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Effect of the Calling, Moral Sensitivity and Recognition of Good Death of Nurses on Terminal Care Performance

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Abstract: This study was attempted to grasp the effect of the calling, moral sensitivity and the recognition of good death of nurses on terminal care performance. Data was collected from Apr., 1, 2017-30, 2017 and the survey was conducted for 163 nurses who had more than 1 year hospital experience and who worked at 4 general hospitals located at D and Y cities. There was a positive correlation between terminal care performance and calling ($r = 0.394$, $p<0.001$), moral sensitivity ($r = 0.238$, $p<0.005$) and the recognition of good death ($r = 0.202$, $p<0.01$). As a result of regression analysis, the working department of nurses had the explanatory power of 19.1% ($\beta = 0.361$, $p<0.001$) for terminal care performance, followed by calling of 9.3% ($\beta = 0.300$, $p<0.001$) and the recognition of good death of 2.2% ($\beta = 0.149$, $p<0.001$). These variables explained a total of 30.6% of terminal care performance. It is necessary to expand the opportunity for nurses to experience terminal care directly and indirectly and is required to develop various education programs and make execution strategies for establishing the sense of duty and the recognition of good death.

Key words: Calling, moral sensitivity, recognition of good death, terminal care performance, sensitivity, conducted

INTRODUCTION

Due to the increasing trend of elderly population and chronic disease, the requirement of terminal care for nurses is increasing day by day. Terminal care is the overall care for alleviating the trouble and sadness of bereaved family, helping the patients physically, emotionally, socially and spiritually so that they can meet the death in peace at the final moment of life, maintaining the dignity and quality of life as a human for the rest of their lives (kim *et al*., 2002). Therefore, to perform a high quality of terminal care, it is required to establish the high level of ethics and values of nurses, however, they are in many ethical and moral dilemmas in relation to terminal care in the clinical field.

Nurses need a thorough calling for the work that they do as they deal with human life. The calling, one of the recognition which an individual has on his or her work, refers to the attitude which he or she tries to have a positive effect on the public good of a society, realizing his or her own role in work and seeking the meaning and goal in it (Dik and Duffy, 2009). This calling has good effects on the organization by affecting job commitment (Lee, 2011) and increases the occupational ethics (Cheon *et al*., 2014). The moral sensitivity is an ability to discover the ethical issues in nursing behavior based on a value of respect for human, the contextual and intuitive understanding of the vulnerability of personal situation and the insight according to the result of ethical decision making which substitutes an individual (Lutzen *et al*., 1997). This moral sensitivity enhances the empathic ties between patients who are cared and families and has a significant effect on the process of decision making by intuiting the trouble and shabbiness which patients suffer from and the fear of the abandonment and the unknown world (Jo, 2012).

A nurse is the person who forms the closest relationship with a patient until he or she dies. Therefore, the effect of the attitude toward death of a nurse must be large to the patient (Brim and Scotch, 1970). However, unless nurses themselves understand the death as a continuum of life and establish their values, it is difficult to perform the right terminal care to patients and families. Therefore, to perform a high quality of terminal care

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performance, nurses themselves need to establish internal factors such as the ethical awareness and values in advance. As the interest in terminal care grows recently, there have been relevant studies, however, the studies which examine how the calling, moral sensitivity and recognition of good death of nurses affect terminal care performance and whether there is correlation between factors can't be found.

Therefore, this study was attempted to grasp the effect of the calling, moral sensitivity and the recognition of good death of nurses on the terminal care performance and to provide the basic data which will be helpful to developing strategies for terminal care performance based on human dignity.

MATERIALS AND METHODS

Study design: This study is a descriptive survey study for grasping the effect of the calling, moral sensitivity and the recognition of good death of nurses on terminal care performance.

Study subjects: The subjects of this study were those who arbitrarily agreed to participate in the study as nurses who had more than 1 year hospital experience and who worked at 4 general hospitals located at D and Y cities.

The sample size was based on the power of test 0.95, effect size 0.15, significance level 0.05 and the number of sample 138 which are necessary when the number of predictors is 5, using G-Power 3.0.10 Program. Given a dropout rate, questionnaires were distributed to 170 nurses and 163 ones were used for the final analysis except for 7 ones which contained insincere response.

