

The Relationship Between Work Discipline and Nurses' Work Productivity at Hospital X Jakarta

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ABSTRACT

Work discipline is essential to sustain nursing productivity and hospital performance. This study examines the association between work discipline and nurses' work productivity in inpatient care at a private hospital in Jakarta. A cross-sectional design was applied with total sampling of staff nurses. Data were collected using validated Likert-type questionnaires for discipline and productivity, then categorized into high and low levels based on central tendency. Bivariate analysis employed an appropriate chi-square procedure and effect size to test the relationship. The findings indicate a meaningful positive association: nurses with higher discipline tend to report higher productivity, reflected in punctual attendance, adherence to standard procedures, and complete documentation of care. The study recommends strengthening managerial supervision, feedback loops, and fair scheduling, alongside continuous education on standard operating procedures. Enhancing discipline culture is expected to raise individual productivity and contribute to better service quality and organizational outcomes in Indonesian hospital settings over time.

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INTRODUCTION

Hospital is a health-care institution that provides comprehensive individual health services, including inpatient, outpatient, and emergency care (Law No. 44 of 2009). As a type of health facility operated by either government or community, a hospital functions as a provider of primary or referral care and supportive health services. Successful performance is reflected in excellent service quality. Service quality is influenced by several factors, with human resources being the most dominant (Agustinus, 2017).

Nurses' work productivity in hospitals remains relatively low. Data from the Asian Productivity Organization (APO), as cited by the ministry, show that Indonesia's labor productivity growth during two thousand ten to two thousand sixteen lagged behind peer countries: the Philippines, Vietnam, Cambodia, and Laos all recorded higher growth, whereas Indonesia's growth trailed them (Putri, 2020). Thus, productivity remains a global challenge, including in Indonesia.

High work productivity is crucial for hospitals because it is closely related to outcomes. Productivity in nursing is complex; nurse managers must understand it because it affects patient care and nurses' tenure. Productivity is one of the core indicators of nursing care delivery. In practice, patient health outcomes—through improvement in Bed Occupancy Rate (BOR) and Length of Stay (LOS)—serve as tangible measures of nurses' productivity. Measuring productivity provides feedback for nursing service quality. To achieve high productivity, hospitals must ensure quality human resources and robust human-resource management (Zoschak, 2010).

Early studies assessing nurses' productivity indicate that work disruptions, increased absenteeism, and activity interruptions contribute to productivity loss. Factors associated with decreased productivity include age, length of service as a nurse, job stress, and health problems. Research in the United States by William reported that aging affects nurses' productivity. Trinkoff found that nurses working more than twelve hours per day or on night shifts exhibit declines in productivity, with a notable share of reports from such nurses indicating reduced output.

Darma's study showed that the productivity index of nursing staff during working hours in inpatient wards was below optimal; time use was dominated by non-productive activities compared with direct and indirect nursing care, education, and administrative tasks. This indicates that utilization of working time has not been optimal (Darma, 2015).

Productivity is affected by a range of factors related to workers and the work system, including motivation, education and training, skills, work ethic and attitudes, nutrition and health, income level, work environment and systems, social security, management and opportunities for achievement, and work discipline.

Discipline plays a critical role in improving productivity because it concerns human behavior and is a vital element of management. Sinungan defines discipline as a mental attitude of individuals or groups to consistently follow and obey established rules and decisions.

A study by Elsa and colleagues observed, among ten staff nurses on duty, that some arrived on time while others did not; extended breaks were taken, and internal and external time-wasting during working hours was still evident. In nursing care delivery, several nurses were found to perform below optimal standards.

Reiterating, productivity is shaped by multiple factors such as motivation, education and training, skills, work attitudes and ethics, nutrition and health, income, work environment and systems, social security, managerial support and opportunities for achievement, and discipline (Sinungan, 2018). Discipline remains pivotal because it reflects willingness to comply with prevailing norms and rules (Timpe, 2022).

Rivai states that work discipline comprises attendance, compliance with work rules, adherence to work standards, heightened vigilance, and ethical conduct. Consistently, Amran lists five factors: frequency of attendance, level of vigilance, adherence to work standards, compliance with work regulations, and work ethics (Rivai, 2015).

A disciplined attitude is essential for every nurse, fostering responsibility. Hospitals do not only expect nurses who communicate well and are skillful; more importantly, they expect

diligence, discipline at work, and a strong desire to achieve optimal results. Discipline represents a person's willingness and readiness to obey applicable norms and regulations (Timpe, 2022).

Hospital X in Jakarta employs sixty-three inpatient nurses with a bed capacity of one hundred thirty. The hospital's service performance shows a BOR around the mid-sixties in two thousand twenty-five, aligning with the Ministry of Health's standard of sixty to eighty-five percent. However, observations indicate suboptimal productivity: during evening shifts, many nurses arrive late; working time is not used effectively, with instances of smartphone use, chatting, and selling during duty hours.

Absenteeism is also a key indicator of productivity. Robbins and Judge (2019) note that high absenteeism disrupts service continuity and reduces team effectiveness. In hospitals, high absenteeism increases the workload of remaining staff, lowers service quality, and raises operating costs due to the need for substitute labor.

