

# Nurse's Individual Factors May Predict Quality of Nursing Work Life (Qnwl) in Clinical Setting

Riyanto Faizin<sup>1,2</sup>, Rizki Fitriyasari<sup>1\*</sup>, Erna Dwi Wahyuni<sup>1</sup>, Nursalam Nursalam<sup>1</sup>

**Abstract**--- Quality of Nursing Work Life (QNWL) affects organizational productivity. Low nurse's QNWL level will decrease employer's commitment to work and reach the hospital vision. The aim of the study was to analyze the relationship of nurse's individual factors with QNWL. The study design was descriptive correlation with cross sectional approach. The population was nurses at the Lamongan Muhammadiyah Hospital and 166 respondents were obtained through purposive sampling techniques. Variables were individual factors and QNWL. The instrument used was individual factors questionnaire and included age, gender, education level, number of children, dependents, job position, work period, works experience and motivation. The Brooks's questionnaire was used to measure nurse QNWL. Data were analyzed by logistic regression test. Individual factors related to QNWL are age ( $p = 0.043$ ), gender ( $p = 0.001$ ), level of education ( $p = 0.048$ ), number of children ( $p = 0.023$ ), dependents ( $p = 0.034$ ), job position ( $p = 0.014$ ), work period ( $p = 0.038$ ), work experience ( $p = 0.026$ ) and motivation ( $p = 0.008$ ). Motivation was are the most dominant and affects to QNWL. It was 8,945 times compared to other factors. Motivation fosters enthusiasm for nurses to demonstrate their ability to carry out their duties and the hope for obtaining rewards and job promotions from superiors that have an impact on improving the quality of life as a nurse. Management, especially in the nursing resources section, needs to keep nurses' motivation in carrying out daily tasks.

**Keywords**--- Individual Factors; Motivation, QNWL; Nurse; Clinical Setting

## I. INTRODUCTION

Quality of Nursing Work Life (QNWL) is an important element in health services [1]. Some studies suggest that is still found to be low and if this is not considered it can lead to a decrease in nurse performance and the nurse's desire to get out of work [2]. QNWL improvement can be pursued through individual, social and environmental factors, operational factors, administrative factors and external factors [1]. Research on nurses QNWL shows 67.2% of nurses feel not satisfied [3] and 40% of 508 nurses were dissatisfied with their work lives [4]. Walton's theory shows that 60% of nurses have moderate quality of work life, 37.1% of quality of work life is lacking and 2% of quality of work life is good [5].

<sup>1</sup> Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

<sup>2</sup> Muhammadiyah Hospital, Lamongan, Indonesia

Corresponding author

Rizki Fitriyasari

Email [rizki-f-p-k@fkip.umajir.ac.id](mailto:rizki-f-p-k@fkip.umajir.ac.id)

The results of a preliminary study at the Muhammadiyah Hospital, Lamongan, Indonesia, show 24 nurses complained about the high workload and performing of non-nursing jobs, such as completing the patients' administration, medical devices, stock of medicine, and also delegation and mandate of assignments from the doctors. Nurses were tired after working in the hospital and still had to pay attention to the family, meaning the rest periods were reduced. Nurses can rarely go on vacation with family. The situation causes a prolonged conflict. Meanwhile, nurses also complained about compensation, which was felt to be unfair because it had not been adjusted to nurse performance.

The QNWL is needed when nurses work at the Hospital. Human resource management must be able to create QNWL that can provide opportunities for self-development, welfare that can cover the basic needs of workers, as well as a safe and comfortable work environment so that it can arouse a work spirit in an effort to better achieve goals [1]. However, if QNWL is not properly addressed, nurses are not satisfied with work life and will leave their profession [4].

Based on O'Brien-Pallas and Baumann, the individual factors that influence QNWL are age, gender, education, marital status, child ownership, dependents at home, positions in nursing, work experience, years of work, and work motivation [7]. The purpose of this study was to analyze individual factors, consisting of age, gender, education, marital status, child ownership, dependents at home, positions in nursing, work experience, years of work, and work motivation related to QNWL in nurses at Muhammadiyah Hospital Lamongan Indonesia.

