
The Impact of Nurse Characteristics and Work Productivity on Patient Satisfaction: A Systematic Review

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ABSTRACT

The quality of nursing care was an important value that can affect the quality of the hospital. This systematic review was to analyze the relationship between nurse characteristics to work productivity of nurses and what is the impact on patient satisfaction. The research design was a systematic review by the PRISMA approach. The criteria inclusion were nurses who worked in hospitals. Selection of the journals was carried out using: 1) Scopus, PubMed, Springer Link, and Science Direct database, 2) Searches on January 19th-28th 2021, 3) 2015-2021 journals published in English, 4) used the PICOS approach to analyzing. The analysis resulted in 1.544 journals and 15 appropriate were selected. Nurse characteristics were related to the work productivity of nurses. The motivation was the characteristic of nurses that most influences to work productivity of nurses. Nurse managers must increase motivation for the best work productivity of nurses. High motivation of nurses can improve nursing care professionally so that patient satisfaction is obtained.

Keywords: Work Productivity, Nurse Characteristics, Patient Satisfaction

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BACKGROUND

Patient satisfaction with nursing care services was categorized as low (Broxton, 2014; Hidayah, 2014). Complaints by families and patients in receiving nursing care services at the hospital were evidenced by the low patient satisfaction (Broxton, 2014; Hidayah, 2014). Dissatisfaction with health services can have an impact on decreasing the number of hospital customers, even reducing salaries and laying off nurses (Broxton, 2014; McMahan, 2018; Singh & Prasher, 2019). Which encourages hospitals to improve the service. These conditions make the authors interested to analyze the relationship between nurse characteristics and work productivity and what is the impact on patient satisfaction.

Hospital competition was a stimulus for hospitals to always provide better service by encouraging efficiency and improving quality to increase patient satisfaction (Glenngård, 2013). Patient satisfaction was a factor that influences by nursing care services (Donahue et al., 2008). Nurse motivation is the most important aspect of health system performance to provide high-quality services (Mutale et al., 2013). All organizational facilities will be wasted if there are no motivated staff (Jooste & Hamani, 2017).

A nurse is an important person in achieving complete nursing care services. Nurses interacting with patients for 24 hours, so that the nurse's performance has an impact on the patient. Nursing services are one of the foundations of the health system (Negussie & Oliksa, 2020). The characteristics of nurses relate to nurses both in the life of the nurse and their environment (Negussie & Oliksa, 2020). Nurse characteristics consist of knowledge, skills, motivation, and work attitudes. Those four sub-categories influence nurses in providing nursing care. A nurse characteristic is a character that underlies a nurse. Individual characteristics are built by knowledge, skills, abilities, and motivation (Nursalam, 2017). The best characteristics of nurses can increase the work productivity of nurses. Nurse productivity is the quality of care provided to patients. Productivity is effective in providing good and high-quality care (Nayeri.N.D et al., 2006, 2011). The best nurse productivity will increase patient satisfaction. Patient satisfaction was the result of the evaluative response, which is related to the quality of nursing services provided by the hospital and the patient's expectations for service. Measurement of work productivity and service quality is an indicator of patient satisfaction.

The purpose of this study was to analyze the relationship between the characteristics of nurses and the work productivity of nurses and the impact on patient satisfaction. The systematic reviews are expected to be a foundation for nursing and hospital managers to always pay attention to nurses. This systematic review is expected to develop nurse characteristics and work productivity to improve the quality of nursing services and increase patient satisfaction.

METHODS**Inclusion and Exclusion Criteria**

The respondents of this review were nurses who work in hospitals both in urban and rural areas. Male and female nurses who are active in providing nursing care were also recruited as the inclusion criteria. Nurses with a home care background were excluded. The first step is to determine the scope and limits of the systematic review. In this step, the researcher filters the journals one by one and removes any unsuitable abstract contents, resulted in 1,544 titles that were displayed. 320 articles remained after duplicates were removed, 210 articles were assessed according to titles and abstracts lastly, 78 corresponding abstracts were obtained.

