Evaluation of Quality of Nursing Work-Life: Based on Swanson's Theory of Caring

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Abstract

BACKGROUND: Quality of Nursing Work-Life (QNWL) has become a major factor in influencing the quality of nursing services. Meanwhile, the caring behavior that is shown by nurses can predict the value of their work quality.

AIM: This study aimed to assess the QNWL and to identify the predictors based on Swanson's theory of caring including compassion, competence, and upholding trust.

METHODOLOGY: Cross-sectional studies were conducted in a nurse at a hospital in Tulungagung and a hospital in Banyuwangi (n = 420 by simple random sampling) from January 2021 to April 2021. The instrument in this study was developed by standard guidelines of Swanson's theory and QNWL's instruments. Multiple linear regression was used to identify predictors.

RESULTS: The mean score of QNWL was 132.05 (SD = 0.936) (range of possible score = 32–160). Upholding trust (0.01), compassion (0.03), and competence (0.02) significantly predicted QNWL (R Square = 0.795).

CONCLUSION: The constructs of Swanson's Theory significantly predicted QNWL. This study supports an investigation about the factors underlying QNWL on a larger scale, as well as the identification of targets in designing future interventions.

Introduction

Quality of Nursing Work-Life (QNWL) in the current era has become a management approach that is continuously directed at improving the quality of nurses' work [1]. Therefore, hospital management should care about the condition of nurses as a whole [2], this is believed to foster loyalty which in turn will improve the performance of nurses [3]. The quality of service provided by a nurse is strongly influenced by QNWL which is an important element in the field of health services [4].

A good QNWL will increase nurse job satisfaction, while nurse job satisfaction has a close relationship with caring behavior shown by nurses. The better the QNWL condition, the better the impact on the caring behavior of nurses in nursing care [5]. QNWL is a concept that describes a nurse's perception of the fulfillment of her needs through work experience in a health care organization [6]. The purpose of fulfilling the quality of work-life of nurses is fully aligned with the management function in managing superior human resources and having maximum work productivity so that nurses as staff get personal satisfaction for meeting their needs [7].

QNWL has four main indicators: (1) Work Life-Home Life Dimension (experience at work and home), (2) Work Design Dimension (composition of work), (3) Work Context Dimension (practice setting), and (4) Work World Dimension (effect of the social environment) [8]. The management of health service organizations, especially hospitals, must be able to create good QNWL by providing opportunities for self-development, welfare that can meet the basic needs of workers, as well as a safe and comfortable work environment so that it can generate morale to improve service quality [9]. However, if QNWL is not considered properly, nurses will feel dissatisfied with their work-life and as a result, they will leave their profession [10].

QNWL has become a major factor in influencing the quality of nursing services. Meanwhile, the caring behavior that is shown by nurses can predict the value of their work quality [11]. Caring behavior is the main indicator of the quality of health services [12]. Caring as an evaluation of health services is a trend in the current era [13]. Caring is also the main performance of nurses to improve service quality [14]. The Theory of Caring developed by Swanson states that caring behavior has three main indicators, namely upholding trust, compassion, and competence [15].

The close relationship between QNWL and caring behavior made us interested in conducting a study on QNWL and caring behavior. This study aims to evaluate QNWL using Swanson's Theory of Caring as its predictor (upholding trust, compassion, and competence).

Methods

A cross-sectional study was conducted on 420 nurses working in two hospitals located in Tulungagung Regency and Banyuwangi Regency, East Java, Indonesia in 2021. Sampling in this study used a simple random sampling technique. This study only recruited inpatient nurses who had more than 2 years of work experience and had a minimum education diploma in nursing as respondents, while nurses who were sick and on official leave at the time of the study were excluded from this study. All questionnaires in this study have been completed/completed by each nurse, and the questionnaires were filled in by nurses voluntarily without any coercion from any party. The research protocol was approved by Indonesia Health Research EthicCommittee (070/2695/407,206/2020)