Study tool: For calling, the Korean version of calling scale which Shim (2010) adapted from Calling and Vocation Questionnaire (CVQ) by Dik *et al.* (2009) was used for moral sensitivity, the Korean version of tool which Han *et al.* (2010) adapted from Moral Sensitivity Questionnaire (MSQ) by Lutzen *et al.* (1997) was done. For good death, the tool which Schwarts *et al.* (2003) developed was used and for terminal care performance, the tool which Park (1996) developed was used.

Data collection method: Data collection was conducted from Apr., 1, 2017-30, 2017. For the method of data collection, a researcher visited subjects and explained the purpose and method of study to them. After distributing a questionnaire to those who agreed to participate in it and explaining precautions and how to respond to it, this survey was conducted. Before collecting the data, confidentiality and that this survey will not be used for other purposes other than research were explained to all the subjects.

Data analysis method: The collected data was analyzed using IBM SPSS/WIN 20.0 Program. For the general characteristics, the calling, moral sensitivity, the recognition of good death and the degree of terminal care performance of nurses, frequency, percentage, mean and standard deviation were obtained and to compare the difference in the degree of terminal care performance according to the general characteristics of nurses, t-test and ANOVA and post-test were analyzed with Scheffe's test. The correlation between the calling, moral sensitivity, the recognition of good death and terminal care performance was analyzed with Pearson's correlation coefficients and to grasp the degree of effect of the calling, moral sensitivity, the recognition of good death on terminal care performance, stepwise multiple regression was used.

RESULTS AND DISCUSSION

The general characteristics of the subjects of this study are like Table 1. For gender, there were females 137 (84.0%) for age, those who were under 29 were 106 (65.0%) for marriage, those who were single were 113 (69.3%) and for religion, those who had none were 96 (58.9%) which was highest.

For educational background, those who had a bachelor's degree were 96 (58.9%) for post, those who were general nurses were 135 (82.8%) and for working department, those who worked at special departments were 110(67.5%) which was highest.

For the question of total clinical career, those who had 1-5 years of one were 91 (55.8%), those who had no experience of hospice education were 114 (69.9%) and those who had the experience of family and relatives dying were 118 (72.4%).

The calling, moral sensitivity and the recognition of good death of nurses and the degree of terminal care performance were like Table 2. Calling was 2.18 out of 4 points which indicates that they had an average calling and by sub-regions, transcendental calling (2.36) was highest. The moral sensitivity was 5.0 out of 7 points which indicates that they had the moral sensitivity of more than average and by sub-regions, patient-centered care (5.40) was highest while the moral significance (4.63) was lowest. The good death was 3.13 out of 4 points, terminal care performance was 2.63 out of 4 points which was more than average. For the sub-regions of terminal care performance, psychological region (2.93) was highest

Table 1: General characteristics of subjects

Characteristics/Division	No. (%)	Mean±SD
Gender		
Female	137 (84.0)	
Male	26 (16.0)	
Age (years)		
21-29	106 (65.0)	29.6± 6.99
30~39	42 (25.8)	
≥40	15 (9.2)	
Marital status		
Single	113 (69.3)	
Married	50 (30.7)	
Religion		
Having one	67 (41.1)	
None	96 (58.9)	
Educational background		
Bachelor of arts	54 (33.1)	
Bachelor	96 (58.9)	
More than MA	13 (8.0)	
Position		
General nurse	135 (82.8)	
Charge nurse	11 (6.8)	
More than head nurse	17 (10.4)	
Working department		
Surgical ward	37 (22.7)	
Internal medicine ward	16 (9.8)	
Special department	110 (67.5)	
Total clinical career (years)		
1-5	91 (55.8)	
5-10	35 (21.5)	
≥10	37 (22.7)	
Hospice education experience		
Yes	49 (30.1)	
No	114 (69.9)	
Experience of family dying		
Yes	118 (72.4)	
No	45 (27.6)	

Table 2: The calling, moral sensitivity and the recognition of good death of nurses and the degree of terminal care performance

Variables/Domain	Mean±SD	Range
Calling	2.18±.57	1-4
Transcendental calling	2.36±.55	1-4
Purpose meaning	2.19±.58	1-4
Prosocial orientation	2.15±.61	1-4
Moral sensitivity	5.00±.61	1-7
Patient-centered nursing	5.40±.83	1-7
Professional responsibility	5.35±.76	1-7
Conflict	4.78±.79	1-7
Moral meaning	4.63±.96	1-7
Good deeds	4.70±.58	1-7
Good death	3.13±.36	1-4
Terminal care performance	2.63±.49	1-4
Physical region	2.83±.51	1-4
Psychological region	2.93±.50	1-4
Spiritual region	1.97±.82	1-4