In the next step, researchers filtered the study variables and compared the results. The researcher continued the search and found 15 suitable journals. Abstract filtering consists of two steps, the first is that the researcher filters the journals one by one and removes any unsuitable abstract contents. The two researchers filtered the study variables and compared the results. The inclusion criteria journals were: 1) evaluating the criteria for nurses; 2) evaluating the work productivity of nurses; 3) analyze the relationship between nurse criteria and work productivity of nurses and the impact on patient satisfaction; 4) the population chosen is nurses, the sample chosen is nurses who work in both urban and rural hospitals; 5) selecting the publication journal 2015-2021; 6) choose an English-language journal. The study exclusion criteria were: 1) home care nurse area; 2) focused on nursing interventions or disease.

Search Strategy

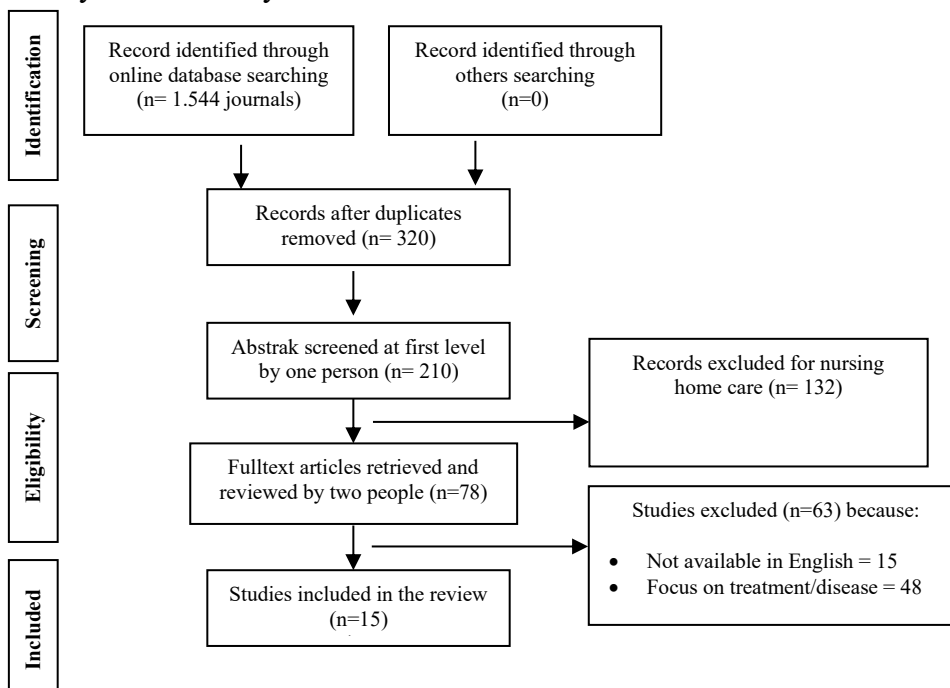
The journal search strategy begins by asking the research question, "What is the relationship between nurse criteria and the work productivity of nurses and the impact on patient satisfaction?". The journals selected were Scopus indexed journals about nurse criteria, work productivity, and patient satisfaction. The databases used were Scopus, PubMed, Springer Link, and Science Direct. The keywords used are TITLE-ABS-KEY (criteria AND nurses) AND DOCTYPE (ar) AND PUBYEAR > 2014; TITLE-ABS-KUNCI (productivity AND work AND nurses) AND DOCTYPE (ar) DAN PUBYEAR > 2014; TITLE-ABS-KEY (satisfaction AND customer) AND DOCTYPE (ar) AND PUBYEAR > 2014. Data extraction was carried out by searching for journals related to search variables. The researcher then selected the journal, then reviewed the abstract, journal contents, and finally found a suitable journal.

Data Extraction and Management

Each article used was extracted by the author. Researchers analyzed differences in journal content, research design, nurse criteria form, work productivity, patient satisfaction, and study results. Study results are recorded to report findings.

Method of Analysis

The systematic analysis method of this review uses PRISMA.



