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Work Life Quality Role as A Variables of Knowledge Mediation, Spiritual Intelligence, And Attitudes Towards Nurse Performance in Applying Patient Safety (SKP)

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This study aims to analyse the significant influence together Knowledge, Spiritual Intelligence, and Attitude on the Quality of Work Life and the Impact on Nurse Performance in the Application of Patient Safety Targets at X Hospital either partially or simultaneously. The research methodology uses a quantitative approach with the path analysis method using the Structural Equation Modelling (SEM) equation. The sampling technique was carried out by saturated sampling (census) of 111 respondents based on the total population of nurses in the inpatient room. The results showed that Knowledge, Spiritual Intelligence, and Attitude had a significant influence together on the quality of work life and their impact on nurse performance. Thus, to improve nurse performance in implementing patient safety goals at X Hospital simultaneously such as knowledge has a significant positive effect on the quality of work life of nurses, spiritual intelligence has a significant positive effect on the quality of work life of nurses, attitudes have a significant positive effect on the quality of work life of nurses, knowledge has a significant positive effect on the performance of nurses in implementing patient safety goals, attitudes have a significant positive effect on the performance of nurses in implementing patient safety goals, and the quality of work life of nurses has a significant positive effect on the performance of nurses in implementing patient safety goals with seventh hypothesis. The findings of this study are that the quality of work life of nurses has a partially mediating role in the performance of nurses in implementing patient safety goals at X Hospital with 0.666 of correlation value. This is an increase in religious activities in kinship to form emotional bonds and commitment to nurses to behave calmly and patiently in implementing the Patient Safety Goals on an ongoing basis.

Keywords: Knowledge, Spiritual Intelligence, Attitudes, Quality of Work Life, and Nurses Performance

1. INTRODUCTION

The application of Patient Safety Goals (SKP) is currently a global and national issue for hospitals and is a very important component of the quality of health services [1, 2, 3]. One of the professions that plays a vital role in implementing SKP is a nurse [4]. Here, the running SKP, nurses must apply good and quality work principles [5]. However, many factors contribute to the quality of nurse performance so that they can affect patient safety. Some of these factors include the level of knowledge, attitudes, and spiritual intelligence [6, 7]. Here, nurses must have a good level of knowledge, a positive attitude, and sufficient spiritual intelligence to improve the quality of their performance which will then have a positive impact on patient safety [8, 9, 10]. However, a good level of knowledge, a positive attitude, and sufficient spiritual intelligence that nurses should have has not been given -

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much attention by hospital management as a regulator of health service providers. In previous studies, X Hospital throughout in 2019 have 1,439 patient safety incidents. Here, around 1,439 cases of 1,406 cases (97.71%) were classified as moderate (green grade) while 32 cases (2.22%) are categorized as a low category (blue grade), and 1 case (0.07%) category high (yellow grade). On the other hand, X Hospital won a plenary accreditation award from the Hospital Accreditation Commission since 2017. In addition, X Hospital also has a Hospital Patient Safety Team which consistently investigates the application of patient safety in the room. In this study also conducted interviews with 2 (two) nurses who were taken randomly. The first nurse expressed a lack of understanding of current correct patient safety practices. This nurse is only trying to carry out the procedure according to her habits without knowing whether it has met patient safety standards or not. Then, the second nurse said, she already

knew the principles of SKP, but in its application, she admitted that sometimes she was still negligent, for example forgetting to identify the patient before giving medication. The second nurse admits that if she is reminded of the meaning of her profession which has high value of worship, usually the nurse will be very careful in caring for the patient. Knowledge is information that can be known by someone with an understanding through a certain based on experience [11, 12]. Knowledge is not absolutely a single factor, there are also attitudinal factors that contribute. Sometimes there are nurses who actually have an adequate level of knowledge, but whose attitude is not suitable in building quality work so they risk neglecting their role in patient safety. Own attitude is the emergence of a person's reaction that comes from an evaluative combination of feelings and thoughts about a situation [13]. The nurses who have a positive attitude towards their work will show better quality caring for patients than those with negative attitudes [14]. The nurse with a positive attitude realizes how important this aspect of patient safety when a nurse have this positive attitude it will potentially affect their duties in implementing a stronger SKP.

Here, the level of knowledge and good attitudes possessed by a nurse is closely related to the implementation of optimal patient safety [15]. Another study also strengthens, that the better the knowledge and the more positive the attitude of a nurse, the more safety of patients in the hospital can be guaranteed [16]. In this study, also provides recommendations for how hospital management should be able to suitably address the needs of nurses for up-to-date conferences or training to improve their knowledge and attitudes towards patient safety. In addition, the knowledge and attitudes, also spiritual intelligence factors can be affected the quality of work of nurses. Spiritual intelligence is a level of depth in a person's thoughts and feelings about the meaning of life in this world [17]. Thus, high spiritual intelligence of nurse can be feeling the work life in the hospital is interpreted as worship so that she has the potential to carry out her duties as well as possible, including by not neglecting the task of carrying out SKP. In addition, the positive correlation between spiritual intelligence and the quality of nursing care.

2. METHODOLOGY

A. Nurse Knowledge

Knowledge is all forms of ideas, information, and data that have intellectual properties that are obtained from anything expressed or obtained from nature [18]. Here, the dimensions based on the International Patient Safety Goals from the Joint Commission International such as Correct patient identification (P_1), Effective communication (P_2), Safety of using drugs that require attention (P_3), Ensuring safe operations (P_4), Reduced risk of infection (P_5), and Prevention of injuries from falls (P_6) are analyzed in this study.

B. Spiritual Intelligence

Spiritual intelligence is a level of the depth of a person's thoughts and feelings about their life which are considered meaningful or not [19]. Dimensions based on The Spiritual Intelligence Self-Report Inventory such as Critical thinking (KC_1), Discovery of the meaning of life (KC_2), Spiritual awareness (KC_3), and Development of consciousness (KC_4) are analyzed in this study.

