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THE IMPORTANCE OF ORGANIZATIONAL SUPPORT IN PREVENTING OBESITY AMONG NURSES IN HOSPITALS

Rio Verdiansyah* , Hanny Handiyani, Tuti Afriani, Enie Novieastari, Andi Amalia Wilda, Joan Xaveria Mahulae
Master's Program in Nursing Science, Faculty of Nursing, Universitas Indonesia, Jl. Prof. DR. Sudjono D. Pusponegoro, atau Jl. Prof. Dr. Bahder Djohan, Pondok Cina, Beji, Depok, Jawa Barat 16424, Indonesia
*rioverdiansyah91@gmail.com

ABSTRACT
Obesity in nurses is a growing occupational health problem and has implications for the quality of service and patient safety. Organizational support is seen as an important resource within the nursing management framework that can shape a health-promoting work environment and lower the risk of obesity. To analyze the relationship between organizational support and the incidence of obesity in nurses in hospitals. A quantitative study with a cross-sectional design was conducted on 227 nurses in a teaching hospital by 2025 nurses were selected as the sample using a purposive sampling technique. Obesity status is determined based on Body Mass Index (BMI). Organizational support was measured using a structured questionnaire that has been tested for validity and reliability. The analysis was carried out in univariate, bivariate, and multivariate logistic regression with a significance level of $p < 0.005$. The prevalence of obesity in nurses was 57.3%. Bivariate analysis showed that organizational support was significantly related to obesity incidence ($p < 0.005$). In a multivariate analysis, nurses with low organizational support were 5.582 times more likely to be obese than nurses with good organizational support (OR = 5.582; 95% CI: 2.064–15.094; p = 0.001), after controlling for confounding variables. Organizational support is a strong independent determinant of obesity in nurses.

Keywords: nursing; nursing management; obesity; organizational support

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INTRODUCTION

Organizations play a fundamental role in creating a work environment that supports nurses' health, including obesity prevention, through appropriate policies and adequate resources. Perceived organizational support enhances nurses' psychological and physical well-being, which is a critical prerequisite for enabling them to adopt healthy behaviors such as involving in physical activity and maintaining a balanced diet to prevent obesity (Erbay Dalli, 2025). Research by Zheng et al. (2024) shows that perceived organizational support is positively correlated with nurses' occupational well-being, an important determinant of healthy workplace behaviors and their ability to respond to work-related stress that may influence obesity risk (perceived organizational support has a direct impact on nurses' occupational well-being).

Within the Job Demands–Resources framework, which is widely used in nursing management, organizational support functions as a significant job resource that helps balance high job demands and reduce the risk of burnout and metabolic disorders (Huston, 2025). When organizations provide facilities and policies that enable nurses to maintain healthy eating patterns, access physical activity, have fair work schedules, and obtain adequate rest periods, these measures can reduce obesity risk factors associated with intensive work and excessive job stress. This model suggests that increasing organizational resources, such as managerial support and occupational health facilities, can reduce stress and improve overall workforce well-being (Bakker et al., 2023).

Organizational support is also closely associated with better work environments, which can reduce barriers to healthy behaviors among nurses. Systematic reviews of workplace-based interventions in hospitals indicate that many obesity-related barriers including limited break times, high workloads, and lack of access to healthy food options are organizational factors that must be addressed for obesity prevention programs to be effective ((NCD-RisC), 2024; Oktaviani et al., 2023). Interventions involving changes to the work context, such as promoting healthy food in cafeterias, providing exercise facilities, and strengthening leadership support, have been shown to improve staff health behaviors (Worley et al., 2022).

Furthermore, recent qualitative studies identify that barriers to healthy eating practices among nurses are often contextual and linked to organizational structure and culture, such as long shifts, high job demands, and unsupportive eating environments (Ahmad Sharoni et al., 2023; Cheng et al., 2023). These findings emphasize that obesity prevention among nurses cannot solely on individual behavior change but requires proactive organizational support through comprehensive occupational health, health policies promotion programs, and supportive facilities (Sajwani et al., 2024).