Picture 1. PRISMA of Nurse Characteristics and Work Productivity of Nurses and The Impact on Patient Satisfaction: A Systematic Review

RESULTS

The Relationship between the Characteristic of Nurse and the Work Productivity of Nurses

The characteristics of nurses are divided into knowledge, capability, skill, and motivation (Nursalam, 2017). Knowledge serves as the basis for nurses to act and make decisions through specific strategies. Skills relate to the capacities needed to carry out a task. Capability is the independence of doing something which consists of cognitive, affective, and psychomotor aspects. Motivation is a feeling from within that explains the intensity, direction, and persistence of a person to achieve his goals (Nursalam, 2017).

1. The Relationship between Knowledge and Work Productivity

Knowledge relates to the level of nurse education. The results showed that most nurses have a nursing diploma level of education compared to a bachelor of nursing degree (Dill et al., 2016). The results of the analysis show that knowledge is not related to the work productivity of nurses (Dill et al., 2016). It shows that knowledge does not affect work productivity because a bachelor of nurse has a better chance of displaying work productivity performance compared to diplomas. Further analysis concluded that bachelor can have better knowledge so that they have more opportunities to good work. Thus, it can increase nurses' confidence in performing effectively.

2. The Relationship between Skill and Work Productivity

The results of the analysis show that nurses who have high skills have lower work productivity (Nago'rska et al., 2017). It found that nurses skill gained from experience had an effect on nurses' expectations of benefits, higher rewards, and increased understanding of management problems (Nago'rska et al., 2017). This results in nurses' disappointment in management and leadership styles, differences in the benefits of nursing and health care disciplines. Another reason could be the lack of functional job descriptions among the different qualifications of the nursing profession in hospitals (Negussie & Oliksa, 2020).

3. The Relationship between Capability and Work Productivity

The results showed that the independence of nurses or the capability to perform nursing care did not affect the work productivity of nurses. Nurse with good capability does not have enough motivation to carry out nursing care compared to nurses who are still learning. The nurse considers his capability to be qualified in nursing care, so he does not need more details. The availability of medical tools also has effects on nurse work productivity. Nurses who do not have the support of medical equipment will have low work productivity.

4. The Relationship between Motivation and Work Productivity

Motivation is the reason someone behaves for self-interest (Dill et al., 2016). Nurses' work productivity is more influenced by motivation than skills and knowledge (Negussie & Oliksa, 2020). Nurses' motivation to work can be divided into intrinsic motivation (IM) and Extrinsic Motivation (EM). Reward and love are the motivation for nurses working. Love is related to IM such as the desire to maintain or improve human well-being, whereas reward focuses on the EM including salary, benefits, or promotion (Dill et al., 2016). IM tends to be related to role serving, whereas EM tends to be related to the enjoyment gained from doing nursing care. The findings show that nurses with high EM have better perceptions of work than those who have high IM (Dill et al., 2016), but high

IM will increase the work productivity of nurses. The results of the analysis show that well-motivated nurses can improve nursing care services (Elive et al., 2016).

The impact Work Productivity on Patient Satisfaction

Patient satisfaction is a measure of the status of the interaction between health care professionals and service users. This level of measure indicates the quality of care received by patients (Tejedor et al., 2013). The results of the analysis show that patient satisfaction is influenced by the performance of nurses in providing nursing care services, which is influenced by psychological conditions, including the perception and motivation of nurses (Ríos-Risquez & García-Izquierdo, 2016). Work productivity is influenced by the characteristics of nurses, especially how nurses perceive their work. A nurse with a good perception will show good performance too. The patient will consciously receive the response given by the nurse form of work performance.

DISCUSSION

Work productivity is an important thing that must be considered to increase patient satisfaction. The work productivity is influenced by nurse's criteria. The nurse's criteria consist of knowledge, capability, skill, and motivation. The results of the analysis show that motivation has a positive effect on the work productivity of nurses. Motivation is the level of individual willingness to work effectively and efficiently to achieve personal and organizational goals. Motivation is an individual feeling in response to stimuli from the worker's environment to improve performance (Negussie & Oliksa, 2020). Motivation is a key aspect in providing positive consequences that can increase the delivery of high-quality health care (Negussie & Oliksa, 2020).