C. Attitude

Attitude is a positive or negative feeling from within a person that influences one's behavior towards a stimulus [20]. Here, the dimensions based on the Safety Attitude Questionnaire (SAQ) such as Cooperation (S_1), Climate / safety atmosphere (S_2), Job satisfaction (S_3), Perceptions of management (S_4), and working conditions (S_5) are analyzed in this study.

D. Quality of Work Life

The quality of work life is the degree or range to which workers feel able to carry out their work comfortably supported by an ideal and responsive managerial work environment so that the work produced is of quality. Dimensions based on Brooks Quality of Nurses Work Life such as Dimensions of Work Life and its Relationship to Life at Home (Q_1), Work Design Dimensions (Q_2), Dimensions of Work Context (Q_3), and Dimensions of the World of Work (Q_4) are analyzed in this study [21].

E. Nurse Performance in SKP Application

The performance of nurses is an assessment of the activities of nurses during work with the characteristics of nursing work that is full of risks (shift work) but must still pay attention to patient safety [22]. SKP dimensions includes Contextual (KP_1), Professional skills (KP_2), Clinical skills (KP_3), Interpersonal communication (KP_4), Problem solving (KP_5), Ethics (KP_6), Teamwork (KP_7), and Leadership (KP_8). Figure 1 shows the conceptual framework for each parameter.

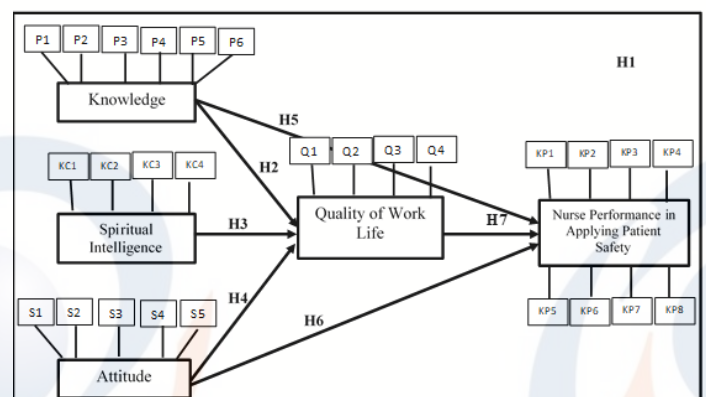


Figure 1. Conceptual Framework

Furthermore, we proposed the conceptual framework in seven hypotheses to obtain the result, as follows:

H₁: There is a significant influence together Knowledge, Spiritual Intelligence, and Attitude on the Quality of Work Life and the Impact on Nurse Performance in Implementing Patient Safety Targets at X Hospital simultaneously

H₂: There is a significant effect of knowledge on the quality of work life of nurses partially

H₃: There is a partially significant influence of spiritual intelligence on the quality of work life of nurses partially

H₄: There is a partially significant effect of attitudes on the quality of work life of nurses partially

H₅: There is a significant influence of knowledge on the performance of nurses in the application of patient safety goals partially

H₆: There is a significant effect of attitudes on the performance of nurses in partially implementing patient safety targets partially

H₇: There is a significant influence on the quality of work life of nurses on the performance of nurses in implementing patient safety targets partially

In addition, we use a quantitative data approach with the path analysis method using the Structural Equation Modeling (SEM) equation. The sampling technique was carried out by saturated sampling (census) of 111 respondents based on the population of nurses in the inpatient room at X Hospital.

3. RESULT AND DISCUSSION

A. Respondent Characteristic

The total number of respondents is reached 111 respondents. Here, we obtain 19.82% male and 80.18% were female nurses. For the largest respondent, we proposed the age group also classified into productive age at the age of 20-30 years at 72.07% while the age of 31-40 years at 22.52% and those over 40 years old reached 5.41%. Based on the respondents' data, we also obtain the education background of the most respondents in X Hospital. Here, the Diploma 3 (D3) of Nursing around 98.20% while Bachelor degree of Nursing Nurse around by 1.80%. On the other hand, the length of work of -

respondents at X Hospital were less than 10 years by 72.07% and the rest more than 10 years reached 27.93% (see Table I).

Table I. Validity and Reliability Testing Results

Variables	Valid	Invalid	Cronbach's Alpha
Knowledge	10	3	0,623
Spiritual intelligence	15	1	0,721
Attitude	9	3	0,648
Quality of work life	13	-	0,745
Nurse Performance in SKP Application	17	-	0,765

B. Descriptive Statistics

The descriptive statistical results show the tendency of patients at X Hospital to be in the perception of agreeing to respond to the behavior of each variable is showed in Table II while Recapitulation of respondents' statements is showed in Table III.

Table II. Descriptive Statistical Results

Variables	N	Minimum	Maksimum	Mean	Std Deviation
Knowledge (X1)	111	1	4	2,70	0,521
Spiritual intelligence (X2)	111	2	4	2,82	0,520
Attitude (X3)	111	1	3	2,41	0,511
Quality of work life (Z)	111	2	4	2,98	0,569
Nurse Performance in SKP Application (Y)	111	2	4	3,26	0,696
Valid N (listwise)	111				

Table III. Recapitulation of respondents' statements

No	Variables	Three Box Method Position			Notes
		Low	Medium	High	
1	Knowledge			v	Nursing care knowledge and education have a positive effect on the application of SKP
2	Spiritual intelligence			v	With high spiritual intelligence, nurses can feel that their work life in the hospital is interpreted as worship so that they get calm and patience in carrying out nursing care actions in implementing SKP
3	Attitude		v		A positive attitude forms a good nurse competence in implementing SKP
4	Quality of Work Life			v	High quality of work life has a positive effect on the performance of nurses in implementing SKP
5	Nurse Performance in SKP Application			v	Nurse performance in implementing SKP is influenced by aspects of the quality of work life, competence, and intelligence of nurses

Here, the patient's statements based on the results of the three-box method is obtained:

- a) There are 3 (three) statements of knowledge variables which have a moderate category, namely drugs that are included as high alerts that must be validated by the nurse alone before being given to the patient; The writing on the patient identity bracelet only needs the patient's name and medical record number; and Concentrated drugs may be stored in the treatment room provided that they are monitored by a nurse
- b) Overall spiritual intelligence variables get high categories where the most supportive statement is that I can find meaning and purpose in my daily experience and I recognize the qualities of people more meaningfully than body, personality or emotions
- c) Overall statements of attitude variables get a moderate category. The lowest score from the moderate category according to the perception of nurses in order, namely I find it easy to convey complaints to colleagues when I am having problems related to the application of patient safety goals and this hospital can properly train new nurses to implement patient safety goals
- d) There are 3 (three) statements of the quality of work life variables which are in the medium category, namely my income / salary at work is sufficient to meet my needs; My workload is too heavy; and I do a lot of non-nursing work
- e) The highest category supports the variable performance of nurses in implementing SKP is I implement patient safety goals carefully and fully prepared and I solve patient problems related to patient safety quickly

C. Path Analysis

In this study, the Path Diagram serves to see the magnitude of the influence of each variable, both directly and indirectly on Nurses Performance at X Hospital. In testing data using AMOS, the chi-square result is 0.819 with degree of freedom approaching 1. It means that the model is close fit or sufficient (see Figure 2).

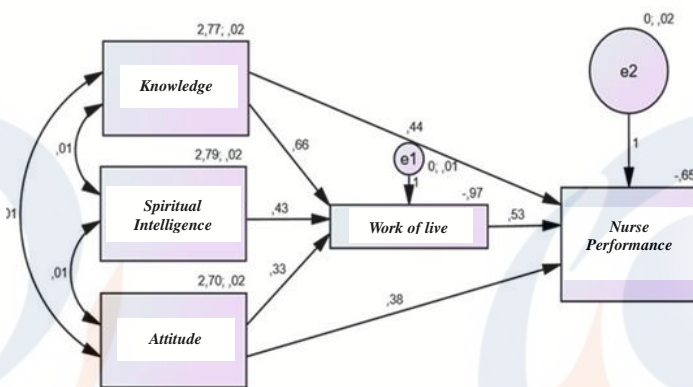


Figure 2. Path Diagram

In this study, H1 accepted at the AMOS output shows that there is a significant influence jointly with Knowledge, Spiritual Intelligence, and Attitudes on the Quality of Work Life and the Impact on Nurses Performance in Implementing Patient Safety at X Hospital simultaneously (see Table IV).

Table IV. Summary of the results of path analysis

Direct Influence Between Variables			Estimate	S.E	C.R.	P	Label
Quality of Work Life	<--	Spiritual Intelligence	0,433	0,083	5,230	***	par_1
Quality of Work Life	<--	Attitude	0,330	0,074	4,430	***	par_2
Quality of Work Life	<--	Knowledge	0,656	0,087	7,526	***	par_3
Nurses Pefomance	<--	Attitude	0,380	0,091	4,176	***	par_4
Nurses Pefomance	<--	Knowledge	0,440	0,120	3,654	***	par_5
Nurses Pefomance	<--	Quality of work life	0,532	0,096	5,525	***	par_6

D. Mediation Testing

Based on the direct influence of the structural coefficients / pathways that have been standardized (standardized direct effects) and the indirect effects of standardized indirect effects, the coefficient value of standardized indirect effects is lower than the standardized direct effects. These results indicate that the quality of work life of nurses acts as a mediating variable to indirectly influence knowledge, spiritual intelligence, and attitudes on nurses' performance in implementing patient safety goals. Furthermore, in hypothesis one there is a significant influence together Knowledge, Spiritual Intelligence, and Attitude on the Quality of Work Life and the Impact on Nurse Performance in Implementing Patient Safety at X Hospital simultaneously. Hypothesis 1 is accepted because the chi-square value is very small, indicating that there is no difference between the theory and the research model and the empirical data environment. This means that the variables between Knowledge, Spiritual Intelligence, and Attitudes as well as the Quality of Work Life have a joint effect on Nurse Performance in the Application of Patient Safety Targets at X Hospital to strengthen theory testing. In addition, the three-box method analysis is obtained as a Knowledge in the implementation of Patient Safety Goals (SKP). A high category, Spiritual Intelligence in the implementation of Patient Safety Goals (SKP) obtained from a high category and Attitudes in implementing Patient Safety Goals (SKP) over Medium category. Furthermore, the quality of work life gets a high category and the performance of nurses in implementing the Patient Safety Goals also gets a high category. The medium category for attitudes is due to the high workload causing some nurses to be unable to communicate well between rooms at the time of implementing the SKP and often the hospital management is not optimal enough to properly train new nurses to implement patient safety goals due to uncoordinated rotation of tasks between rooms. good. On the other hand, the quality of work life according to the -

nurse's perception is getting good. Compared to other type C hospitals around the site, Hospital X has a good quality of work life. A good quality of work life tends to have an impact on the maximum performance of nurses in implementing patient safety goals (SKP) on an ongoing basis. Here, a human is an important factor in accidents, 88% of accidents are caused by human factors who carry out unsafe behavior and / or potential mechanical and physical hazards. The human factor is described as daydreaming, carelessness / neglect, and not following safety requirements. Here, the 3 domains such as cognitive domain, affective domain, and psychomotor domain are measured by knowledge, attitude, practice or action. The nurses as workers who are quite influential in the implementation of patient safety have at least 3 (three) factors that can affect the quality of their work life namely knowledge, attitudes, and spiritual intelligence. Knowledge and attitudes about the 6 (six) Patient Safety Goals (SKP) must be possessed by nurses properly and adequately in order to have a good quality of work life. Increasing the knowledge of nurses to improve performance can be done in several ways, namely by socialization, continuous training, and learning to a higher level of education. Through action and learning, a person will increase his self-confidence and dare to take a stand on something that will ultimately affect behavior.