A questionnaire to measure QNWL (32 questions) was developed based on four QNWL indicators: (1) Work Life-Home Life Dimension (experience at work and home), (2) Work Design Dimension (job composition), (3) Work Context Dimension (practice setting)., and (4) Work World Dimension (effect of the social environment). While the questionnaire to measure upholding trust, compassion, and competence used a questionnaire developed from the standard instruments of Swanson's Theory of Caring, the translation of the questionnaires was carried out to adjust to the situation at the sites. This questionnaire contains four questions each. Validity and reliability tests have been carried out on all questionnaires used in this study.

Respondents were asked to read and understand each sentence in the questionnaire before starting to answer the questions. Each individual obtained a score of 0–12 for each questionnaire (upholding trust, compassion, competence), and a score of 1–96 for the QNWL questionnaire. Finally, according to the questions of each subtest, the scores of each subtest are calculated separately, and the mean of scores is obtained. Structural Equation Modeling analysis using smartPLS was carried out to explore QNWL, in which Swanson's Theory of Caring was the predictor (upholding trust, compassion, and competence). The data analysis process includes the evaluation of the outer model (Convergent Validity, Discriminant Validity, and Reliability AVE), as well as the inner model (R- Square Evaluation, Q-Square predictive relevance, and Hypothesis Testing). "Upholding trust, compassion, and competence have a positive effect on QNWL" was determined as the hypothesis in this study. Significance level was considered at t-Values > 1.96.

Results

Sociodemographic in this study shows that the average age of the respondents is 37 years, most of the respondents (62.6%) are female nurses. More than half of the respondents (51.7%) have a monthly income of more than Rp. 5,000,000.00. Respondents in this study had a fairly good education, almost half of the respondents (48.9%) had undergraduate education. More than half of the respondents (5.7%) have permanent employee status where they work. In terms of years of service, most of the respondents (59.4%) had more than 3 years of service. The nurse's working hours in a day were between 6 and 12 h (mean: 8.5 h). The mean time of nurse's working hours at night was 10.5 h. Almost all respondents (95.3%) had a rotating shift, and (78.9%) of the nurses had the physical activity of more than ½ h in a day. The sleeping time duration of nurses was between 3 and 12 h (mean: 7.5 h), the desired sleeping time duration of nurses was between 6-14 h (mean: 8.5 h).

Respondents who participated in this study came from several diverse ethnic groups, the largest portion came from the Arek Javanese (25%), followed by the Panaragan tribe (17.2%), the Osing tribe (16.1%), the Mataraman tribe (14.4%), Madurese (13.3%), Balinese (3.9%), Sundanese (3.3%), Minang (3.3%), Betawi (1.7%) and the last is the Dayak tribe (1.7%).

This study uses two indicators to measure the Upholding Trust variable, namely maintenance belief and culture care preservation (Table 1). To measure the Compassion variable, the indicators of knowing and being with are used. To measure the Competence Variable using the Doing for and Enabling indicators. Meanwhile, to measure the QNWL variable using four indicators, namely: (1) Work Life-Home Life Dimension (experience at work and home), (2) Work Design Dimension (composition of work), (3) Work Context Dimension (practice arrangement), and (4) Work World Dimension (effect of the social environment).

Based on the picture of the outer model evaluation above, it is known that the loading factor value of all variable indicators has a value >0.70. This means that all indicator variables in this study have good validity in predicting their respective variables: (1) Maintaining belief and culture care preservation are valid indicators for the variable upholding trust, (2) Knowing and being with are valid indicators for compassion variable, (3) Doing for and enabling are valid indicators for competence variable, (4) Work

Table 1: Frequency Distribution of Quality of Nursing Work-Life and Construct from Swanson's Theory of Caring (upholding trust, compassion, competence)

