%)	56 (22.4%)	117(46.8%)	65(26.0%)	
Negative impact on work performance	**Physicians**	0 (0.0%)	15(6.0%)	54 (21.6%)	100(40.0%)	81(32.4%)	0.43
	Nurses	2 (0.8%)	15(6.0%)	42 (16.8%)	104(41.6%)	87(34.8%)	
Increased absenteeism	**Physicians**	4 (1.6%)	34(13.6%)	84 (33.6%)	78(31.2%)	20.0%))50	0.07
	Nurses	17(6.8%)	34(13.6%)	60 (24.0%)	95(38.0%)	44(17.6%)	
Negative impact on productivity	**Physicians**	24(9.6%)	108(43.2%)	102(40.8%)	12 (4.8%)	4 (1.6%)	**0.001***
	Nurses	2 (0.8%)	25 (10.0%)	56 (22.4%)	109 (43.6%)	58 (23.2%)	

*: Statistically significant.

Table 4 demonstrated a statistically significant difference regarding the effect on physical health (p=0.001), with more physicians strongly agreeing that their dietary habits negatively impacted their physical health compared to nurses. However, no significant differences were noted in perceptions of the effect on mental health (p=0.80) and concentration (p=0.17), work performance (p=0.43) and absenteeism (p=0.07). A significant difference was found in the perceived negative impact on productivity (p=0.001), where nurses were more likely to agree or strongly agree that poor dietary habits negatively affected their productivity, while physicians predominantly disagreed.

Table (5): Relationship between Body Mass Index (BMI) and the health effects among health care workers.

	Response category	Normal BMI	Abnormal BMI	P-value
Dietary habits at work have a negative impact on physical health	Strongly disagree	3 (42.9%)	4 (57.1%)	0.549
	Disagree	9 (56.3%)	7 (43.8%)	
	Neutral	30 (62.5%)	18 (37.5%)	
	Agree	146 (56.8%)	111 (43.2%)	
	Strongly Agree	90 (52.3%)	82 (47.7%)	
Dietary habits affect mental health	Strongly disagree	3 (50.0%)	3 (50.0%)	0.655
	Disagree	14 (58.3%)	10 (41.7%)	
	Neutral	68 (54.8%)	56 (45.2%)	
	Agree	133 (56.1%)	104 (43.9%)	
	Strongly Agree	60 (55.0%)	49 (45.0%)	
Dietary habits affect energy/concentration	Strongly disagree	1 (33.3%)	2 (66.7%)	**0.023***
	Disagree	10 (71.4%)	4 (28.6%)	
	Neutral	63 (62.4%)	38 (37.6%)	
	Agree	137 (58.5%)	97 (41.5%)	
	Strongly Agree	67 (45.3%)	81 (54.7%)	
Dietary habits affect work performance	Strongly disagree	0 (0.0%)	2 (100.0%)	0.512
	Disagree	17 (56.7%)	13 (43.3%)	
	Neutral	55 (57.3%)	41 (42.7%)	
	Agree	114 (55.9%)	90 (44.1%)	
	Strongly Agree	92 (54.8%)	76 (45.2%)	
Dietary habits lead to absenteeism	Strongly disagree	12 (57.1%)	9 (42.9%)	**0.021***
	Disagree	36 (52.9%)	34 (50.0%)	
	Neutral	91 (63.2%)	53 (36.8%)	
	Agree	85 (49.1%)	88 (50.9%)	
	Strongly Agree	56 (59.6%)	38 (40.4%)	
Concentrate/work effectively with higher energy	Strongly disagree	3 (60.0%)	2 (40.0%)	**0.004***
	Disagree	10 (76.9%)	3 (23.1%)	
	Neutral	75 (60.5%)	49 (39.5%)	
	Agree	131 (53.5%)	114 (46.5%)	
	Strongly Agree	58 (51.3%)	55 (48.7%)	
Negative impact on productivity	Strongly disagree	17 (65.4%)	9 (34.6%)	**0.004***
	Disagree	62 (46.6%)	71 (53.4%)	
	Neutral	70 (44.3%)	76 (48.1%)	
	Agree	79 (65.3%)	42 (34.7%)	
	Strongly Agree	32 (51.6%)	24 (38.7%)	

*: Statistically significant. Normal BMI: between 18.5 and 24.9 Abnormal BMI: Below 18.5 and above 25

Table 5 revealed significant associations between dietary habits at work and BMI categories. Abnormal BMI (combining underweight, overweight, and obese) was significantly associated with perceptions that dietary habits affected energy and concentration (p=0.023), with 54.7% of strongly agreeing respondents falling into the abnormal BMI category. Similarly, abnormal BMI showed a significant relationship with dietary habits leading to absenteeism (p=0.021), where 50.9% of agreeing respondents had abnormal BMI. The ability to concentrate and work effectively with higher energy showed the strongest association (p=0.004), with 48.7% of strongly agreeing participants having abnormal BMI. The negative impact on productivity also demonstrated significant differences (p=0.004), where 34.7% of agreeing respondents had normal BMI compared to 65.3% with abnormal BMI.