## II. METHODS

Research design was descriptive with cross-sectional approach. The population was nurses who worked at the Muhammadiyah Hospital, Lamongan, Indonesia. The sample was 166 respondents obtained by purposive sampling technique. Inclusion criteria of sample are associate nurses, team leaders and nursing unit manager. They were permanent employees with education level of diploma and bachelor of nursing. Independent variables are individual factors including age, gender, education level, marital status, number of the children, dependents, job position, work period, work experience and motivation. The dependent variable is QNWL. The instrument was questionnaire to collect data of individual factors (age, gender, education level, number of children, dependents, job position, work period, works experience and motivation). The Brooks's questionnaire was used to measure nurse QNWL [1]. The data were analyzed using a logistic regression test. This study has been approved ethically by the Ethical Board Committee of Faculty of Nursing, Universitas Airlangga with number of 1819-KEPK.

## III. RESULT

Results of 166 respondents who participated in this study are as follows:

Table 1. Respondents' characteristics

Variable	Category	n	%
Age	25-35 years old	108	65.9
	36-45 years old	52	30.5
	>45 years old	6	3.7
Gender	Male	62	36.6
	Female	104	63.4
Education level	Diploma	132	80.8
	Bachelor	34	19.2
Marital status	Not yet	26	14.6
	Married	140	85.4
	Divorce/widow/widower	0	0
Number of children	Belum memiliki anak	30	12.2
	One	42	24.4
	More than one	94	63.4

Variable	Category	n	%
Dependents	No one	26	16
	one	64	39
	> More than one	76	45
Job position	Nurse unit manager	11	6.7
	Nurse team leader	25	15.0
	Nurse associate	130	78.3
Work period	1-5 years	60	36.6
	6-10 years	35	20.1
	> 10 years	71	43.3
Work experience	Manage 1 ward	0	0
	Manage 2 wards	56	34.1
	Manage more than 2 wards	110	65.9
Motivation	Good	117	71.3
	Enough	27	16.5
	Low	20	12.2

Based on Table 1, it can be explained that the majority (65.9%) of respondents were aged 25-35 years, most were female (63.4%), married with education level of diploma. The average respondent has more than one child. Almost all respondents are associate nurses, already working more than 10 years and have worked to manage more than two wards. The respondents' motivations are good (71%).

Table 2 Relationship of individual factors and QNWL

Variable	Dimension of QNWL				QNWL
	Work Life Home Life	Work Design	Work Context	Work World	
Age	0.496	0.490	0.035	0.202	0.043
Gender	0.025	0.029	0.224	0.054	0.001
Education level	0.000	0.116	0.676	0.100	0.048
Marital status	0.000	0.229	0.631	0.083	0.233
Number of children	0.002	0.006	0.224	0.245	0.023
Dependents	0.885	0.001	0.006	0.045	0.034
Job position	0.145	0.118	0.037	0.001	0.014
Work period	0.048	0.014	0.017	0.806	0.038
Work experience	0.010	0.010	0.026	0.619	0.026
Motivation	0.680	0.002	0.370	0.126	0.008

Based on Table 2, the individual factors related to QNWL are age ( $p = 0.043$ ), gender ( $p = 0.001$ ), level of education ( $p = 0.048$ ), number of children ( $p = 0.023$ ), dependents ( $p = 0.034$ ), job position ( $p = 0.014$ ), work period ( $p = 0.038$ ), work experience ( $p = 0.026$ ) and motivation ( $p = 0.008$ ). While marital status is not related to QNWL ( $p = 0.233$ ).

Based on the QNWL dimension, internal factors related to work life home life (WLHL) include gender ( $p = 0.025$ ), education level ( $p = 0.000$ ), marital status ( $p = 0.000$ ), number of child ( $p = 0.002$ ), work period ( $p = 0.048$ ) and work experience ( $p = 0.010$ ). Internal factors associated with work design (WD) are gender ( $p = 0.029$ ), number of children ( $p = 0.006$ ), dependents ( $p = 0.001$ ), time of work ( $p = 0.014$ ), work experience ( $p = 0.010$ ) and motivation ( $p = 0.002$ ).