Here, the results simultaneously show that knowledge attitudes and work experience together have a significant effect on employee performance. Thus, the relationship between the knowledge and attitudes of nurses and the implementation of patient safety in the inpatient room.

Furthermore, in hypothesis two there is a significant effect of knowledge on the quality of work life of nurses partially. Hypothesis 2 is accepted because the significance level is less than 0.05. These results reinforce hypothesis 2 developed in this study that there is a significant effect of knowledge on the quality of work life of nurses at X Hospital partially. The coefficient of direct effect of knowledge on the quality of work life of nurses is 0.656 value. The results of the analysis of the three box methods, the knowledge variable on average gets the high category and the quality of work life variable on average gets the high category. Medication statements including high alerts must be validated by the nurse alone before being given to the patient; Concentrated drugs may be stored in the treatment room as long as they are monitored by a nurse; and the contents of the writing on the patient's identity bracelet only need the patient's name and medical record number on the knowledge variable to obtain a moderate category. This shows that the safety dimension of drug use that requires attention to the knowledge variable as a whole is in the moderate category. The safety factor of drug use that requires the attention of nurses has the potential to influence the activities of the nurse who also does nursing care work that is not in the realm of nursing. The results of the path analysis showed a significant positive relationship between knowledge variables and the quality of work life. This relationship

explains that the higher knowledge of nurses in implementing patient safety goals can improve the quality of their work life as well. Increased knowledge about medicines owned by nurses and documentation of clear patient bracelet recording accompanied by certain high alerts can improve the quality of work life in implementing SKP. The quality of work life approach seeks to meet the needs that are felt to be important for nurses by providing fair, fair, and supportive treatment; provide opportunities for each nurse to use their abilities to the full; provide opportunities to manifest themselves and provide opportunities to play an active role in making important decisions that involve their work [35]. Thus, this approach seeks to further utilize the skills and abilities of employees and provide an environment that encourages them to improve nursing care for patients. The idea is that nurses are human resources that need to be developed, not just used. The knowledge contributes more or less to the quality of a person's work life. Here, research show that the level of knowledge of nursing care and the better the ability to improve the quality of work life of nurses to take action on patients.

Furthermore, hypothesis three there is a significant effect of spiritual intelligence on the quality of work life of nurses partially. Hypothesis 3 is accepted because the level of significance is less than 0.05. These results reinforce hypothesis 3 developed in this study that there is a significant effect of spiritual intelligence on the quality of work life of nurses at X Hospital partially. The coefficient of direct effect of Spiritual Intelligence on the quality of work life of nurses is 0.433 value. The results of the three-box methods analysis show that all dimensions and statements of spiritual intelligence variables get high categories and the quality of work life variables on average get high categories. The calm and patience that results from the process of forming and developing spiritual intelligence in nurses affects their work context in the application of Patient Safety Goals (SKP). Nurses who have high spiritual intelligence will consider that every work activity means worship and is a part of their life duties that must be interpreted properly, so that the perception of the quality of work life is also getting better. RS X holds religious activities in a family manner that is developed by the hospital management every month and on major holidays. RS X provides meeting room facilities that are used for nurses to hold religious events or events such as inter-room gathering and monthly recitations. RS X encourages nurses to be able to interact well during religious activities. The results of the path analysis showed a significant positive relationship between spiritual intelligence and the quality of work life. This relationship explains that the higher the spiritual intelligence of nurses in implementing patient safety goals can improve the quality of their work life as well. Spiritual values that underlie the work of nurses can be used as the main capital for work, especially for overcoming tough problems and being able to accept the results of their work. Here, the one of the characteristics of a spiritually healthy person is

a person who has a socially responsible attitude, spiritually healthy people show a sense of concern for others [46]. Having an attitude of being willing to help when seeing the distress of others, seeing life realistically, obtaining spiritual meaning through his prosocial attitude, which is more giving than receiving and more concerned with the welfare of others. The influence between spiritual intelligence on the quality of work life of nurses.

Furthermore, hypothesis four there is a partially significant effect of attitudes on the quality of work life of nurses. Hypothesis 4 is accepted because the level of significance is less than 0.05. These results reinforce hypothesis 4 developed in this study that there is a partially significant effect of attitudes on the quality of work life of nurses at X Hospital. The coefficient of direct effect / attitude towards the quality of work life of nurses is 0.330 value. The results of the three-box method analysis show that all dimensions and statements of attitude variables get the medium category and the quality of work life variable on average gets high categories. My workload statement is too heavy; I do a lot of work that is not in the realm of nursing; and my income / salary at work is sufficient to meet my needs in the variable quality of work life for nurses to get a moderate category. The dimensions of the attitudes of nurses in inpatient rooms, which are in average category, are probably due to the existence of income / salary statements that some nurses feel is not sufficient to meet their life needs on the variable of quality of work life. On the other hand, workloads that are not in the realm of nursing, such as administrative activities, are felt to hinder the quality of work life of the nurse in charge. The results of the path analysis showed a significant positive relationship with the attitude variable towards the quality of work life. This relationship explains that the higher the nurse's attitude in implementing patient safety goals can improve the quality of their work life as well. A positive attitude can affect the quality of nurses' work life. It's shows that the negative attitude of nurses due to various factors, such as an unsupportive work environment, can then affect their perception of the quality of work life (dissatisfaction). Nurses who are supported by their colleagues to apply SKP properly will certainly have a better perception of the quality of work life. On the other hand, there is no significant relationship between knowledge, attitudes and quality of work life with the performance of nurses in implementing the Patient Safety System (SKP) in the hospital. The conclusion shows that there is no relationship between these variables because the attitudes and behavior of nurses have been formed at the beginning of education.