Table 3: Difference in the degree of terminal care performance according to general characteristics of nurses

Characteristics/Division	Mean±SD	t or F(p)
Gender		
Female	2.58±.46	10.929(0.001)
Male	2.92±.55	
Age		
21~29a	2.55±.48	4.786(0.010)
a<c		
30~39b	2.75±.43	
Over 40c	2.88±.60	
Marital status		
Single	2.55±.50	10.162(0.002)
Married	2.81±.43	
Religion		
Having one	2.73±.51	4.346(0.039)
None	2.57±.47	
Working department		
Surgical ward	2.35±.38	19.110(0.000)
Internal medicine ward	2.26±.35	
Special department	2.78±.48	
Total clinical career (years)		
1-5	2.56±.49	4.724(0.010)
5-10	2.60±.47	
More than 10	2.84±.46	

while spiritual region (1.97) was lowest. The difference in personal information protection knowledge according to the general characteristics of nursing students is like Table 3. For gender, there was a statistically significant difference ($F = 10.929$, $p = 0.001$), that is, females (2.58) and males (2.92). For age, over age 40 (2.88) was higher than age 21-29(2.55) ($F = 4.786$, $p = 0.010$) and for marriage, single was 2.55 and married was 2.81 which showed a statistically significant difference ($F = 10.162$, $p = 0.002$). For religion, having one was 2.73 and none was 2.57 which showed a statistically significant difference ($F = 4.346$, $p = 0.039$). For working department, special departments (2.78) were higher than surgical wards (2.35) and internal medicine wards (2.26) ($F = 19.110$, $p = 0.000$). For total clinical career, more than 10 years of one (2.84) was <1-5 years of 1(2.56) in terminal care performance ($F = 4.724$, $p = 0.010$).

The relationship between the calling, moral sensitivity and the recognition of good death of nurses and terminal care performance is like Table 4. There was a positive correlation between terminal care performance and calling ($r = 0.394$, $p<0.001$), moral sensitivity ($r = 0.238$, $p<0.005$) and the recognition of good death ($r = 0.202$, $p<0.01$). That is the higher calling, moral sensitivity and the recognition of good death were the higher the degree of terminal care performance was. The effect of the calling, moral sensitivity and the recognition of good death of nurses on terminal care performance is like Table 5. For independent variables, the gender, age, marriage, religion, working department and total clinical career which showed the difference in terminal care performance among the general characteristics were processed with a variable number and then after including calling, moral sensitivity and good death, they were analyzed.

Before conducting retrogression analysis, the conditions of multicollinearity, independency, homoscedasticity and normality were tested, all of which satisfied the assumption of regression equation. As a result of testing multi collinearity, tolerance (0.945~0.989) was 0.1 or more and Variance Inflation Factor (VIF) (1.011~1.058) didn't exceed 10 or more, so there was no problem in multi collinearity. Also, as a result of testing independency, Durbin Watson statistic (1.978) was close

Table 4: The relationship between the calling, moral sensitivity and the recognition of good death of nurses and terminal care performance

Variables	Calling r(p)	Moral sensitivity r(p)	Recognition of good death r(p)	Terminal care performance r(p)
Calling	1			
Moral sensitivity	0.227 (<0.005)	1		
Recognition of good death	0.095 (0.227)	0.375 (<0.001)	1	
Terminal care performance	0.394 (<0.001)	0.238 (<0.005)	0.202 (<0.01)	1

Table 5: The effect of the calling, moral sensitivity and the recognition of good death of nurses on terminal care performance

Variables	B	SE	β	R^2	Adj. R^2	t-values	p-values
Constant working department	1.165	0.304	-	-	-	3.836	<0.001
(Special department)	0.378	0.071	0.361	0.191	0.186	5.318	<0.001
Calling	0.262	0.059	0.300	0.284	0.275	4.419	<0.001
Recognition of good death	0.206	0.092	0.149	0.306	0.293	2.242	<0.001