The results also explained internal factors of nurses related to the work context (WC) dimensions of QNWL including age ( $p = 0.035$ ), dependents ( $p = 0.006$ ), job position ( $p = 0.037$ ), work period ( $p = 0.017$ ) and work experience ( $p = 0.026$ ). While the dimension of work world (WW) is associated with dependents ( $p = 0.045$ ) and job position ( $p = 0.001$ ).

Table 3 Models of relationship between individual factors and QNWL.

Models	Likelihood Ratio Tests			Nagelkerke
	Chi-Square	Df	Sig.	
Intercept Only				
Final	56.599	34	0.009	0.532

Based on Table 3, the model explains if individual factors can predict the level of QNWL with a significance of 0.009. The individual factors affected 53.2% of the nurse's QNWL, while another 46.8% was influenced by other variables.

Table 4 Regression logistic models of relationship between individual factors and QNWL

Variable	Sig	Exp (B)	95% C.I. for EXP (B)	
			Upper	Lower
Age				
25-35 years old	0.023	0.762	0.262	1.778
36-45 years old	0.034	0.449	0.890	0.450
>45 years old	0.012	0.683	0.142	29.791
Gender				
Male	0.021	0.527	0.191	21.039
Female	0.009	0.255	0.912	1.901
Education level				
Diploma	0.012	2.003	0.008	3.122
Bachelor	0.034	0.098	0.009	3.489
Number of children				
Not yet	0.011	0.665	0.276	2.189
One	0.021	0.318	0.102	0.818
More than one	0.007	0.778	0.037	4.073
Dependents				
No	0.018	0.289	0.402	9.975
One	0.021	0.919	0.187	21.039
More than one	0.054	0.701	0.912	1.901
Job position				
Nurse unit manager	0.008	0.435	0.090	3.122
Nurse team leader	0.004	0.844	0.067	3.489
Nurse associate	0.004	0.597	0.122	2.611
Work period				
1-5 years	0.006	0.563	0.701	1.064
6-10 years	0.028	0.481	0.389	2.189
> 10 years	0.009	0.226	0.091	0.818
Work experience				
Manage 1 ward	0.007	2.057	0.023	4.073
Manage 2 wards	0.045	0.558	0.005	0.225
Manage more than 2 wards	0.033	0.320	0.008	1.456
Motivation				
Good	0.000	8.945	0.060	1.132
Enough	0.000	0.245	0.151	0.620
Low	0.000	0.231	0.030	0.202

Based on Table 4, it shows that, overall, the variables included in the final stage of regression have significant values so that it can be concluded that nine variables are related to QNWL. The highest variable is motivation in good categories. Good motivation contributed to QNWL 8,945 times greater than the other variables.

#### IV. DISCUSSION

The results explain the relationship between age and QNWL, especially in the work context dimension. Work context is the setting of the nurses' workplace situation and the impact of the work environment felt by nurses, including job design, communication, teamwork between nurses and inter-professional health teams, availability of resources (equipment and materials), systems at work, growth achieved, and supporting work [1]. The findings of this study explain if a more mature age affords a person the ability to think and determine actions to establish communication with others



openly and transparently [8], [9]. Nurses, in carrying out their duties, will always collaborate in a multidisciplinary health team. The ability to communicate is the result of critical thinking to situations that occur in patients, fostering a good relationship both in teams, patients and families. Communication skills and styles are influenced by age [10]. Older nurses find it easier to build a relationship of trust in the nursing team and in the inter-professional team [11]. Work context also focuses on components of reliable human resources. Older nurses have a longer and more extensive experience, so they can solve the work problems easily. Senior nurses are often consulted with regard to the choice of clinical decisions, actions to patients who need expert judgment and also tiered guidance to more junior nurses.