Furthermore, hypothesis five there is a significant influence of knowledge on the performance of nurses in implementing patient safety partially. Hypothesis 5 is accepted because the significance level is less than 0.05 value. These results reinforce hypothesis 5 developed in this study that there is a significant direct effect of knowledge on the performance of nurses in partially

implementing patient safety targets at X Hospital. The coefficient of direct effect of knowledge on the performance of nurses in implementing patient safety goals at X Hospital is 0.440 value. The results of the three-box method analysis show that the dimensions of accuracy in identifying patients, the dimensions of effective communication, the dimensions of ensuring the safety of operations, the dimensions of reducing the risk of infection, and the dimensions of injury prevention due to falls in the knowledge variable get the high category. Likewise, the overall dimensions contained in the nurse's performance variable in the application of patient safety targets obtained a high category. The results of the path analysis showed that there was a significant positive relationship between the knowledge variable and the nurse's performance in the application of SKP. This relationship explains that the higher the knowledge of nurses in implementing patient safety goals, the better the nurse's performance. The higher the Knowledge, the more Patient Safety Implementation Performance will increase. This is as explained by the fact that the higher a person's level of knowledge, the more rational and creative he will be and open to accepting a variety of renewal efforts and being able to adapt to various renewals to something that comes from outside. Nurses' knowledge about patient safety encourages nurses to carry out actions according to patient safety SOPs so that they have an impact on the performance of patient safety implementation. This affects the organizational ability of X Hospital to improve quality through patient safety aspects influenced by individual factors. To optimize the development of individual nurses at X Hospital, efforts are needed to increase knowledge and special skills in the scope of patient safety. Reliable and good knowledge and skills generate confidence in a nurse so that it encourages nurses to take an active role in discussions with other health teams. Often ideas appear in patient care because with his knowledge it can provide motivation to be able to think critically and quickly make decisions, in overcoming patient problems and minimizing errors. Here, the high knowledge enables a nurse to act appropriately based on the latest science and standard procedures so that their performance in the hospital can be of high quality. The employee knowledge has a positive and significant effect on employee performance [64].

Furthermore, hypothesis six there is a significant effect of attitudes on the performance of nurses in partially implementing patient safety. Hypothesis 6 is accepted because the significance level is less than 0.05. These results reinforce the hypothesis 6 developed in this study that there is a significant direct effect of attitudes on the performance of nurses in partially implementing patient safety targets at X Hospital. The direct effect coefficient of attitudes towards the performance of nurses in implementing patient safety targets at X Hospital is 0.380 value. The results of the three-box method analysis obtained the overall dimensions of climate cooperation / safety atmosphere, the dimensions of job satisfaction,

perceptions of management, the dimensions of working conditions in the attitude variable obtained the moderate category, on the other hand the overall dimensions contained in the nurse performance variable in the application of patient safety targets obtained the high category. The lowest index for the statement of attitude variables according to the perception of nurses is that I find it easy to convey complaints to colleagues when I am having problems related to the application of patient safety goals and this hospital can properly train new nurses to implement patient safety goals. Hospital X needs to improve the attitude training program in implementing SKP which has the aim of increasing knowledge and skills as the criteria for the success of the overall health program. The results of the path analysis showed a significant positive relationship with the attitude variable towards nurses' performance in implementing SKP. This relationship explains that the higher the nurse's attitude in implementing patient safety goals can improve the nurse's performance well. An attitude has not been automatically manifested in an action. In order to turn an attitude into a real action, it requires supporting factors or a possible condition, including facilities and support factors from other parties. The highest level of attitude is adaptation, which is an action that has developed well, meaning that the action has been modified itself without reducing the correctness of the action. Nurse's attitude positively affects the nurse's performance in implementing patient safety goals. Here, a nurse's good attitude is closely related to optimal patient safety implementation. Nurses who have a positive attitude towards their work will show better caring quality for patients than those with negative attitudes. The nurse with a positive attitude realizes how important this aspect of patient safety is. When nurses have this positive attitude, it will have the potential to influence their duties in implementing a stronger SKP [67]. Here, the employee attitudes have a positive and significant effect on employee performance.

Furthermore, hypothesis seven there is a significant influence on the quality of work life of nurses on the performance of nurses in implementing patient safety partially. Hypothesis 7 is accepted because the significance level is less than 0.05. These results reinforce hypothesis 7 developed in this study that there is a significant influence on the quality of the work life of nurses on the performance of nurses in partially implementing patient safety targets at X Hospital. The coefficient of direct effect / direct effect on the quality of work life of nurses on the performance of nurses in implementing patient safety targets at X Hospital is 0.532 value. Based on the results of the three box method analysis, it is obtained that the overall dimensions of work life and its relation to life at home, work design dimensions, work context dimensions, work world dimensions on the quality of work life variables get a high category and the overall dimensions of contextual, professional skills dimensions, dimensions of clinical skills, Interpersonal communication dimensions, problem

solving dimensions, ethical dimensions, teamwork dimensions, and leadership dimensions on nurse performance in implementing patient safety targets dominantly get a high category. The results of the index analysis also show the components of quality of life that must be improved to achieve job satisfaction of nurses in inpatient rooms, namely high workloads, nurses doing work that is not in the realm of nursing, and compensation given by the company to employees. A high quality of work life must be supported by balanced compensation. These results support the theory that the reward system given to employees must be appropriate, fair and adequate, meaning that the benefits provided by the organization to the employees concerned are in accordance with the wages and payroll standards applicable in the work market. The amount of compensation reflects the status, recognition and level of fulfillment of needs enjoyed by employees and their families. The amount of compensation reflects the status, recognition and level of fulfillment of needs enjoyed by employees and their families. This can be categorized as one of the problems faced by nurses, namely the lack of incentives received by nurses. The results of the path analysis showed a significant positive relationship between the quality of work life and the performance of nurses in implementing SKP. This relationship explains that the higher the quality of work life of nurses in implementing patient safety goals, the better the performance of nurses. A pleasant and healthy work environment can be formed by the behavior of a balanced nurse's lifestyle so that it can affect the health status and quality of the work life of the nurse and ultimately form a high performance. The condition of a person's health status is inseparable from the state of his family's health history such as self-development towards adulthood which shapes the level of health and plays a large role in the ability to work [71]. Health is the main capital for work so that the maintenance of nurses' health will make them have enough work resilience or stamina to work which can be the basis for the quality of life of a nurse at work. Good quality of work life of nurses has an influence on the application of nurse's SKP. Through a good quality of work life for nurses, the work productivity of nurses in the hospital will also be better [72].