Discussion

Poor dietary habits are a well-known modifiable risk factor for chronic conditions such as metabolic syndrome, diabetes, obesity, and cardiovascular diseases (Bielsky et al., 2022 and Boivin et al., 2022). Therefore, identifying unhealthy behaviors in healthcare organizations and their effects on physical, mental, and occupational performance provides crucial data for health policy and decision-makers to implement effective preventive and health promotion measures (Sooriyaarachchi et al., 2022).

The current study found that both physicians and nurses reported long working hours, with over 60% working more than 8 hours per day (Table 1). Nurses were more likely than physicians to work nights, split hours, and be on call, likely due to hospital staffing protocols designed to ensure constant patient coverage (Utter et al., 2023). Irregular or long work hours are linked to poor dietary choices, increased consumption of calorie-dense and nutrient-poor foods (Dobrowolski et al., 2022).

The findings also showed that shift work and heavy workloads lead to missed meals and reliance on hospital catering or fast food (Table 2). Physicians were more likely to skip at least one meal, while nurses were more likely to skip multiple meals illustrating the complex interactions between individual preferences, occupational roles, and shift work in influencing eating habits (Sooriyaarachchi et al., 2022). Physicians often bought food from hospital

catering (21.6% versus 12.8% for nurses), while nurses frequently brought meals from home (40.4% versus 28% for physicians) (Table 2). Time and resource limitations frequently hinder the ability to follow through on these well-meaning plans for meal preparation (Basulaiman et al., 2015).

Sweets were the most preferred food items among healthcare workers (Table 2), likely due to their quick energy boost (Li et al., 2023). Sweets elicit neurobiological responses influencing consumption due to their caloric and hedonic value resulting in neurological adaptations to avoid withdrawal symptoms, leading to excessive sugar intake over time (Neelakantan et al., 2022 and Lin et al., 2025).

The studied nurses consumed a higher percentage of sweets, meats, soft drinks, and juices during work, while physicians were more likely to limit themselves to a single meal (Table 2). The preference for quick-energy snacks among nurses reflects their need for immediate energy during busy shifts, though this can lead to glycemic fluctuations (Lin et al., 2019). Coffee and tea consumption was also more common among nurses (Table 2), with caffeine enhancing alertness and mental processes, though it raises concerns about sleep quality and stress levels (Shrivastava et al.,2024). A study by O'Callaghan et al., 2018 also showed that physicians who work long hours consume more caffeine to enhance performance.

Both physicians and nurses identified long working hours as a primary barrier to healthy eating (Table 3). This aligned with the findings from Hong Kong Public Hospitals, where healthcare professionals often have limited time for meal breaks due to demanding schedules. Key barriers included emotional eating triggered by work stress, inconsistent schedules, limited availability of nutritious foods, and workplace social dynamics (Ling et al., 2025). Physicians might have more variable schedules but also experience pressures related to patient load, administrative tasks, and extended on-call periods (Sooriyaarachchi et al., 2022).

Similarly, Winston et al. (2008) found that less than half of responding physicians reported taking regular lunch breaks, citing limited dining room hours, lack of choice, and lack of breaks as the most common barriers to healthy eating at work. Physicians mentioned being too busy to think about food, having no time during the work-

day to stop and eat making it difficult to access food regularly. Persson and Mårtensson (2006) found that fatigue and lack of time negatively affected the diet and exercise habits of nurses working at night, leading to poor nutritional habits and increased risk of obesity.

Eating as a maladaptive coping mechanism while under stress was another challenge. Although there was no statistically significant difference between physicians and nurses, around 30–36% in both groups acknowledged this pattern (Table 3). High stress levels in healthcare settings lead to "emotional eating" or consumption of energy-dense "comfort foods." In Saudi Arabia, Almajwal , (2016) found that all eating styles, stress, and shift duty influenced the amount of food nurses consumed, but it was more significant under a restrained eating style. Under this eating style, a significantly higher percentage of nurses reported eating more fast food, snacks, and binging, while fruits and vegetables were the least likely to be eaten under stress. Highly stressed nurses were more likely to exhibit abnormal restrained eating (Almajwal, 2016).