Gender is related to QNWL, especially on work life, home life and work design dimensions. Male nurses have lower QNWL compared to female nurses. QNWL is a nurse's perception or assessment of dimensions that affect the quality of work life of nurses associated with experience in working to achieve organizational goals [1]. A number of nurses who also rely on physical work, such as moving the patients and pushing heavy medical equipment, will be more burdened than male nurses, while the situation in the hospital is that the number of nurses is more dominated by women. This condition causes male nurses to get more labor-intensive jobs compared to female nurses and has an impact on the quality of life of male nurses [12].

Nurse education level is related to QNWL, especially in the dimension of work life home life. Education is related to the level of logical, critical, and systematic thinking. Learning theory and practice obtained while studying will become the main provision of nurses to do the job. Education will be a fundamental aspect for nurses in intervening the patients. The nurse's ability to be critical of the patient's condition, thinking in, solving the patient's problems, and implementing nursing interventions that have an impact on achieving better and faster patient recovery. The situation fosters satisfaction and confidence in nurses, thereby increasing the quality of work life of nurses. Nurse education in this study was dominated at the diploma level, which had mastered skills in addition to good nursing knowledge. A good level of education and work skills will improve performance and have an impact on satisfaction of caregivers [13].

Marital status has no relationship with QNWL. The married nurses still have a good quality of life, including satisfaction while working in the hospital [14]. Most of the respondents in this research were married, resulting in a dual role in the lives of nurses and as a parent or partner; nurses who are not married also lead lives that are not alone. Nurses must try to make ends meet every day, even not infrequently some unmarried nurses also meet the needs of parents and siblings. This situation causes both married and unmarried nurses to be no different in terms of efforts to achieve quality of work life.

The data in this research show that there is a relationship between number of children and QNWL especially in the dimensions of work life, work home and work design. Child ownership is a burden that is borne by someone materially and financially and increases workload, especially at home. Female nurses who have children tend to have high stress especially and this affects the nurse's performance [14]. Child ownership requires someone to work harder to meet their daily needs and also education for children. Nurses also assume the task of caring for children, providing protection and learning, so that it often causes fatigue, while nurses also still have to serve in hospitals, which requires good physical condition. The situation affects the quality of work life of nurses.

The nurses' dependency is related to QNWL. Dependency is defined not only as family and children, but also every person who lives in the same house and becomes a burden. Worker dependency affects motivation and quality of work [15]. The number of dependents, such as children and other families, makes respondents become more enthusiastic in working to get income to meet the needs of daily life. The dependency relates to the dimensions of work design, work

context, and work world. The most dominant parameters in this variable are the proportion of work, adequacy of salary and supervision. Respondents' needs are related to the salary received to be able to meet the dependency influences the nurse's QNWL [16]. The results showed that the load of dependents has a high value on the parameters of the proportion of work in the dimensions of work design. Nurses with dependents feel that their workload is too heavy because, besides taking care of dependents at home, they also take care of their work as nurses. Furthermore, career development in the work context dimension shows that nurses feel that career development is important because it is related to salary adequacy in the work world dimension. Nurses with more qualifications will get more salary, sufficient to overcome the burden of dependents in the home.

Nurses' work experience is related to QNWL especially in the dimensions of work life, home life, work design and work context. High work experience would improve QNWL [16]. Work experience is a job someone has ever done and provides great opportunities to work better. Work experience supports the strengthening of pregnancy in doing work, perfecting thinking patterns and attitudes in acting to achieve the goals setting. Nurses who have more work experience are easy in detecting errors, understanding mistakes and finding solutions. Career development parameters in the work context dimension are more dominant in this study. Nurses feel that their experience is valued by superiors if they are offered further study and training. In addition, the parameters of work and home balance in the dimensions of work life home life are the most dominant. Nurses are able to balance work at home and work as well as taking care of home and children and then caring for patients. Work experience helps nurses adapt to stress arising from work and problems at home.

