Development of Aswaja An-Nahdliyah-based caring model to improve performance in patient safety goals

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ABSTRACT

Introduction: The efforts to improve quality and safe health services for patients have been carried out. However, the adverse event is still occurring. This study aims to develop a caring model based on ASWAJA An-Nahdliyah To Improve Performance In Patient Safety Goals.

Methods: This study used a cross-sectional approach to 123 nurses, taken by cluster-random sampling. The research instrument is a questionnaire. Data analysis using Structural Equation Modeling (SEM) based on variance or component-based SEM is called partial least square (PLS). The development of the ASWAJA An-Nahdliyah-based caring model was carried out after a path analysis study and the formulation of strategic issues through focus group discussions (FGD) and expert discussions.

Results: There is an effect on individual characteristics of nurses, patient characteristics, and caring ASWAJA An-Nahdliyah on performance in patient safety goals (t statistic >1.96 and p-value 0.005). The resulting coefficient is positive 0.561, meaning that the higher the caring value of ASWAJA An-Nahdliyah tends to improve performance.

Conclusion: The ASWAJA An-Nahdliyah-based Caring Development Model has a major effect on performance in patient safety goals. The individual characteristics of nurses are the biggest factors that affect ASWAJA An-Nahdliyah-based caring so strengthening the characteristics of nurses is very much needed in order to improve performance in patient safety goals.

Keywords: Caring, ASWAJA An Nahdliyah, Performance, Patient safety.

INTRODUCTION

Nursing services have a very strategic position in determining the quality of health services in hospitals because the most professional service providers (60%) are nurses and have the longest contact with clients for 24 hours. The service is still felt to be unsatisfactory by the community, one of the reasons is the lack of care for nurses.1 Some research results show that nurses have not all shown caring behavior.2-4 Policies to provide good service by community expectations have been widely carried out by hospital leaders, but the success of the full-service implementation of compassion, empathy, and according to the needs of the client, depending on the attitudes and behavior of the health/nursing staff.5 According to the Citizen Report Card (CRC) survey (public and private) that was conducted in five major cities in Indonesia, it was found that there are nine points of the problem. One of which was 65.4% of patients complaining about the attitude of nurses who are less friendly, less sympathetic, and rarely smile.1 The results of previous research conducted in several hospitals, including the Bandung city hospital, showed that the caring behavior of 58.1% of 43 nurses was not good.6 The findings at the Ajibarang Hospital Banyumas, out of 41 respondents, 41.5% had less caring behavior.6 Lack of caring behavior is a potential problem that can affect service quality because nurses have a relatively large proportion.1 Research in the UK shows that the incidence of poor quality improvement due to lack of care is still high.4 The results of previous research conducted at the Jemursari Islamic Hospital in Surabaya showed that 45% of nurses showed less caring behavior.7 Caring is an application of the nursing process as a form of performance displayed by a nurse.1 Nursing performance reflects the quality of care provided and the results will be felt by the patient. Several previous research results indicate that the quality of health services still needs to be improved. Caring will allow the establishment of harmonious interpersonal relationships between nurses and clients, which can help meet client needs to provide satisfaction to clients.8-10 Patient satisfaction is an indicator of the quality of nursing/health services.11,12 Poor performance is considered a risk factor for patient safety.13 Nurse behavior is one of the main factors to apply a great patient safety. Risky behavior, lack of attention and motivation to do service, forgetful of patient’s treatment, carelessness, and the ability to ignore and maintain the patient safety may increase the risk for errors and will lead to injury of the patients. Behavior modification can be done in order to reduce error that involving adverse events. Nurses must optimize their cognitive, affective and actions that prioritize patient safety.

Patient safety is a serious global public health problem.14 In Europe, patients have an 83.5% risk of infection and evidence
of medical error shows 50–72.3%. The results of research in various countries, found Adverse Events with a range of 3.2–16.6%. Reports of patient safety incidents in Indonesia found cases of Adverse Event (14.41%) and Near Miss (18.53%) caused by clinical processes or procedures (9.26%), medication (9.26%), and patients fell (5.15%). The consequences of organizations that do not have a good patient safety culture can lead to latent errors, psychological and physiological disorders on staff, decreased productivity, reduced patient satisfaction and can lead to interpersonal conflicts.