IM gets a lot of attention because this motivation benefit nurses and organizations to go further in performing work tasks effectively and productively (Dill et al., 2016). IM is the right motivation to do a job. IM makes a nurse perform a job with more care and responsibility for the patient and the nursing organization.

In this study, further tests were carried out on the IM at work and the impact on the work productivity of nurses. IM of nurses in working will increase the better productivity, or will it be the negative impact? The results of the analysis show that the high IM of nurses is a risk to the high level of neglect. This finding is related to the literature that high nurse motivation can also be a threat to higher fatigue (Barron & West, 2007).

The results of the analysis also showed that nurses with high EM in carrying out the treatment showed lower levels of fatigue. This is in accordance with the results of the study that high EM will have a good impact on the nurse's well-being (Dill et al., 2016). Nurses who work on the basis of EM, meaning that nurses are oriented towards only for reward, actually have low levels of stress physically and emotionally. This is related to the attachment of interaction with the patient. Nurses who work on IM will find it more difficult to escape from patients, so IM-based nurses will have a higher work interactional pressure compared to EM (Dill et al., 2016).

Nurses with IM are associated with the profession and work organization. The results of the analysis show that nurses with high IM commit for the next 3 years (Dill et al., 2016). IM also has a good impact on work productivity while doing the job. Nurses who have IM do work based on love so that all activities carried out will always involve the heart so the patient feels prioritized.

Self-motivated nurses will find it easier to get along with their organization. This will have an impact on commitment with nursing professional organizations so that it is

beneficial for the organization such as improving the image of nurses (Ugwu & Onyishi, 2020). These findings are results of the study that nurses' motivation is positively related to organizational commitment which has an impact on job satisfaction so that it can increase nurses' work productivity (Ugwu & Onyishi, 2020). Low motivation nursing will have an impact on low-quality care so that patients receive substandard nursing care which has a negative impact on patient satisfaction and organizational

IM in the health system can lead nurses to have quality performance and encourage a renewal of work towards the needs of patients. Low work motivation has an impact on organizational and has a serious impact on the quality of nursing care which leads to a negative impact on patient satisfaction (Negussie & Oliksa, 2020). Nurses' motivation in carrying out nursing care can have an impact on nurses' performance. This can affect the work productivity of nurses, which of course will affect patient satisfaction. Patient satisfaction is an indicator of a nurse's success in providing professional nursing care services. The presence of nurses, a sense of responsibility, the perception of work, are things that can affect the work productivity of nurses (Ríos-Risquez & García-Izquierdo, 2016).

The limitations of this research are only conducted in the area of hospital services both in rural and urban areas. Researchers have not been able to explain the condition of nurses who work in-home care services. This also requires the development of further analysis and research. Research on the work productivity of nurses on patient satisfaction is limited. In fact, this is a milestone for the success of nurses in implementing their knowledge, love, and role in the benefits received by users of nursing services. Therefore, it is necessary to carry out further research or analysis related to work productivity and patient satisfaction using nursing services within the home care areas.

CONCLUSION

The characteristics of nurses are important things to pay attention to because the characteristics of nurses can affect the performance of nurses. The characteristics of nurses, especially the nurses' motivation in interpreting their roles and responsibilities in carrying out nursing care, are proven to have a relationship with the work productivity of nurses. Motivation is the main milestone for nurses in carrying out nursing care professionally. Optimal work productivity will be able to increase patient satisfaction in receiving nursing care services. Unfortunately, researchers are still limited in the scope of the hospital, so the next researcher needs to analyze the work productivity on the level of patient satisfaction in the home care service areas.

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CONFLICT OF INTEREST

The author states that there was no conflict of interest whatsoever in compiling a systematic review. This writing was purely for the purpose of the study, and in making it there was no element of coercion from any.

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