The work period of nurses is related to QNWL, especially in the dimensions of work design and work context. The length of work in an organization improves experience. Nurses who have worked for a long time have the ability and good adaptation to the environment, and this has an impact on the competence of nurses to provide nursing care. Quality of work life includes activities in the workplace that can arouse the enthusiasm of workers in carrying out the task of achieving company goals. Work life includes safety and health, justice, individual choices, participation in decision-making, opportunities for development, meaningful work, ability to control work time and place, protection from unfair treatment, and opportunities to satisfy social needs. The existence of benefits, such as health and facilities obtained, will trigger nurses to work better and show a high nurse QNWL. Individuals who are comfortable in their work will be more durable in working there, so they can avoid the intention to quit [17].

The results showed that the proportion of work parameters in the work design parameters is the dominant value. Length of service or length of work makes nurses able to adapt to both light and heavy work. Nurses who have worked more than 10 years feel the workload is normal and not heavy. The work context dimension is dominated by career development. Nurses who have a long working period are often involved in participation in training and further education. This is the kind of giving awards or rewards for working in a hospital within a certain period of time and as an effort to develop abilities or skills. In addition, nurses with work period more than 10 years are often involved in room management and respected by other health workers.

The results showed that the job position is related to QNWL, especially in the dimensions of work context and work world. A higher position in a company will foster a sense of pride in individuals [18]. While a little different with the result, the position in the job as a nurse can affect the level of stress at work [19]. Nurses who have job as nurse unit manager or nurse team leaders have more responsibility than associate nurses and are more likely to feel tension at work. Work world dimension is an effect of social influence and changes in nursing practice. Work world dimensions include the image of the profession, economic issues, job security, concerns of most employees, behavior, and the daily lives of nurses.

Most of the respondents in this study were associate nurses. The salary adequacy parameter in the work world dimension is the most dominant. Salaries received by nurses are considered sufficient to meet their needs. In addition to the dimensions of work context with the dominance of values in career development, it shows that all nurses have the opportunity to develop a career. Overall, nurses said that they had the same opportunity to continue their education to a higher level. In addition, associate nurses have the pride of their profession because most of the Lamongan community considers nurses to be the same profession as doctors who can treat illnesses and help solve health problems faced by the community.

Nurses' motivation is related to QNWL, especially the work design dimension. The quality of work life is associated with workers' perceptions [20]. Nurses who have high motivation and expectations in the workplace environment tend to have good perceptions about work so that they are better at achieving high quality at work [21]. The dimensions of job design are the composition or workload of nursing as well as the actual work the nurses do. Workload relates to staff arrangements that cause burdens for nurses and result in dissatisfaction at work; nurses' dissatisfaction at work will have an impact on the performance and desire of nurses to leave their jobs. To prevent this situation, nurses need motivation to improve nurse performance.

The results showed that the proportion of work parameters was dominantly associated with motivation. Most nurses feel that, even though they experience heavy workloads, they can strive for the best quality of service. Nurses work as much as possible and earnestly to get more rewards. Nurses do their best work with the aim of getting a promotion or getting positive attention from superiors.

## V. CONCLUSION

The individual factors have relationship with nurses QNWL: the older nurses, female, bachelor graduated with more dependents, more children, have job positions with longer work experience and highly motivated tend to have better QNWL. Motivation fosters enthusiasm for nurses to demonstrate their ability to carry out their duties and the hope of obtaining appreciation and promotion of work from superiors who have an impact on improving the quality of life as a nurse. Implication of this research suggests to the hospital management, especially in the nursing resources section, the need to keep the motivation of the obedient high in carrying out daily tasks.

## CONFLIC OF INTEREST

No conflict of interest has been declared

## ACKNOWLEDGMENT

The authors of this study want to thank the nurses of Muhammadiyah Hospital, Lamongan who contributed as respondents of this study.

## REFERENCE

- [1] B. A. Brooks, "Defining Quality of Nursing Work Life," *Nurs. Econ.*, vol. 23, no. 6, 2005.
- [2] L. Kelbiso, A. Belay, and M. Woldie, "Determinants of Quality of Work Life among Nurses Working in Hawassa Town Public Health Facilities , South Ethiopia : A Cross-Sectional Study," vol. 2017, 2017.
- [3] L. Kelbiso, A. Belay, and M. Woldie, "Determinants of Quality of Work Life among Nurses Working in Hawassa Town Public Health Facilities , South Ethiopia : A Cross-Sectional Study," *Hindawi Nurs. Res. Pract.*, 2017.