4. CONCLUSIONS

Knowledge, Spiritual Intelligence, and Attitude simultaneously have a significant influence on the Quality of Work Life and the Impact on Nurse Performance in Implementing Patient Safety Targets at X Hospital simultaneously; Knowledge has a significant positive effect on the quality of nurses' work life; Spiritual intelligence has a significant positive effect on the quality of work life of nurses; Attitudes have a significant positive effect on the quality of work life of nurses; Knowledge has a significant positive effect on the performance of nurses in implementing patient safety goals; Attitudes have a significant positive effect on the performance of nurses in implementing patient safety goals; and the quality of work

life of nurses has a significant positive effect on the performance of nurses in implementing patient safety goals. The findings of this study are that the quality of work life of nurses has a partially mediating role in the performance of nurses in implementing patient safety goals. The existence of kinship religious activities that the hospital management develops every month and on holidays forms an emotional bond and commitment to nurses to behave calmly and patiently in implementing the Patient Safety Goals on an ongoing basis. Furthermore, the knowledge with high category and attitude with medium category towards nurse performance in applying patient safety goals with high category indirectly mediated by the quality of work life with high category has a better effect than directly. The quality of the work life of nurses acts as a partial mediation variable to indirectly influence knowledge, spiritual intelligence, and attitudes on the performance of nurses in implementing patient safety goals at X Hospital. Quality of work life as a process where the organization responds to employee needs by developing a mechanism that allows employees to share in making decisions that shape their work life. Thus, we proposed the managerial implication for X hospital such as First, X Hospital develops attitudes and commitment to patient safety culture through increasing the promotion of safety culture, improving patient safety management systems. Second, X Hospital strengthen training programs and attitude training program to improve the quality of work life through a work environment creation program that forms harmonious teamwork and is committed to developing cooperation between units and between professions. Third, X Hospital increases family religious activities every month or on major holidays and organize recreational activities/ refreshing activities. Fourth, X Hospital provides a remuneration system that is given to employees in a fair, fair and adequate manner in accordance with applicable wage and wage standards

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References

- [1] Abdalla, A. A. A. (2017). Nurses are a Key to Ensure Patient Safety: A Systematic Review. *International Journal of Research Studies in Medical and Health Sciences*, 2(9), 10–15.
- [2] Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association*, 103(3), 152–153.
- [3] Al-Ahmadi, H. (2009). Factors Affecting Performance of Hospital Nurses in Riyadh Region, Saudi Arabia. *Int J Health Care Qual Assur*, 22(1).
- [4] Albarracin, D., Johnson, B. T., & Zanna, M. P. (2005). *The Handbook of Attitudes*. London: Lawrence Erlbaum Associates.
- [5] Babu, S. (2014). *Psychology for Nurses*. India: Elsevier.
- [6] Biggam, J. (2001). *Defining Knowledge: an Epistemological Foundation for Knowledge Management*. Proceedings of the 34th Hawaii International Conference on System Sciences.
- [7] Boer, A. de, Timmerman, M., Pijil, S. J., & Minnaert, A. (2012). The psychometric evaluation of a questionnaire to measure attitudes towards inclusive education. *European Journal of Psychology of Education*, 27, 573–589.
- [8] Bolarinwa, O. A. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Postgraduate Medical Journal*, 22(4).
- [9] Bressan, V., Stevanin, S., Bulfone, G., Zanini, A., Dante, A., & Palese, A. (2016). Measuring patient safety knowledge and competences as perceived by nursing students: An Italian validation study. *Nurse Educ Pract.*, 16(1).
- [10] Burns, N., & Grove, S. K. (2011). *Understanding Nursing Research* (5th ed.). Riverport Lane: Elsevier Saunders.
- [11] Carabine, J. (2013). In the Studio: Researcher Subjectivity, the Infant Observation Method, and Researching Creative Practices. *Methodological Innovations*, 8(1), 65–85.
- [12] Carrasco, J.-A., & Lucas, K. (2015). Workshop synthesis: Measuring attitudes; quantitative and qualitative methods. *Transportation Research Procedia*, 11, 165–171.
- [13] Chaiklin, H. (2011). Attitudes, Behavior, and Social Practice. *The Journal of Sociology & Social Welfare*, 38(1).
- [14] Clements, P., & Jones, J. (2008). *The Diversity Training Handbook: A Practical Guide to Understanding & Changing Attitudes* (3rd ed.). India: Replika Press Pvt Ltd.
- [15] DeLucia, P. R., Ott, T. E., & Palmieri, P. A. (2009). Performance in Nursing. *Reviews of Human Factors and Ergonomics*, September.
- [16] Detlor, B. (2004). *Towards Knowledge Portals: from Human Issues to Intelligent Agents*. London: Kluwer Academic Publishers.
- [17] Dixit, A. K., & Pandiya, S. (2015). *Quality of Work Life: an Overview on Banking System*. Great Britain: Horizon Books.
- [18] Drach-Zahavy, A., Leonenko, M., & Srulovici, E. (2018). Toward a Measure of Accountability in Nursing: A Three-Stage Validation Study. *Journal of Advanced Nursing*, June.
- [19] El-Azzab, S. E. S. H., & El-Aziz, A. M. A. (2018). Nurses Knowledge, Attitudes, and Skills towards Psychiatric Patients' Safety. *IOSR Journal of Nursing and Health Science*, 7(3), 13–25.
- [20] Faghihi, A., Fahraji, H. H., & Bafghi, M. J. A. (2016). Determining the Relation between Nurses Spiritual Intelligence and Nursing Care Quality in Estahban City Imam Khomeini Hospital (the Relation of Spiritual Intelligence and Nursing Care Quality). *International Journal of Advanced Biotechnology and Research*, 7(2).
- [21] Fain, J. A. (2017). *Reading, Understanding, and Applying Nursing Research* (5th ed.). Philadelphia: F.A. Davis Company.
- [22] Fugaca, N. P. A., Cubas, M. R., & Carvalho, D. R. (2015). Use of Balanced Indicators as a Management Tool in Nursing. *Rev Lat Am Enfermagem*, 23(6).
- [23] Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods*. Thousand Oaks: SAGE Publications Inc.
- [24] Gordon, J., & Richardson, E. (2012). Continuous Improvement Using Balanced Scorecard In Healthcare. *American Journal of Health Sciences*, 3(3).
- [25] Groene, O., Brandt, E., Schmidt, W., & Moeller, J. (2009). The Balanced Scorecard of acute settings: development process, definition of 20 strategic objectives and implementation. *International Journal for Quality in Health Care*, 21(4).
- [26] Harari, O. (2004). *Knowledge and Demonstration: Aristotle's Posterior Analytics*. London: Kluwer Academic Publishers.
- [27] Haskins, J. L. M., Phakathi, S., Grant, M., & Horwood, C. M. (2014). Attitudes of Nurses Towards Patient Care at a Rural District Hospital in The Kwazulunatal Province of South Africa. *Africa Journal of Nursing and Midwifery*, 16(1).
- [28] Healy, J., & Dugdale, P. (2009). *Patient Safety First: Responsive Regulation in Health Care*. Singapore: Allen & Unwin.
- [29] Hess, C., & Ostrom, E. (2007). *Understanding Knowledge as a Commons: from Theory to Practice*. London: The MIT Press.