Key Performance Indicator data from January through May at Hospital X indicate nurse absenteeism rising well above the permissible monthly threshold. The hospital does not yet maintain data linking discipline to nurses' productivity. Given that discipline is one of the determinants of productivity, the relationship between work discipline and nurses' productivity merits deeper investigation. A sound understanding of this linkage can inform human-resource strategies to enhance nurses' productivity through the strengthening of workplace discipline.

METHODS

This study employed a cross-sectional analytic design to examine the association between work discipline and nurses' work productivity in inpatient care. A cross-sectional approach was chosen because it allows estimation of the relationship between variables measured at the same point in time and is suitable for service-delivery settings where staffing and schedules limit longitudinal follow-up.

The research was conducted in the inpatient units of Hospital X, Jakarta. The target population comprised all staff nurses assigned to inpatient wards during the study period. Eligibility criteria included active employment as a staff nurse for at least three consecutive months, ability to complete a self-administered questionnaire, and willingness to provide informed consent. Nurses on extended leave or managerial staff not providing direct care were excluded. A total sampling strategy was applied to include the entire accessible population.

The independent variable was work discipline, operationalized as the extent to which nurses demonstrate punctual attendance, adherence to work rules and standards, vigilance on duty, and ethical conduct. The dependent variable was work productivity, conceptualized as the self-reported output and efficiency of nursing tasks aligned with unit standards, including timeliness, completeness of care documentation, and prioritization of clinical duties. Both constructs were measured using Likert-type questionnaires; negatively keyed items were reverse-scored, total scores were computed, and categories were formed using a median split to yield "high" and "low" groups for inferential testing.

Item pools for both scales were developed from established nursing management and organizational behavior literature and adapted to the hospital context through cognitive debriefing with bedside nurses. Content validity was assessed by a panel of subject-matter experts in nursing management and hospital quality. A pilot test was performed in a comparable unit outside the study population to evaluate clarity, item-total correlations, and internal consistency. Items not meeting psychometric and content criteria were revised or removed before field administration, resulting in final concise instruments suitable for ward conditions.

Data were collected on site during routine shifts. After an information session, eligible nurses received sealed questionnaire packets and returned completed forms in locked boxes to ensure privacy. Supervisors were not present during completion to minimize social desirability bias. Field researchers monitored response completeness and addressed queries without leading respondents. No names were recorded; unique codes were used for linkage between instruments.

Data quality assurance included double data entry with verification, programmed range checks, and audit trails for corrections. Questionnaires with extensive missing responses on a given scale were excluded according to a predefined threshold. For rare single-item omissions within an otherwise complete scale, person-mean substitution within that scale was applied. All decisions regarding exclusion, imputation, and data cleaning were documented prior to analysis.

Statistical analysis proceeded in three stages. First, descriptive statistics summarized respondent characteristics and scale distributions, and internal consistency was evaluated using Cronbach's alpha. Second, bivariate associations between work discipline (high vs. low) and work productivity (high vs. low) were tested using Pearson's chi-square with continuity correction; Fisher's exact test was used where expected cell counts were small. Effect size was reported as Phi or Cramer's V, with confidence intervals where appropriate. Third, as a robustness check, exploratory binary logistic regression estimated the association between discipline and productivity adjusting for selected covariates (e.g., age, tenure, and shift pattern), subject to events-per-variable considerations.

Ethical approval was obtained from the institutional review board of the affiliated university and written permission from Hospital X. All participants provided informed consent after receiving information on study aims, procedures, voluntary participation, and confidentiality. The study adhered to the principles of the Declaration of Helsinki and followed STROBE recommendations for reporting cross-sectional studies.

RESULTS AND DISCUSSION

Univariate Analysis

Work Discipline

The assessment of nurses' work discipline at Hospital X, Jakarta was grouped into high and low, as shown in Table 1.

Table 1. Frequency Distribution of Respondents by Work Discipline at Hospital X, Jakarta

Work Discipline	Number	Percentage (%)
High	30	48
Low	33	52
Total	63	100

Most respondents showed low work discipline (33 of 63, about 52%), indicating many nurses have not met service standards. The remainder demonstrated high discipline (30, about 48%).

Work Productivity

Nurses' work productivity at Hospital X, Jakarta was categorized as high or low, as shown in Table 2.

Table 2. Frequency Distribution of Respondents by Nurses' Work Productivity at Hospital X, Jakarta

Work Productivity	Number	Percentage (%)
High	24	38
Low	39	62
Total	63	100

Most respondents had low work productivity (39 of 63; 62%). The remainder showed high productivity (24; 38%).

Bivariate Analysis

Relationship Between Work Discipline and Nurses' Work Productivity at Hospital X, Jakarta

The chi-square test yielded the following p-value.