Variable	Min	Max	Mean	SD
Upholding trust (X1)				
Maintening belief (X1.1)	0	6	4.12	12.43
Culture care preservation (X1.2)	0	6	3.87	11.23
Compassion (X2)				12.65
Knowing(X2.1)	0	6	3.76	12.23
Being with (X2.2)	0	6	3.51	11.23
Competence (X3)				
Doing for (X3.1)	0	6	4.01	9.75
Enabling (X3.2)	0	6	3.89	10.67
QNWL (Y1)				
Work Life-Home Life (Y1.1)	1	24	16.21	11.23
Work Design (Y1.2)	1	24	18.72	12.93
Work Context (Y1.3)	1	24	17.98	12.43
Work World (Y1.4)	1	24	15.73	13.01

Life-Home Life Dimension, Work Design Dimension, Work Context Dimension, and Work World Dimension are valid indicators for QNWL variable.

Table 2 shows that the composite reliability value of all variables in this study is > 0.7, and the AVE value of all variables is > 0.5. This shows that each variable has met composite reliability so that it can be concluded that all variables have a high level of reliability.

Table 2: Cronbach's alpha, composite reliability, and average variance extracted (AVE)

Variable	Cronbach's Alpha	Composite Reliability	AVE
X1	0.769	0.868	0.688
X2	0.719	0.872	0.773
X3	0.859	0.898	0.639
Y1	0.826	0.896	0.744

R-squared value (R^2) is used to measure how much influence the X variable has on the Y variable. Based on Figure 1, the R-square value of the QNWL (Y1) variable in this study is 0.915. It can be interpreted that 91.5% of QNWL variables can be explained by upholding trust, compassion, and competence variables, while the remaining 8.5% is explained by other variables outside this study. This means that the construct of Swanson's Theory of Caring (upholding trust, compassion, and competence) can predict QNWL well, its ability reaches 91.5%.
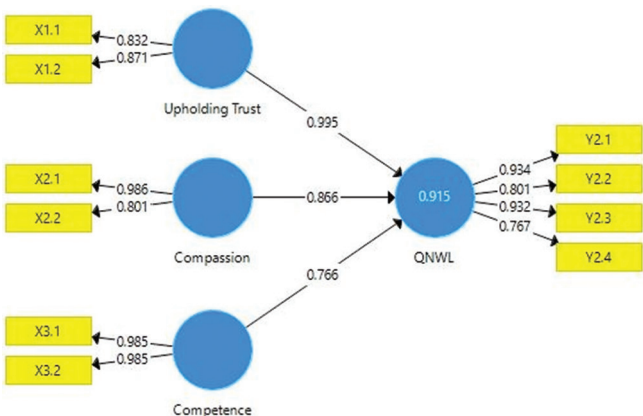

Figure 1: Outer model evaluation

Based on the data analysis that we carried out, the value of the Q-Square model in this study was 0.898, meaning that the model in this study is capable and relevant if applied in other settings or other places, its ability reaches 89.8%. The results of hypothesis testing in this study can be seen in Figure 2, based on the inner model evaluation, it is known that the value of the t-Values variable upholding trust towards QNWL is 8,148, compassion for QNWL is 6,549, and competence towards QNWL is 5,129. The test results mean that upholding trust, compassion, and competence have a positive effect on QNWL.
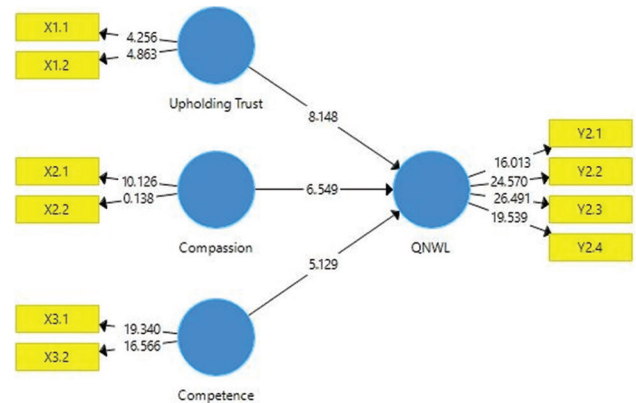

Figure 2: Inner Model Evaluation

Based on all the explanations of the research results above, it can be said that the construct of Swanson's Theory of Caring (upholding trust, compassion, and competence) can be an accurate predictor of QNWL.