Efforts to answer the above problems need a new model that is suitable to be applied in Islamic-affiliated hospitals and is suitable to be applied in Indonesia, which has a majority Muslim population, but also has a population with religious, ethnic, linguistic and cultural diversity, namely the ASWAJA An Nahdliyah-based Caring model. This ASWAJA An Nahdliyah-based caring model is expected to improve performance, quality and patient safety. This study uses the theory of service quality development as a framework, because caring is part of performance (work behavior) in order to improve service quality (Organization Effectiveness). Caring skills in this study using the Carolina care model which adapts from Swanson caring theory is one model approach to systematically actualize nursing theory, including interventions that connect nursing actions based on ASWAJA An Nahdliyah, the care process, and expectations. The purpose of this study was to develop a caring model based on ASWAJA An Nahdliyah as an effort to improve performance in patient safety.

METHODS

Study Design
This study was observational analytics study in order to analyze several factors that affect performance in patient safety based on ASWAJA An Nahdliyah's caring. The population of the study were nurses in two Islamic hospitals in Surabaya. The inclusion criteria are 1) working in a medical surgery room, 2) working more than 1 year, 3) not being on leave or sick during the research. The sample size in this study was 123 people, taken by simple random sampling.

Data Collection
Data were collected using a questionnaire. The research instrument used a questionnaire designed by the researcher. The instrument of factors related to caring and performance was designed by the researcher based on the concept adopted from Nursalam's study in 2015. Caring based on ASWAJA An Nahdliyah was designed by the researcher with a modification of Caroline and Swanson's caring theory Jansson & Adolsfsson's study in 2011 and modified with the value of -the value of ASWAJA An Nahdliyah, Matthews et al. The patient safety target performance instrument was taken from Hospital Accreditation Commission's study.

The instrument used a questionnaire in the form of a Likert scale which contained approval of the statement on each variable. In a positive statement, if the respondent chooses to strongly agree, it is given a score of 4, agrees 3, disagrees 2 and strongly disagrees 1. For negative statements the opposite applies, namely if strongly agree it is given a score of 1, agree a score of 2, disagree 3 and strongly disagree agree 4. The research instrument has been tested for validity and reliability. The validity test uses Pearson's Product Moment correlation with the condition that if the value of r count > the value of r table, the statement item is declared valid. The reliability of the questionnaire was tested with Cronbach's alpha. It is said to be a reliable instrument if the value of Cronbach's alpha > 0.70. Validity and reliability tests were conducted on 20 respondents. The value of r product moment at sig 0.05 is 0.4438. The results of the validity test of all instrument items are valid because all items show > 0.4438. The results of the reliability test also showed that all items showed a value of > 0.70, indicating that all items were reliable for measuring the variable to be measured.

Data Analysis
The data used structural equation modelling (SEM) based on variance or components, better known as partial least squares (PLS). The patient safety target performance model based on caring based on ASWAJA An-Nahdliyah was developed after conducting a path analysis study and formulating strategic issues through focus group discussions (FGD) and expert discussions. The discussion was held in order to evaluate the latest model and prepare the nursing intervention according to the model development.

RESULTS

The Characteristics of Subjects
According to the inclusion criteria, the characteristics of respondents that included in this study can be seen in table below.

Respondents in this study were nurses who worked in a medical surgery room with an average age of 29.66 years (SD = 4.910, 95% CI: 28.78–30.54), work experience (years of service) on average mean 6.15 years (SD=5.506, 95% CI: 5.17–7.13). Table 1 shows that most of the respondents (95/123 = 77.2%) were female, most (68/123 = 55.3%) had a D3 nursing education and most (88/123 = 71.5%) were married, most of them (71/123=77.7%) were already permanent employees.