From a nursing management perspective, strategic unit planning and the integration of nurses' health indicators into organizational performance assessments (Key Performance Indicators – KPI) are essential to ensure sustainable and effective obesity prevention (WHO, 2025; World Obesity, 2025). When organizational support such as work schedule adjustments, provision of adequate rest areas, regular health education, and health indicator monitoring is incorporated into nursing KPIs, hospitals create accountability mechanisms that drive meaningful improvements in a healthy work environment. This approach aligns with occupational health principles recommended in many studies, emphasizing the importance of organizational focus on environmental and policy factors that support the long-term health of the workforce (Worley et al., 2022). The aims study to analyze the relationship between organizational support and the incidence of obesity in nurses in hospitals.

METHOD

This study employed a quantitative design with a cross-sectional approach. It was conducted in a teaching hospital in Indonesia in 2025. The study population consisted of all nurses working at the hospital. A total of 227 nurses were selected as the sample using a purposive sampling technique. The inclusion criteria were nurses who had worked for at least six months and were willing to participate by signing informed consent. The exclusion criteria included nurses who were on sick leave or elective leave, pregnant nurses, and those who were unable to complete the entire research process. The dependent variable in this study was the incidence of obesity among nurses, determined based on Body Mass Index (BMI). The independent variable was organizational support. Age, gender, education level, marital status, and years of service were treated as confounding variables.

Data collection was conducted using anthropometric measurements and structured questionnaires. Anthropometric measurements (such as body weight and height) were performed using standardized and calibrated instruments to ensure measurement accuracy. The structured questionnaires had been previously tested for validity and reliability; content validity was established through expert review, while construct validity was assessed using correlation analysis. Reliability testing demonstrated acceptable internal consistency, with Cronbach ' s alpha coefficient ≥ 0.70, indicating that the instrument was reliable. Data analysis included univariate, bivariate, and multivariate logistic regression analyses to identify determinants of obesity after controlling for potential confounding variables. Statistical significance was set at $p < 0.005$. This study also obtained ethical approval from the institutional research ethics committee.

RESULT

The results of Body Mass Index (BMI) measurements showed that the prevalence of obesity among nurses was 57.3%, while 42.7% were classified as non-obese. The majority of respondents were aged ≥35 years, female, married, and had ≥10 years of work experience. Most nurses reported low to moderate physical activity, moderate to high levels of work-related stress, and high workloads. Organizational support was generally perceived as good, although a proportion of nurses reported low levels of organizational support. Bivariate analysis indicated that physical activity, work stress, workload, and organizational support were significantly associated with obesity among nurses ($p < 0.005$). In contrast, individual characteristics such as gender, marital status, and years of service, as well as several behavioral and work environment factors, did not show statistically significant associations ($p > 0.005$). Variables that met the selection criteria were subsequently included in multivariate logistic regression analysis to identify independent determinants after controlling for confounding variables. The final model (Table 1) showed that low physical activity was significantly associated with obesity, with nurses having 5.842 times higher odds of obesity compared to those with moderate to high physical activity (OR = 5.842; 95% CI: 2.460–13.872; $p < 0.001$).

Table 1.
Results of the final model regression analysis (n=227)

Variable	B	SE	Wald	p	OR (Exp B)	95% CI OR
Physical Activity						
Low	1,765	0.441	15,987	<0.001	5,842	2,460 – 13,872
Work Stress						
Tall	-2,696	0.497	29,397	< 0.001	0.067	0.025 – 0.179
Organizational Support						
Low	1,719	0.508	11,477	0.001	5,582	2,064 – 15,094
Age						
< 35 years	3,982	0.635	39,332	<0.001	53,635	15,451 – 186,180

Low organizational support also showed a significant association with obesity. Nurses with low organizational support were 5.582 times more likely to be obese than nurses with good organizational support (OR = 5.582; 95% CI: 2.064–15.094; $p = 0.001$). These findings indicate that organizational support is a strong independent determinant of obesity after controlling for behavioral factors and individual characteristics. High job stress showed a significant relationship with a protective direction according to the coding in the model (OR = 0.067; 95% CI: 0.025–0.179; $p < 0.001$). In addition, age <35 years was the strongest factor associated with the incidence of obesity, with a 53.635 times greater chance compared to nurses aged ≥35 years (OR = 53.635; 95% CI: 15.451–186.180; $p < 0.001$).