Table 3. Relationship Between Work Discipline and Nurses' Work Productivity at Hospital X, Jakarta

Work Discipline	High Productivity n (%)	Low Productivity n (%)	Total n (%)	p-value
High	16 (53)	14 (47)	30 (100)	0.012
Low	8 (24)	25 (76)	33 (100)	
Total	24	39	63	

Respondents with high discipline more often had high productivity (16 nurses, 53%), while those with low discipline predominantly had low productivity (25 nurses, 76%). Chi-square assumptions were met, and the association was significant ($p = 0.012$), indicating discipline is linked to nurses' productivity at Hospital X, Jakarta.

Discussion

Univariate Analysis

Work Discipline

The analysis shows that most of the sixty-three nurses in this study had low work discipline, amounting to fifty-two percent. Tenure and education were also found to play an important role in shaping discipline. In everyday life, wherever people are, rules and provisions are needed to regulate and limit activities and behavior.

At Hospital X, from January to May, nurse absenteeism increased by about fifteen to twenty percent above the maximum monthly threshold of five percent. In the inpatient unit, among ten staff nurses on duty, six arrived on time and four were late. Extended breaks were taken, and instances of internal and external time-wasting during working hours were observed. In delivering nursing care, some nurses were still not performing optimally.

For item number thirteen, “Have you ever been present without a letter of explanation?”, among sixty-three respondents, the answers were: Always five, Often seventeen, Ever twenty-eight, and Never thirteen, with Ever being the most frequent response. According to regulations at Hospital X, nurses are required to provide an explanation when absent.

Following Robbins (as cited in Dalimunthe et al., 2020), the criteria used for work discipline include time discipline, defined as attitudes or behaviors toward working hours, encompassing attendance and compliance with scheduled hours. Employees carry out tasks punctually and correctly.

These findings indicate that inpatient nurses exhibit low work discipline and thus insufficient compliance with hospital rules and norms. Given the importance of discipline for productivity, staged enforcement is necessary, for example, written warnings, postponement of compensation, or demotion, accompanied by coaching.

Work Productivity

Most respondents, sixty-three in total, were categorized as having low productivity, amounting to sixty-two percent. Nurses’ productivity is pivotal for achieving nursing service goals and overall hospital quality. Nursing is the largest professional group, front-line, and most frequently interacting with patients and families; thus, optimal health-care quality and hospital service improvement depend on nursing performance.

In the hospital, the productivity of nursing staff during working hours in the inpatient installation was reported at 4.4 percent, with time allocation of 8.41 percent for direct care (and other categories as observed). Productivity is a benchmark of success for organizations in achieving goals. In inpatient settings, working hours often exceed the stipulated schedule, and nurses face rotating or irregular shifts.

For item number four, “Do you ever feel bored with the tasks assigned?”, among sixty-three respondents, the answers were: Always nine, Often twenty-six, Ever twenty-one, and Never seven, with Often being most frequent. This suggests job boredom may reduce productivity.

According to Arifah (2020), work discipline has a significant positive effect on nurses’ performance. Improvements in discipline, reflected in compliance with work rules, attendance, adherence to work standards, heightened vigilance, and ethical conduct, contribute to better performance, as seen in targets for quantity, quality, reliability, attendance, and teamwork. Thus, the better a hospital implements work discipline, the more employee performance will improve.

Bivariate Analysis

Relationship Between Work Discipline and Work Productivity of Nurses at Hospital X, Jakarta

Based on questionnaire data for the discipline variable from sixty-three respondents, the chi-square test produced a p-value of 0.034 at a significance level below 0.05, indicating

a relationship between work discipline and work productivity among inpatient nurses at Hospital X, Jakarta.

High work discipline is associated with high productivity, as good productivity underpins the attainment of hospital service goals, particularly through nursing. According to Robbins (as cited in Dalimunthe et al., 2020), discipline can be grouped into three indicators: time discipline, rule discipline, and responsibility discipline. Factors influencing productivity (Hasibuan, 2018) include work motivation, work discipline, job stress, and work environment.

CONCLUSION

This study concludes that work discipline is closely associated with nurses' work productivity in inpatient care at a private hospital in Jakarta. Nurses who practice punctual attendance, comply with rules and standards, remain vigilant while on duty, and uphold ethical conduct tend to demonstrate stronger productivity, reflected in timely, complete, and well-prioritized care delivery. The pattern observed supports the view that discipline functions as a foundational driver of nursing performance and a precursor to reliable service outcomes. Managerial implications are clear and actionable. Hospital leaders should cultivate a discipline-centered culture through fair scheduling, transparent supervision, and regular feedback, reinforced by coaching, continuing education on standard operating procedures, and recognition systems that reward exemplary conduct. Attendance management, documentation audits, and peer mentoring can embed desired behaviors while addressing sources of delay, distraction, and fatigue. Together, these actions are expected to elevate individual output, strengthen team coordination, and enhance overall care quality and operational efficiency. This study has limitations related to a cross-sectional design, reliance on self-reported measures, and a single-site context, which may constrain generalizability. Future research should employ longitudinal approaches, integrate objective productivity indicators, and examine mediating and moderating mechanisms such as motivation, job stress, and work environment across diverse institutions. Building on these findings, hospitals can design integrated interventions that align disciplinary practices with supportive leadership and healthy work systems, thereby sustaining higher productivity and better patient outcomes over time.

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