Structural Equation Modelling

Outer Model Evaluation
Evaluation of the measurement model (outer model) checks the validity and reliability of indicators measuring latent constructs/variables. The latent variables in this study are organizational characteristics (X1), job characteristics (X2) individual characteristics of nurses (X3), patient characteristics (X4), infrastructure factors (X5). Caring based on ASWAJA An Nahdliyah (X6), performance in patient safety goals (Y1). The indicator is considered valid if it has an outer loading >0.5. The indicator with the highest outer loading value indicates that the indicator is the strongest measure of the relevant latent variable.

Figure 1 shows that based on the loading factor value in the initial model results, almost all indicators have an outer loading value of more than 0.5, and there are only four (4) indicators with an outer loading between 0.4 to 0.5, namely selection (X1.3) and development (X1.5), knowledge (X3.1), and patient age (X4.1). According to Hulland (1999), this is still tolerable because the number is not large.
Table 1. Characteristics of Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age (years)</td>
<td>≤ 24</td>
<td>11</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>95</td>
<td>77.2</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>2. Sex</td>
<td>Male</td>
<td>28</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>95</td>
<td>72.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>3. Level Education</td>
<td>Diploma3</td>
<td>68</td>
<td>55.3</td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td>55</td>
<td>44.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>4. Marital status</td>
<td>Single</td>
<td>35</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>88</td>
<td>71.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>5. Employment status</td>
<td>Contract</td>
<td>52</td>
<td>42.3</td>
</tr>
<tr>
<td></td>
<td>Permanent</td>
<td>71</td>
<td>57.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1. Outer model of caring development based on ASWAJA An Nahdliyah on the performance of patient safety goals.

The R square value on the variable performance in patient safety goals (Y1), it is 0.561 which is in the good category. This means that the magnitude of performance variation in patient safety goals (Y1) is explained by exogenous factors, organizational characteristics (X1), job characteristics (X2), individual characteristics (X3), patient characteristics (X4), infrastructure (X5) and caring. ASWAJA An Nahdliyah is good at 56.1%, the remaining 43.9% is explained by other variables outside the model.

Factors that Affect Performance in Patient Safety Goals

The significance test is used to test whether there is an effect of exogenous variables on endogenous variables. The test criteria state that, if the t-statistic value of T table (1.96) or p value <0.05, it indicates that there is a significant influence between exogenous variables on endogenous variables. The results of the significance test and the model are shown in Figure 2 and Table 2.

Hypothesis testing in model development showed that organizational characteristics (p = 0.029) and job characteristics (p = 0.010) had an effect on individual characteristics of nurses, where individual characteristics of nurses would have a significant effect on ASWAJA An Nahdliyah-based caring (p = 0.000). Job characteristics (p = 0.000), patient characteristics (0.036), facilities and infrastructure factors (p = 0.014) also had a significant effect on ASWAJA An Nahdliyah-based caring. Caring based on ASWAJA An Nahdliyah significantly influences performance in patient safety goals (SKP) (p = 0.000). Performance in patient safety goals is not only influenced by ASWAJA An Nahdliyah's caring path, it is also directly influenced by patient characteristics (p = 0.008) and individual characteristics of nurses (p = 0.005).

DISCUSSION

Figure 1 shows that the outer loading value is valid because almost all indicators have an outer loading value of more than 0.5, the average is more than 0.7. This means that each indicator can measure the latent variable, although there are some whose values range from 0.4 to 0.5, because there
are not many of them in a factor, according to the previous study, tolerated, supported by the value of Average Variance Extracted (AVE) all showing 0.5.22

Figure 2, shows that organizational characteristics and job characteristics do not directly affect the performance variable in patient safety goals. Likewise, infrastructure factors cannot directly affect performance in patient safety goals. This is a new finding from this study, which is to produce good performance in patient safety goals, it cannot be done directly through organizational characteristics and job characteristics, but mediation is needed through individual characteristics and Caring ASWAJA An Nahdliyah. Facilities and infrastructure also indirectly affect performance in patient safety targets (SKP), but Caring ASWAJA An Nahdliyah mediation is needed.