- [4] B. Kaddourah, A. K. Abu-Shaheen, and M. Al-Tannir, "Quality of nursing work life and turnover intention among nurses of tertiary care hospitals in Riyadh: A cross-sectional survey," *BMC Nurs.*, vol. 17, no. 1, Oct. 2018.
- [5] T. Moradi, F. Maghaminejad, and I. Azizi-Fimi, "Quality of working life of nurses and its related factors," *Nurs. Midwifery Stud.*, vol. 3, no. 2, 2014.
- [6] B. A. Brooks, "Defining Quality of Nursing Work Life," no. November, 2004.
- [7] O'Brien-Pallas and L. Baumann, "Quality of nursing worklife issues--a unifying framework," *Can. J. Nurs. Adm.*, vol. 5, no. 2, pp. 12-16, 1992.
- [8] D. Lewis, K. Brazil, P. Krueger, L. Lohfeld, and E. Tjam, "Extrinsic and intrinsic determinants of quality of work life," *Leadersh. Heal. Serv.*, vol. 14, no. 2, pp. 9-15, 2001.
- [9] P. Theresia and Hans, "Performance and quality of work life," *J. Organ. Chang. Manag.*, vol. 13, pp. 389-400, 2003.
- [10] A. B. Aji and T. K. Ambarini, "Coping stress perawat dalam menghadapi agresi pasien di Rumah Sakit Jiwa Dr. Radjiman Wediodiningrat Lawang," *Psikol. Ind. dan Organ.*, vol. 3, no. 3, pp. 54-58, 2012.
- [11] R. Rey, K. Beh, L. Uli, and L. Indris, "Quality of work life: implication of career dimensions," *Am. J. Soc. Sci.*, vol. 2, no. 2, pp. 61-67, 2011.
- [12] Sochalski, "Constructs of quality of work life: q perspective of information and technology professionals," *Eur. J. Soc. Sci.*, vol. 7, no. 1, 2002.
- [13] Trihastuti and R. Yadav, "Literature review on quality of work life and their dimensions," *IOSR J. Humanit. Soc. Sci.*, vol. 19, no. 9, pp. 71-80, 2014.
- [14] P. Asih, F. S. Susilaningsih, and I. Somantri, "Pengaruh faktor demografi terhadap quality of nursing work life perawat rumah sakit," *J. Pendidik. Keperawatan Indones.*, vol. 3, no. 1, pp. 13-24, 2017.
- [15] G. N. Saraji and H. Dargahi, "Study of quality of work life (QWL)," *Iran. J. Public Heal.*, vol. 35, no. 4, pp. 8-14, 2006.
- [16] M. Almalki, G. Fitzgerald, and M. Clark, "Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: a cross-sectional study," *Hum. Resour. Health*, vol. 10, no. 10, 2012.
- [17] M. Alkubaisi, "How can stress affect your work performance?: a quantitative field study on Qatari Banking Sector," *Bus. Manag. Res.*, vol. 4, no. 1, 2015.
- [18] Johnston, Parasuraman, and Ferrel, "Patient- and Family-Centered Care and the Pediatrician's Role," *Pediatrics*, vol. 129, no. 2, pp. 394-404, 2012.
- [19] P. Najim, A. Goudarzi, and G. Sharifirad, "Causes of job stress in nurses: A cross-sectional study," *Iran. J. Nurs. Midwifery Res.*, vol. 17, no. 4, 2012.
- [20] R. Zin, "Perception of professional engineers toward quality of worklife and organizational," *Gadjah Mada Int. J. Bus.*, vol. 6, no. 3, 2004.
- [21] R. Baljoon, H. Banjar, Banakhar, and A. Maram, "Nurses' work motivation and the factors affecting it: a scoping review," *Int. J. Nurs. Clin. Pract.*, vol. 5, no. 27, 2018.