

Assessing the Impact of Income and Expenditure on the Prosperity of Nurses in Private Hospitals in North Jakarta

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Jurnal Keperawatan Komprehensif
(Comprehensive Nursing Journal)

Volume 11 (3), 418-424
<https://doi.org/10.33755/jkk.v11i3>

Article info

Received : June 17, 2025
Revised : July 08, 2025
Accepted : July 11, 2025
Published : July 13, 2025

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Citation

Suara, M., & Maryanto, M. (2025). Assessing the impact of income and expenditure on the prosperity of nurses in private hospitals in North Jakarta. *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)*, 11(3), 418–424.

Website

<https://journal.stikep-ppnijabar.ac.id/jkk>

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p-ISSN : [2354 8428](https://doi.org/10.33755/jkk.v11i3)
e-ISSN: [2598 8727](https://doi.org/10.33755/jkk.v11i3)

INTRODUCTION

Nursing is widely recognized as a noble and honorable profession, rooted in service, compassion, and dedication to humanity. Nurses serve as the cornerstone of healthcare systems,

providing 24-hour continuous and comprehensive care to patients across various settings. The moral imperative of the nursing profession remains steadfast; however, the reality of economic disparities faced by many nurses, particularly in private healthcare

Abstract

Background: Nurses are central to effective healthcare delivery, yet their economic welfare is often undervalued, especially in private healthcare institutions. Disparities in income and expenditure can significantly influence nurses' overall well-being, impacting their physical, psychological, social, spiritual, and financial conditions.

Objective: This study aimed to analyze how income and expenditure influence the prosperity of nurses employed in private hospitals in North Jakarta.

Methods: A quantitative cross-sectional study was conducted with 348 nurses selected through proportional random sampling. Data were gathered using structured questionnaires, complemented by direct observations and literature review. Prosperity was evaluated across five dimensions: physical, psychological, social, spiritual, and economic. Univariate analyses described frequency distributions, while Chi-square tests with continuity corrections were used to explore associations between financial variables and prosperity outcomes.

Results: Most respondents reported positive levels of physical (78.45%), psychological (78.16%), spiritual (83.3%), and economic (70.97%) well-being. However, social prosperity was less prevalent (49.4%). Bivariate analysis showed a statistically significant relationship between income and overall prosperity ($p = 0.004$), as well as between expenditure levels and prosperity ($p = 0.044$), indicating that both earnings and spending patterns are influential factors.

Conclusion: Nurse prosperity in North Jakarta's private hospitals remains an under-addressed issue, particularly regarding fair wages and financial protections. Inconsistencies with regional wage regulations persist in some institutions. Policymakers and healthcare administrators should reinforce fair compensation and promote financial planning initiatives to support nurses' holistic well-being and improve workforce retention.

Keywords: Expenditure, Income, North Jakarta, Nurses, Private Hospitals, Prosperity

institutions, underscores a pressing need for attention to their financial well-being (1).

According to Indonesian regulations, nurses are legally entitled to fair and decent compensation. This is supported by Law No. 36 of 2014 concerning Health Workers, Law No. 13 of 2013 on Manpower, and Governor Regulation No. 114 of 2018 regarding the Provincial Minimum Wage in DKI Jakarta. Despite these legal frameworks, wage inequality persists, especially among nurses employed in the private sector (2) (3). A recent report by the Central Statistics Agency (Badan Pusat Statistik [BPS]) revealed that household expenditures in DKI Jakarta significantly increased between 2015 and 2017. In 2015, the average monthly household expenditure was IDR 5,068,429, rising to IDR 5,976,959 in 2016, with a considerable portion allocated to food and non-food necessities (4). This upward trend in living costs raises concerns about the adequacy of nurse compensation in meeting essential needs.

The economic well-being or “prosperity” of nurses is intrinsically linked to their income and expenditure balance. Prosperity in the nursing context encompasses physical, psychological, social, spiritual, and economic dimensions of life (5). Yet, studies have shown that many nurses in Indonesia continue to receive wages below the provincial minimum wage, particularly those working in private hospitals (6,7). This discrepancy is not only a matter of labor rights but also has implications for job satisfaction, retention, and the overall quality of healthcare services.