Discussion

The results of data analysis state that all variable indicators used in this study meet the requirements of good validity and reliability, (1) Maintaining belief and culture care preservation are valid indicators for the upholding trust variable, (2) Knowing and being with are valid indicators for the variable. compassion, (3) Doing for and enabling are valid indicators for competence variable, (4) Work Life-Home Life Dimension, Work Design Dimension, Work Context Dimension, and Work World Dimension are valid indicators for QNWL variable. Maintaining belief has a mean value of (4.12), culture care preservation (3.87), knowing (3.76), being with (3.51), enabling (3.89), work-life-home life dimension (16.21), work design dimension (18.72), work context dimension (17.98), and work world dimension (15.73).

The purpose of this study was to explore QNWL using Swanson's Theory of Caring Construct (upholding trust, compassion, and competence) as a predictor. The results of the study show that the construct of Swanson's Theory of Caring (upholding trust, compassion, and competence) can be an accurate predictor of QNWL,

the accuracy reaches 91.5%. Even the model offered in this study can be used in other settings or elsewhere with an accuracy that reaches 89.8%.

Several studies state that other factors that influence QNWL include organizational characteristics, the nature of nursing work, respect for values, human resources, collective relationships, and career development [2], [16]. A good QNWL will increase nurse job satisfaction [5]. Meanwhile, nurse job satisfaction has a close relationship with caring behavior that will be shown by nurses [17]. The better the QNWL condition, the better the impact on the caring behavior of nurses in nursing care [18]. QNWL is something that hospital management must continue to pay attention to, especially the COVID-19 pandemic situation that is currently engulfing the global world is very burdensome for nurses' workload, both physically and mentally [19].

QNWL is a concept that describes a nurse's perception of the fulfillment of her needs through work experience in a health-care organization [6]. The purpose of fulfilling the quality of work-life of nurses is fully aligned with the management function in managing superior human resources and having maximum work productivity so that nurses as staff get personal satisfaction for meeting their needs [7]. QNWL evaluation in a pandemic situation like this is highly recommended to maintain the quality of work and quality of life of the nurses [8]. This evaluation can be done using Swanson's Theory of Caring as the predictor. Many studies state that the caring behavior shown by nurses is a reflection of the quality of nurses' work-life [20]. The better the quality of the nurse's work-life, the better the caring behavior shown by the nurse will be [21]. The Swanson's Theory of Caring can be used as an approach in the nursing model to develop more holistic nursing science [22]. Swanson explains that Caring is defined as "a nurturing way of relating to a valued other toward whom one feels a personal sense of commitment and responsibility." The keyword of this definition is to provide valuable nursing care to clients with a full sense of commitment and responsibility [21]. Other studies also say that caring behavior can explain a large part of the quality of nurses' work-life [15]. This study only investigates the description of QNWL and caring behavior factors that influence it, we do not investigate how good QNWL and bad QNWL.

Conclusion

This study found that the construct of Swanson's Theory of Caring (upholding trust, compassion, and competence) was able to be an accurate predictor of QNWL. Even the model offered in this study can be used in other settings or elsewhere. A good QNWL will increase nurse job satisfaction, and

nurse job satisfaction has a close relationship with caring behavior shown by nurses. The better the QNWL condition, the better the impact on the caring behavior of nurses in nursing care. We recommend the hospital management periodically evaluate QNWL, especially since the COVID-19 pandemic situation that is currently engulfing the global world is currently very burdensome for nurses' workload, both physically and mentally.

Acknowledgments

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