R^2 = 0.306, Adj. R^2 = 0.293, F = 23.343, p<0.001

to 2, so it was identified that there is auto-correlation. As a result of retrogression analysis, the working department of nurses had an explanatory power of 19.1% (β = 0.361, p<0.001) on terminal nursing performance, followed by calling of 9.3% (β = 0.300, p<0.001) and the recognition of good death of 2.2% (β = b 0.149, p<0.001). These variables explained a total of 30.6% of terminal care performance. Therefore, it was revealed that the more special the working department of nurses was, the higher calling was and the higher the recognition of good death was, the more terminal care performance was affected. Especially, it was identified that the working of nurses at special departments among the main factors is the factor which has the largest effect on terminal care performance. In this study, the effect of the calling, moral sensitivity and the recognition of good death of nurses on terminal care performance was identified and the main results are discussed as follows.

First, the calling of nurses was 2.18 (±0.57) out of 4 points which corresponds to the result of many preceding studies which showed the result of more than average. The moral sensitivity showed a high result, that is, 5.0 (±0.61) out of 7 points. By the sub-regions of the moral sensitivity, patient-centered nursing region and professional responsibility region showed high results, compared with other regions which corresponded to the study results of Jo and Kim (2013). These results show that nurses are establishing their own identity in the position of nursing the patients. The good death was 3.13 (±0.36) out of 4 points which corresponded to the study results of An and Lee (2014). Terminal care performance revealed the result of more than average that is, 2.63(±0.49) out of 4 points. By the sub-regions of terminal care performance, psychological region and physical region were high, that is, 2.93 (±0.50) and 2.83 (±0.51) respectively while spiritual region was 1.97 (0.82) which was lowest and showed that the nursing on spiritual region is sluggish.

Second for the difference in the degree of terminal care performance according to the general characteristics of nurses, there was significant difference in gender, age, marital status, religion, working department and total clinical career. Especially in age, terminal care performance showed a higher result in the group over age 40 than that under age 21-29. It seems that it's because the nurses over age 40 are closer to the concept than the young ones and have understanding on the life based on the abundant life experience. For working department, the result was that terminal care performance was high in special departments in comparison with general wards. Compared with the nurses under 5 years of clinical career, those who have over 10 years of clinical career were significantly high in terminal care performance. These results seem to be due to the reasons that the subjects who responded to the survey were mostly the nurses who worked at special departments such as intensive care unit and neonatal intensive care unit, etc. that they had much terminal care experience and that the nurses who had over 10 years of clinical career have become exposed to the terminal care experience, gaining the clinical career for a long time well, too.

Third for the correlation with terminal care performance of nurses, there was significant pure correlation in all of calling (r = 0.394, p<0.001), moral sensitivity (r = 0.238, p<0.005) and the recognition of good death (r = 0.202, p<0.01). There was significant pure correlation between calling and moral sensitivity (r = 0.227, p<0.005) and between moral sensitivity and the recognition of good death (r = 0.375, p<0.001). These results indicate that those of this study are supported by the study that clarified the correlation between moral sensitivity and terminal care performance (Jo and Kim, 2013). Therefore for terminal care performance which must be conducted based on respect for human as the professional nurses who advocate a patient, they need to cultivate professional calling and moral sensitivity and make an effort to accept terminal care as a continuum of nursing based on the understanding of the death.

Fourth, in this study, it was revealed that working at a special department such as intensive care unit (β = 0.361), calling (β = 0.300) and the recognition of

good death (β = 0.149) are the factors which had the largest effect on terminal care performance. These results are supported by a result that the degree of terminal care attitude was highest when good death was often thought (An and Lee, 2014) and it seems that as the special departments such as intensive care unit, etc. are high in the frequency of terminal care performance and are often exposed to the terminal care situation, the nurses who work at them seem to have more opportunities to think of the death in comparison with general wards.

Also, as it is shown from the study result that the more professional calling gets increased, the more principle of duty, asceticism and utilitarianism, the factors of professional ethics, increase (Cheon *et al*., 2014), it seems that the calling of nurses contributes to establishing the professional ethical belief which leads to the result of enhancing terminal care performance.

CONCLUSION

It was grasped that in order for nurses to perform a good quality of terminal care, it is necessary to expand the experience of working at special departments such as intensive care unit, etc. and establish the recognition of good death and sense of duty. Therefore, it is necessary to expand the opportunity for nurses to experience terminal care directly and indirectly and is required to develop various education programs and make execution strategies for establishing the recognition of good death and the sense of duty.

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