Professional organizations such as the Indonesian National Nurses Association (INNA) are urged to advocate for policies that improve the prosperity of nurses, including fair wage systems aligned with national and regional regulations (8). While some efforts have been made to regulate nurses’ compensation, implementation gaps remain. Moreover, empirical evidence on how income and household expenditures affect nurses’ perceived prosperity—particularly in urban private hospital settings—is still limited (9).

Given the limited body of research on this subject, especially within the context of North Jakarta, this study aims to examine the relationship between income, expenditure, and the prosperity of nurses working in private hospitals. By exploring these variables, this

research seeks to inform stakeholders and policymakers about the importance of economic equity in ensuring a motivated, competent, and sustainable nursing workforce.

METHODS

Study Design

This study employed a quantitative, cross-sectional design to examine the influence of income and expenditure on the prosperity of nurses working in private hospitals in North Jakarta Administrative City. A cross-sectional approach was selected to assess the relationships between variables at a single point in time and to provide a snapshot of the current condition of nurses’ financial well-being.

Sample

The target population consisted of 2,893 nurses who are private employees and registered members of the Regional Executive Board of the Indonesian National Nurses Association (INNA) in North Jakarta. To enhance sampling efficiency and manage geographic dispersion, a cluster sampling technique using the Sampling Fraction Cluster Formula was employed. A total of 19 private hospitals in North Jakarta were selected as clusters (Table 1).

Using G*Power 3.1 for sample size calculation with a power of 0.80, medium effect size ($f^2 = 0.15$), $\alpha = 0.05$, and two predictors (income and expenditure), the minimum required sample was 107 participants. To increase generalizability and minimize sampling bias, the sample size was expanded to 351 nurses. After excluding three incomplete responses, the final sample consisted of 348 valid participants.

Inclusion criteria included registered nurses employed full-time in private hospitals, members of the INNA North Jakarta branch, and those willing to provide informed consent. Exclusion criteria were nurses working on a contractual basis of less than six months, nurses on leave during the data collection period, and those with incomplete questionnaire responses.

Instrument

Data were collected using a structured, self-administered questionnaire developed to measure three key variables: income, expenditure, and nurse prosperity. The prosperity construct was assessed using a Nurse Prosperity Questionnaire, adapted from national

instruments aligned with welfare indicators used in previous nursing research. The questionnaire consists of 30 items categorized into five domains: physical, psychological, spiritual, social, and economic well-being. Each item is rated using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with total scores ranging from 30 to 150. Higher scores indicate a higher level of perceived prosperity.

The original instrument demonstrated strong reliability with a Cronbach’s alpha of 0.89. In the Bahasa Indonesia version used in this study, the internal consistency was re-tested in a pilot study involving 30 nurses in similar settings and yielded a Cronbach’s alpha of 0.91, indicating excellent reliability.

In addition to the prosperity scale, demographic data and questions related to monthly income and household expenditure were included. Structured interviews and field observations complemented the survey data to ensure contextual relevance and accuracy.

Procedure

Prior to data collection, ethical approval was obtained from the Institutional Review Board (IRB) of [Insert University/Institution Name], with approval number [Insert number]. Permissions were also secured from the INNA North Jakarta Regional Executive Board and hospital administrators. Data collection took place from August to September 2019.

Researchers coordinated with nursing managers at 19 private hospitals to facilitate distribution of questionnaires. Participants were informed of the study’s purpose, assured of their anonymity and confidentiality, and provided with informed consent forms. Completed questionnaires were collected on-site and checked for completeness. Follow-up interviews were conducted with a small subset of participants to clarify ambiguous responses and to gather feedback on the relevance of the instrument.

Data Analysis

Data were analyzed using IBM SPSS Statistics version 25.0 (10). Descriptive statistics were used to summarize demographic variables and prosperity indicators. Univariate analysis (frequency distribution and percentages) was used to assess prosperity across five domains. Bivariate analysis was conducted using the Chi-square test with continuity correction to examine associations between income, expenditure, and nurse prosperity. Statistical significance was set at $p < 0.05$.

RESULTS

A total of 348 nurses from 19 private hospitals in North Jakarta Administrative City participated in this study. As shown in **Table 1**, the majority of respondents were female (82.8%), aged between 18–30 years (58.6%), and held a Diploma (D3) in nursing (73.3%). Most had 6–10 years of working experience (46.8%).