Based on the results of the study, it showed that ASWAJA An Nahdliyah's caring was the strongest factor affecting performance in patient safety goals, which was 50.7%. Performance in patient safety goals (SKP) includes: (1) Accuracy of patient identification, (2). Improved effective communication (3) Improved safety of drugs that need to be watched out for, (4) Confirmation of the right location, right procedure, right patient operation, (5) Reducing the risk of infection related to health services, (6) Reducing the risk of falling patients. Performance in patient safety goals (SKP) can be carried out well by nurses who have good caring base on ASWAJA An Nahdliyah. Caring is human knowledge, the core of ethical and philosophical nursing practice. Caring is also defined as an action that aims to provide physical care and attention to emotions while increasing the patient's sense of security and safety. Caring attitude is given through honesty, trust and good intentions. Caring helps patients promote positive changes in physical, psychological, spiritual, and social aspects.23 Caring base-on ASWAJA An Nahdliyah is very important to be carried out by nurses in providing nursing care to patients so that Adverse Events do not occur which will have an impact on service quality and will affect patient satisfaction.6,24–26 According to earlier studies caring behavior is expressed on a continuum not only in presence, but in the form of competent nursing care performance.27 Caring has been known to produce client satisfaction and the results are positive.

Caring base-on ASWAJA An Nahdliyah is caring which stages refer to Swanson's caring, which is modified with the concept of caring in Islam. According to Islamic documents, there are four main types of caring: (1) Caring for God (2) Caring for themselves, (3) Caring for others, and (4) Caring for humans towards nature and vice versa. Caring for God affects the other three types of caring. That is, the whole world is under the authority of God and God is the regulator, protector, and caretaker of the universe (Sadat-Hoseini, Abdoul-Hosein, & Khosropanah, 2017). In addition, it also includes the values of ASWAJA An Nahdliyah, namely in providing nursing services nurses must be with the attitudes and behaviors of (1) tasamuh (tolerant, respectful), (2) tawassuth & i'tidal (moderate, straight, middle, fair), (3 ) tawazun (proportional / balanced) (4) amar ma'ruf nahi mungkar (do good and stay away from despicable acts), (5) al-Istiqamah (continuous, consistent, obedient to laws and regulations).20 Caring is a way to create and or maintain health that can be done by establishing valuable relationships with other people so that they have an intimate relationship with commitment

![Figure 2. Inner Model of Caring Based On ASWAJA An Nahdliyah On Performance In Patient Safety Goals.](image)

<table>
<thead>
<tr>
<th>Influence</th>
<th>Original Sample (O)</th>
<th>T-statistic (O/STDEV)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Characteristics (X1) influence the individual characteristics of nurses (X3)</td>
<td>0.227</td>
<td>2.190</td>
<td>0.029</td>
</tr>
<tr>
<td>Job Characteristics (X2) influence the individual characteristics of nurses (X3)</td>
<td>0.410</td>
<td>2.587</td>
<td>0.010</td>
</tr>
<tr>
<td>Job Characteristics (X2) influence Caring based on ASWAJA An Nahdliyah (X6)</td>
<td>0.358</td>
<td>3.864</td>
<td>0.000</td>
</tr>
<tr>
<td>Individual characteristics of nurses (X3) influence Caring based on ASWAJA An Nahdliyah (X6)</td>
<td>0.348</td>
<td>4.378</td>
<td>0.000</td>
</tr>
<tr>
<td>Patient Characteristics (X4) has an influence Caring based on ASWAJA An Nahdliyah (X6)</td>
<td>0.066</td>
<td>2.102</td>
<td>0.036</td>
</tr>
<tr>
<td>Factors of Facilities &amp; Infrastructure (X5) influence on Caring based on ASWAJA An Nahdliyah (X6)</td>
<td>0.202</td>
<td>2.472</td>
<td>0.014</td>
</tr>
<tr>
<td>Individual characteristics of nurses (X3) influence Performance in patient safety goals (Y)</td>
<td>0.310</td>
<td>2.800</td>
<td>0.005</td>
</tr>
<tr>
<td>Patient Characteristics (X4) influence Performance in patient safety goals (Y)</td>
<td>-0.150</td>
<td>2.669</td>
<td>0.008</td>
</tr>
<tr>
<td>Caring ASWAJA Annahdiyah (X6) has an influence on Performance in patient safety goals (Y)</td>
<td>0.507</td>
<td>4.323</td>
<td>0.000</td>
</tr>
</tbody>
</table>
and responsibility, both to God, oneself, with others, as well as caring for the natural environment. Example: the use of tools and materials to provide care in a proportionate manner that is not wasteful and manages medical waste properly. This is useful in realizing a patient safety culture where in realizing a patient safety culture it requires cooperation and commitment between nurses and clients as well as shared responsibilities, including responsibility to God.