DISCUSSION

The prevalence of obesity at 57.3% among nurses in this study indicates that obesity is not only an issue in the general population but also affects healthcare workers. Globally, the trend of obesity has increased significantly from 1990 to 2022 across children, adolescents, and adults, highlighting obesity as a global epidemic with serious implications for health systems (NCD Risk Factor Collaboration, 2024; WHO, 2025). Recent reports further emphasize that the global burden of obesity continues to rise and is projected to increase in the coming decades (World Obesity, 2025). These findings reinforce that nurses, as part of the productive workforce, are not exempt from systemic and structural risks of obesity.

The results of this study show that low organizational support is significantly associated with obesity, with 5.58 times higher odds compared to nurses with good organizational support. This finding underscores that obesity among nurses is not merely an issue of individual behavior but is also influenced by organizational factors. From the perspective of the Job Demands–Resources theory, organizational support acts as a job resource that helps balance work demands and reduces the negative impact of chronic stress on health (Bakker et al., 2023). When organizational resources

are limited, nurses are more vulnerable to fatigue, dysregulation of eating patterns, and reduced physical activity, which ultimately increases the risk of obesity.

This study is also consistent with findings that organizational support is positively correlated with professional well-being and quality of life among nurses. A study by Zheng J. demonstrated that perceived organizational support is significantly associated with nurses' professional well-being and quality of work. When organizations provide support through occupational health policies, a conducive work environment, and attention to work–life balance, nurses' psychological conditions and health behaviors become more adaptive. Conversely, a lack of organizational support may deteriorate professional quality of life and lead to suboptimal health behaviors (Zheng et al., 2024).

In the hospital context, structural barriers to healthy eating behaviors and physical activity often originate from the work system itself, such as shift schedules, limited break times, and restricted access to healthy food. A systematic review by Abeer I. Sajwani identified that workplace environment and organizational policies are key determinants of nurses' eating behaviors. This strengthens the finding that organizational support is not merely an administrative aspect but a determining factor that shapes either an obesogenic environment or a health-promoting one (Sajwani et al., 2024).

Furthermore, workplace-based interventions have been proven effective in improving the health status of hospital staff when regularly designed and supported by management. A review by Victoria Worley showed that workplace health promotion in hospitals can improve staff health indicators when supported by consistent organizational policies (Worley et al., 2022). Research in Indonesia also demonstrates that nutritional counseling combined with work-related adjustments can reduce body weight among overweight nurses (Oktaviani et al., 2023). This indicates that individual-level interventions are more effective when reinforced by organizational systems.

From a nursing management perspective, organizational support is a direct manifestation of leadership and organizing functions. According to Carol J. Huston, nursing management functions include planning, organizing, directing, and controlling, all of which should be oriented toward staff well-being (Huston, 2025). Therefore, integrating nurses' health indicators, including obesity prevention, into nursing Key Performance Indicators (KPI) can serve as a structural strategy to ensure that organizational support is implemented consistently and measurably.

CONCLUSION

This study demonstrates that organizational support is a significant independent determinant of obesity among hospital nurses. Nurses who reported low organizational support had a substantially higher risk of obesity compared to those with adequate support, even after controlling for behavioral and individual factors. These findings highlight that obesity is influenced not only by personal factors but also by structural and managerial aspects of the work environment. Organizational support including occupational health, workload management, health-promoting facilities, and work–life balance—plays a crucial role in fostering policies healthy behaviors. From a nursing management perspective, optimizing management functions and integrating nurses' health indicators into performance evaluation systems are essential strategies to ensure sustained organizational support, positioning obesity prevention as an organizational responsibility rather than solely an individual one.

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