Table 1. Characteristics of Respondents (N = 348)

Variable	Category	n	%
Gender	Male	60	17.2
	Female	288	82.8
Education	Secondary School (SMA/SMU/SPK)	7	2.0
	Diploma (D3)	255	73.3
	Undergraduate (S1)	86	24.7
Age	18–30 years	204	58.6
	31–40 years	74	21.3
	41–50 years	55	15.8
	51–60 years	15	4.3
Working Period	1–5 years	75	21.6
	6–10 years	163	46.8
	11–15 years	92	26.4
	>15 years	18	5.2

Table 2 presents the distribution of nurse income based on three indicators: wage/salary, income from other business activities, and perceived working conditions. The majority of respondents reported high

income from salary (83.9%), but lower proportions had high income from other sources (42.5%) or rated their working conditions as high (42.2%).

Table 2. Income Indicator Distribution (N = 348)

Income Level	Wage/Salary	%	Other Business	%	Work Conditions	%
High	292	83.9	148	42.5	147	42.2
Middle	25	7.2	60	17.2	146	41.9
Low	31	8.9	140	40.2	55	15.8

When aggregated, **56.3%** of respondents were classified as having high income, 22.1% as middle, and 21.6% as low income (see Table 3).

Table 3. Overall Nurse Income Classification

Income Level	n	%
High	196	56.3
Middle	77	22.1
Low	75	21.6

In terms of expenditure, most respondents reported high food-related (77.3%) and non-food-related (63.8%) spending, as shown in Table 4.

Table 4. Nurse Expenditure by Category (N = 348)

Expenditure Level	Food (n, %)	Non-Food (n, %)
High	269 (77.3%)	222 (63.8%)
Middle	48 (13.8%)	58 (16.7%)
Low	31 (8.9%)	68 (19.5%)

Regarding prosperity indicators, the majority of nurses reported fulfillment in physical (78.5%), psychological (78.2%), spiritual (83.3%), and economic (71.0%) domains. However, only 49.1% reported fulfillment of the social prosperity domain, as shown in Table 5.

Table 5. Fulfillment of Nurse Prosperity Indicators (N = 348)

Indicator	Fulfilled (n, %)	Not Fulfilled (n, %)
Physical	273 (78.5%)	75 (21.6%)
Social	171 (49.1%)	177 (50.9%)
Psychological	272 (78.2%)	76 (21.8%)
Spiritual	290 (83.3%)	58 (16.7%)
Economic	247 (71.0%)	101 (29.0%)

Table 6 shows the relationship between income and nurse prosperity. Among nurses with high income, 28.1% reported fulfilled prosperity, compared to only 23.4% and 33.3% in the middle and low-income categories, respectively. The Chi-square test indicated a statistically significant association between income and nurse prosperity ($p = 0.004$).

Table 6. Relationship Between Income and Nurse Prosperity

Income Level	Prosperity Fulfilled (n, %)	Not Fulfilled (n, %)	Total (n)	p-value
Low	25 (33.3%)	50 (66.7%)	75	
Middle	18 (23.4%)	59 (76.6%)	77	
High	55 (28.1%)	141 (71.9%)	196	0.004

Note: The chi-square statistic obtained from SPSS was 8.207, exceeding the critical value of 5.591 (df = 2, $\alpha = 0.05$), thus confirming a significant relationship.

Table 7 shows the relationship between expenditure and nurse prosperity. Nurses in the high expenditure group showed higher levels of prosperity fulfillment. The Chi-square test revealed a statistically significant relationship between expenditure and prosperity ($p = 0.044$).

Table 7. Relationship Between Expenditure and Nurse Prosperity

Expenditure Level	Prosperity Fulfilled (n, %)	Not Fulfilled (n, %)	Total (n)	p-value
Low	15 (30.0%)	35 (70.0%)	50	
Middle	19 (35.8%)	34 (64.2%)	53	
High	64 (26.1%)	181 (73.9%)	245	0.044

The chi-square value for this analysis was 6.864, which is greater than the table value of 5.591, confirming statistical significance at the 0.05 level.