- [30]. Hoeben, E. M., Steenbeek, W., & Pauwels, L. J. R. (2018). Measuring Disorder: Observer Bias in Systematic Social Observations at Streets and Neighborhoods. *Journal of Quantitative Criminology*, 34, 221–249.
- [31]. Horrigan, J. M., Lightfoot, N. E., & Lariviere, M. A. S. (2013). Evaluating and Improving Nurses' Health and Quality of Work Life: A Cross-Sectional Study of Korean Blue Collar Workers Employed by Small Businesses. *Workplace Health & Safety*, 61(4).
- [32]. Hurwitz, B., & Sheikh, A. (2009). *Health Care Errors and Patient Safety*. Chichester: Blackwell Publishing Ltd.
- [33]. Inomata, T., Mizuno, J., Iwagami, M., Kawasaki, S., Shimada, A., Inada, E., ... Amano, A. (2018). The impact of Joint Commission International accreditation on time periods in the operating room: A retrospective observational study. *PLoS ONE*, 13(9).
- [34]. Iqbal, U., Syed-Abdul, S., & Li, Y.-C. (2015). Improving quality of care and patient safety as a priority. *International Journal for Quality in Health Care*, 27(5).
- [35]. JCI. (2006). International Patient Safety Goals. Retrieved June 17, 2020, from Joint Commission International, website: <https://www.jointcommissioninternational.org/en/standards/international-patient-safety-goals/>
- [36]. Jeffs, L., Merkley, J., Richardson, S., Eli, J., & McAllister, M. (2011). Using a Nursing Balanced Scorecard Approach to Measure and Optimize Nursing Performance. *Nursing Leadership*, 24(1).
- [37]. Jones, R. A. P. (2007). *Nursing Leadership and Management: Theories, Processes and Practice*. Philadelphia: F.A. Davis Company.
- [38]. Kahya, E., & Oral, N. (2018). Measurement of clinical nurse performance: Developing a tool including contextual items. *Journal of Nursing Education and Practice*, 8(6).
- [39]. Kawulich, B. (2012). *Collecting Data Through Observation*. Georgia: University of Georgia.
- [40]. Kelbiso, L., Belay, A., & Woldie, M. (2017). Determinants of Quality of Work Life among Nurses Working in Hawassa Town Public Health Facilities, South Ethiopia: A Cross-Sectional Study. *Nursing Research and Practice*, 2017.
- [41]. Khandan, M., Eyni, Z., & Koohpaei, A. (2017). Relationship between Spiritual Intelligence and Job Performance: A Case Study of Nurses and Nursing Aids in the Main University Hospital of Qom, Iran. *Health, Spirituality and Medical Ethics*, 4(3), 8–13.
- [42]. Khani, A., Jaafarpour, M., & Dyrekvandmogadam, A. (2008). Quality of Nursing Work Life. *Journal of Clinical and Diagnostic Research*, December, 1169–1174.
- [43]. King, D. (2008). *Rethinking claims of spiritual intelligence: A definition, model, and measure*. Trent University.
- [44]. Levine, M. F., Taylor, J. C., & Davis, L. E. (1984). *Defining Quality of Working Life*. Human Relations, January.
- [45]. Lillykuty, Mathew, J. A., & Jose, D. (2018). Safe Patient Care: Knowledge, Attitude and Practice Among ICU Nurses. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 2(5).
- [46]. Mohsenimaram, M., Naji, S., & Zarea, K. (2018). The Relationship between Spiritual Intelligence and Quality of Work Life in Nurses in Oncology Departments of Ahwaz Hospitals, 2017. *Asian Journal of Pharmaceutics*, 12(2).
- [47]. Moradi, T., Maghaminejad, F., & Fini, I. A. (2014). Quality of Working Life of Nurses and its Related Factors. *Nursing and Midwifery Studies*, 3(2).
- [48]. Needleman, J., & Hassmiller, S. (2009). The Role Of Nurses In Improving Hospital Quality And Efficiency: Real-World Results. *Health Affairs*, 28(3).
- [49]. Needleman, J., Kurtzman, E. T., & Kizer, K. W. (2007). Performance Measurement of Nursing Care: State of the Science and the Current Consensus. *Medical Care Research and Review*, 64(2).
- [50]. Noor, N. I. A. El, Noor, M. K. A. El, Abuowda, Y. Z., Alfaqawi, M., & Bottcher, B. (2019). Patient safety culture among nurses working in Palestinian governmental hospital: a pathway to a new policy. *BMC Health Services Research*, 19.
- [51]. O'Keefe, D. J. (2002). *Persuasion: Theory & Research* (2nd ed.). California: Sage Publication.
- [52]. Oyira, E. J., Ella, R. E., Chukwudi, U. E., & Paulina, A. I. (2016). Knowledge Practice and Outcome of Quality Nursing Care Among Nurses in University of Calabar Teaching Hospital (UCTH). *Journal of Education and Training Studies*, 4(11).
- [53]. Penner, S. J. (2017). *Economic and Financial Management for Nurses and Nurse Leaders* (3rd ed.). New York: Springer Publishing Company.
- [54]. Polit, D. F., & Beck, C. T. (2010). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice* (7th ed.). China: Lippincott Williams & Wilkins.