The results also show that the factors that influence caring base-on ASWAJA Annahdiyah’s are (1) job characteristics, (2) individual characteristics of nurses, (3) patient characteristics, and (4) infrastructure factors. Of the four factors, the strongest influence is individual characteristics of nurses, with indicators 1) knowledge, 2) abilities, 3) skills, 4) motivation, 5) attitudes, 6) values and norms. The results of this study support the findings made by Leyva, Peralta, Jean, & Santos, (2015), that caring behavior is influenced by personal characteristics, culture, and the general environment of nurses and clients involved in the relationship. This finding is also consistent with earlier research that job characteristics and individual characteristics of nurses influence Islamic caring.26

Figure 2 can show that organizational characteristics do not directly affect caring base-on ASWAJA Annahdiyah’s and performance in patient safety goals, but the effect is indirectly through the mediation of individual characteristics of nurses. Among the six indicators forming the individual characteristics of nurses, values and norms are the strongest indicators of individual nurse factors that affect caring base-on ASWAJA An Nahdliyah. Based on the results of these studies indicate that organizational characteristics will affect individual characteristics of nurses, and nurse characteristics affect for caring base-on ASWAJA Annahdiyah, then this caring behavior will affect performance in patient safety goals. The results of this study support the theory proposed by Gibson’s study in 1997 that organizational variables have an indirect effect on a person’s behavior and performance.29 The individual characteristics of nurses are not only influenced by organizational characteristics but also by job characteristics. Job characteristics have a stronger influence on individual characteristics of nurses than organizational characteristics. It can be understood that the work environment will directly improve the knowledge, abilities, skills, motivation, attitudes, values and norms.

CONCLUSION

The study which aims to develop a caring model based on ASWAJA An Nahdliyah on performance in patient safety goals, proves that caring based on ASWAJA An Nahdliyah has a strong influence on improving performance in patient safety goals. The factor that has a strong influence in increasing ASWAJA An Nahdliyah’s caring is the individual characteristics of the nurse. Strengthening the characteristics of nurses is needed, among others, to increase knowledge, abilities, skills, motivation, values and norms in order to improve performance in patient safety goals. Strengthening the individual characteristics of nurses can be through scientific meetings such as conference, training, continuing education.

DISCLOSURE

Author Contribution

All authors have contributed to this research process, including conception and design, analysis and interpretation of the data, drafting of the article, critical revision of the article for important intellectual content, final approval of the article, collection and assembly of data.

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Conflict of Interest

There is no conflict of interest for this manuscript.

Ethical Consideration

The research procedure was approved by the Health Research Ethics Committee of the Rumah Sakit Islam Surabaya Jemursari with the number: 0174/KEPK-RSI JS/IV/2020. We have also received a research assignment letter from the Faculty of Nursing, Universitas Airlangga with the number: 775/UN3.1.,12/PPD/S3/2020. All participants gave their consent and were notified that they could withdraw from participation at any time as research respondents.

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