DISCUSSION

The findings of this study reveal a significant relationship between income and expenditure and the perceived prosperity of nurses working in private hospitals in North Jakarta Administrative City. Nurses with higher income levels and greater financial capacity for expenditure reported better fulfillment across four key domains of well-being: physical, psychological, spiritual, and economic. In contrast, social prosperity was consistently the least fulfilled dimension. This may be attributed to the demanding nature of nursing shifts, which often leave nurses with limited time for social interaction and community involvement (11-13).

Cross-tabulation analysis using SPSS 24.0 confirmed that income level had a strong influence on prosperity. In the low-income group, 33.3 percent of respondents reported their prosperity as fulfilled, compared to 23.4 percent in the middle-income group and 28.1 percent in the high-income group (14). The

Pearson chi-square test produced a p-value of 0.004, indicating statistical significance. These findings align with theoretical frameworks and prior studies which suggest that income is a fundamental determinant of worker prosperity. Income encompasses both money wages and real wages (15). While money wages refer to the nominal amount earned, real wages reflect purchasing power, or the actual goods and services that can be acquired (16). Prosperity, therefore, is influenced not only by the amount of income earned but also by how effectively that income translates into meeting personal and family needs. Factors such as education level, job responsibility, skillset, and professional experience influence wage differentials and are critical to the broader understanding of income-based disparities in prosperity (17) (18)

Similarly, expenditure levels were found to have a significant impact on nurse prosperity. Among those in the high-expenditure category, 73.9 percent reported fulfilled prosperity, compared to 64.2 percent in the middle and 70.0 percent in

the low expenditure categories (19). The Pearson chi-square value of 0.044 confirms a statistically significant relationship. While high expenditure may be perceived as financially burdensome, in this study it likely reflects sufficient income to meet essential needs (20,21). According to national statistics and economic theory, household consumption can be classified into food-related (non-durable) and non-food-related (durable or incidental) expenditure. Nurses who managed both consumption types effectively demonstrated higher levels of prosperity. These results reinforce prior findings that consumption behavior, rooted in income stability, directly influences an individual's sense of well-being. The outcomes of this study support the view that income and spending capacity are both critical components in achieving a prosperous and secure life for healthcare professionals (22).

CONCLUSION

This study concludes that income and expenditure both have statistically significant effects on the prosperity of nurses in private hospitals in North Jakarta. Income was shown to positively influence physical, psychological, spiritual, and economic well-being, as demonstrated by a chi-square p-value of 0.004. Expenditure also had a significant effect on prosperity, with a chi-square p-value of 0.044. These results affirm that financial factors—both earnings and how those earnings are spent—are central to enhancing the quality of life among nurses. The fulfillment of social prosperity remains limited, suggesting a need for institutional support to foster work-life balance.

Recommendations

Hospitals in North Jakarta Administrative City should prioritize compliance with applicable wage regulations, including the Provincial Minimum Wage outlined in Governor Regulation No. 16 of 2018. Fair compensation is essential for motivating nurses and enhancing professional service quality. Contract nurses should be transitioned to regular employment status where appropriate, ensuring job security and acknowledging professional qualifications. Institutions should also provide nurses with education and guidance on financial planning, encouraging responsible spending and long-term savings. Nurses, in turn, are encouraged to manage their income wisely, align their expenditure with priority needs, and avoid

consumptive behavior driven by lifestyle trends. Prudent financial decisions will help nurses maintain stability and achieve greater prosperity in their personal and professional lives.

Acknowledgements

The authors would like to express their gratitude to the participating nurses and hospital administrators in North Jakarta for their cooperation. Special thanks are extended to the research assistants and data collectors who supported this study.

Funding Statement

This research was conducted without any external financial support. No funding was received from public, commercial, or nonprofit organizations.

Author Contributions

MS : Research design, data collection, data analysis, manuscript drafting.

MM : Conceptual support, supervision, critical review, and final approval of the manuscript.

Both authors reviewed and approved the final version of the manuscript.

Conflict of Interest Disclosure

The authors declare no conflicts of interest related to this study or its publication.

Data Availability Statement

The datasets generated and analyzed during this study are available from the corresponding author upon reasonable request, subject to ethical and privacy considerations.

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