- [55]. Priddis, L., & Rogers, S. L. (2018). Development of the reflective practice questionnaire: preliminary findings. *Reflective Practice International and Multidisciplinary Perspectives*, 19(1).
- [56]. Reilly, N. P., Gorman, C. A., & Sirgy, M. J. (2012). *Work and Quality of Life: Ethical Practices in Organizations*. New York: Springer.
- [57]. Rossi, A. M., Meurs, J. A., & Perrewe, P. L. (2017). *Stress and Quality of Working Life: Conceptualizing and Assessing Stress*. United States of America: Information Age Publishing Inc.
- [58]. Roussel, L., Thomas, P. L., & Harris, J. L. (2020). *Management and Leadership for Nurse Administrators* (8th ed.). Burlington: Jones and Barlett Learning.
- [59]. Saberi, M., Jamshidi, E., Rajabi, F., Seydali, E., & Bairami, F. (2017). Attitude of Nurses toward the Patient Safety Culture: A Cross-Sectional Study of the Hospitals in Tehran, Iran. *Patient Safety & Quality Improvement Journal*, 5(3).
- [60]. Salkind, N. J. (2010). *Theory of Attitude Measurement*. Thousand Oaks: SAGE Publications Inc.
- [61]. Shahsavari, Z., & Tan, B. H. (2012). Developing a Questionnaire to Measure Students Attitudes Toward The Course Blog. *Turkish Online Journal of Distance Education*, 13(1).
- [62]. Sivalogathanan, V., & Edirisinghe, S. S. K. (2015). Improve your Work Life: The Impact of Quality of Work Life on Organizational Commitment of Selected Apperal Company. *International Conference on Contemporary Management (ICCM-2015)*.
- [63]. Steenkamp, R., & Schor, A. van. (2008). *The Quest for Quality of Work Life: A TQM Approach*. Lansdowne: Juta Education.
- [64]. Sulahyuningsih, E., Tamtomo, D. G., & Joebagio, H. (2017). Exploring patient safety culture in preventive medicine settings: an experience from Northern Italy. *Journal of Health Policy and Management*, 2(2).
- [65]. Sullivan, L. M. (2008). *Essentials of Biostatistics in Public Health*. United States of America: Jones and Barlett Publishers, Inc.
- [66]. Talbot, L., & Verrinder, G. (2010). *Promoting Health: A Primary Health Care Approach* (4th ed.). Victoria Avenue: Elsevier Australia.
- [67]. Tereanu, C., Sampietro, G., Sarnataro, F., Mazzoleni, G., Pesenti, B., Sala, L. C., ... Barboglio, G. G. (2017). Exploring patient safety culture in preventive medicine settings: an experience from Northern Italy. *Journal of Preventive Medicine and Hygiene*, 58(2).
- [68]. Toma, R. B., & Villagra, J. A. M. (2019). Validation of the single-items Spanish-School Science Attitude Survey (S-SSAS) for elementary education. *PLoS ONE*, January.
- [69]. Tones, K., & Tilford, S. (2001). *Health Promotion: Effectiveness, Efficiency and Equity* (3rd ed.). Cheltenham: Nelson Thomes Ltd.
- [70]. Tonn, P., Reuter, S. C., Kuchler, I., Reinke, B., Hinkelmann, L., Stockigt, S., ... Schulze, N. (2017). Development of a Questionnaire to Measure the Attitudes of Laypeople, Physicians, and Psychotherapists Toward Telemedicine in Mental Health. *JMIR Mental Health*, 4(4).
- [71]. Vaismoradi, M., Tella, S., Logan, P. A., Khakurel, J., & Moreno, F. V. (2020). Nurses' Adherence to Patient Safety Principles: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(6).
- [72]. Vasita, M. L., & Prajapati, K. (2014). A study of Quality of Work Life and its impact on Job Satisfaction in selected higher education institutions of Western Rajasthan. *Annamalai International Journal of Business Studies & Research*, 6(1).
- [73]. Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2010). *Measurement in Nursing and Health Research* (4th ed.). United States of America: Springer Publishing Company.

- [74]. Wara, N. G., Rampengan, S. H., Korompis, M., & Rattu, A. J. M. (2018). Correlation between Quality of Work Life (QWL) with Nurse productivity in inpatient room Bhayangkara Tk III Hospital Manado. *Bali Medical Journal (Bali Med J)*, 7(2), 385–392.
- [75]. Watcher, R. M. (2008). *Understanding Patient Safety*. United States of America: McGraw-Hill Companies.
- [76]. WHO. (2007). *Patient Safety Solutions Preamble*.
- [77]. Youngberg, B. J. (2011). *Principles of Risk Management and Patient Safety*. United States of America: Jones and Barlett Learning.
- [78]. Zulkifli, W. N. B. W., Ishak, N. A. B., & Saad, Z. B. M. (2017). The Spiritual Intelligence Self Report Inventory (Sisri 24) Instrument Reliability Among Delinquent Teenagers. *IOSR Journal of Humanities and Social Science*, 32(7), 44–47

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