A study in Korea found a significant positive correlation between emotional labor, job stress ($r= .570$, $p=<.001$), and eating attitudes ($r= .114$, $p<.05$) (Im and Cho, 2014). These findings suggest that work environments significantly influence dietary behaviors (Shrivastava et al., 2024).

Regarding the consequences of poor dietary habits, most studied participants (both physicians and nurses) agreed that they have a negative impact on physical health and the difference was statistically significant ($p = 0.001$) (Table 4). Regarding mental health, there were no significant differences between the two groups, and the association between diet and psychological well-being was generally observed. Nutrient-dense meals have been associated with better mental health outcomes, and diet quality is increasingly recognized for its role in mood regulation (Grajek et al., 2022).

Additionally, poor eating habits can impair concentration level and productivity at work. More than 70% of respondents in both studied groups agreed or strongly agreed with these assertions (Table 4). These findings were consistent with previous studies on workplace productivity, which showed that nutrient-deficient diets contribute to fatigue and cognitive deficiencies,

reducing the efficiency and had a significant negative impact on their professional performance (Ydyrysheva et al., 2022). Nurses were significantly more likely than physicians to associate healthy eating with greater productivity ($p = 0.001$) (Table 4). This could be related to nurses› frontline patient-care responsibilities resulting in a better understanding of how food influences performance.

There was a significant association between abnormal BMI and negative perceptions of dietary habits on energy, concentration, absenteeism, and productivity among studied healthcare workers (Table 5). These results aligned with previous studies emphasizing the impact of BMI on occupational health outcomes. For instance, Mizia et al. (2022) reported that overweight and obese employees experienced higher levels of fatigue and reduced work performance compared to those with normal BMI. Similarly, Paterson et al. (2021) found that poor dietary habits and higher BMI were linked to decreased cognitive function and energy levels during work hours. There was no significant relationship between BMI and the perceived impact of dietary habits on mental health (Table 5). This discrepancy may be due to differences in occupational demands or stress levels specific to healthcare environments (Mancin et al., 2023).

Institutional policies that ensure lunch breaks provide affordable nutritional meal options, and address staffing shortages may help to reduce stress while encouraging healthier eating habits. Integrating such measures enhances not just personal wellness but also patient outcomes by increasing staff attentiveness, reducing errors, and lowering burnout rates (Paterson et al., 2021). Physicians and nurses who adopt healthy eating habits are more likely to be credible role models and confident in providing nutrition counseling to their patients (Pineda et al., 2022).

Conclusion: The studied physicians and nurses have bad eating habits, including excessive sweets, coffee use, and binge eating, which might affect their health and performance. Overall, the study revealed challenges for physicians and nurses in maintaining a healthy diet, including long hours, shift work, an excessive workload, insufficient break time, limited access to healthy food options, and professional stress.

Recommendations: To mitigate the negative impact of unhealthy diets on HCWs' productivity and absenteeism, promoting healthy eating habits in the workplace is crucial .This can be achieved through nutrition education and awareness programs and encouraging healthy meal practices .Hospital administrators should ensure the availability of nutritious, affordable meal options in cafeterias, including fresh fruits, vegetables, and balanced meals. Additionally, designated break areas should be provided to encourage regular meal consumption during shifts. Structured nutrition education programs should be introduced to raise awareness about healthy eating, meal planning, and the risks of poor dietary habits. Clear policies should be enforced to guarantee adequate meal breaks, especially for shift workers. Hospitals should consider staggered shifts or additional staffing to reduce workload pressures that lead to skipped meals and reliance on fast food.

Study Limitations: The study has several important limitations that must be acknowledged. Due to its cross-sectional design, it could not establish temporal relationships between variables, limiting the ability to infer causality. Additionally, relying on self-reported data may have led to overestimation or underestimation of responses, as participants could be affected by recall bias or social desirability bias. To improve accuracy, future research could incorporate objective methods, such as dietary logs or wearable sensors, to track real-time eating habits and energy expenditure. However, since the study did not provide participants with a standardized definition of healthy eating based on national dietary guidelines, variations in individual interpretations may have influenced responses as it introduces potential subjectivity in how healthy eating habits were perceived and reported.

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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