

## Original Article

### Determining the Moral Sensitivity of Intensive Care Nurses

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#### Abstract:

**Introduction:** Intensive care units are defined as clinics that aim to support and cure critically ill patients, have a priority with their allocation in terms of patient care, are equipped with advanced technology devices, follow patients' vital signs for 24 hours and provide a multidisciplinary service. This study was conducted for examining the moral sensitivity of intensive care nurses in moral decision-making.

**Method:** The sample of this descriptive and cross-sectional study consisted of 84 nurses who worked in intensive care units of university and public hospitals in the province of Malatya between February - March 2015 and accepted to participate in the study. The data were collected using Socio-Demographic Data Form and Moral Sensitivity Questionnaire. Statistical analyses of the data were evaluated using computer-aided SPSS program, descriptive statistics (frequency, mean, minimum and maximum values, standard deviation), Anova variance analysis and Student t test.

**Findings:** 70,2% intensive care nurses who were included in the study were in the age group of 18-34, 54,8% were married, 91,7% had bachelor's degree and 53,6% had studied ethics. While the total moral sensitivity score of intensive care nurses ranged from minimum 51 to maximum 131; the average score was  $87,30 \pm 17,03$ . Average scores obtained by intensive care nurses from the lower dimensions of moral sensitivity were as;  $18,32 \pm 5,84$  (autonomy),  $11,41 \pm 4,40$  (benefit),  $10,67 \pm 2,97$  (integrative approach),  $13,46 \pm 4,78$  (conflict),  $11,05 \pm 3,08$  (application) and  $8,47 \pm 3,33$  (orientation). It was determined that there was no difference between the total scores obtained by nurses from moral sensitivity and their educational background, duration of working in intensive care units, the unit where they worked and the state of studying ethics before and after graduation (respectively  $p:0,265$ ,  $p:0,555$ ,  $p:0,299$  and  $p:0,439$ ), however, there was a significant difference between the scores of some lower dimensions of moral sensitivity according to their age and marital status (respectively  $p:0,036$ ,  $p:0,037$ ).

**Conclusion:** It was determined that intensive care nurses had a moderate level of moral sensitivity. Thus, it is recommended to plan and conduct continuous curriculums containing information and personal development aimed at increasing the moral sensitivity of intensive care nurses. Besides, it is considered important to conduct studies in larger groups for the moral sensitivity of intensive care nurses.

**Keywords:** Intensive Care Nursing, Moral Sensitivity

## Introduction:

Intensive care units are defined as clinics that aim to support and cure critically ill patients, have a priority with their allocation in terms of patient care, are equipped with advanced technology devices, follow patients' vital signs for 24 hours and provide a multidisciplinary service (1). Intensive care nurses are among the critically important members of intensive care units that require; having high-level knowledge and skills in a special environment equipped with advanced technology, working as a part of multidisciplinary health team, having the skills of making correct decisions and applying other decisions and having a relevant specialty (2,3,4).

The emergence of moral problems that are encountered in intensive care units due to multiple/complex reasons and the necessity for solving them in a short time make the situation even more important (5). Moral problems frequently encountered by nurses were determined as; different approaches of other team members and the institution to care and treatment of patients, protection of patient rights, care of terminal patients, getting informed consent, allocating limited resources and unethical attitudes of colleagues (1,6).

It is important for intensive care nurses to primarily distinguish their moral problems and make appropriate decisions in order to be able to solve these problems (6,7). Defined as the ability of distinguishing moral problems; moral sensitivity may either solve and clarify moral problems, justify actions or prevent a moral dilemma in intensive care units just like in all units

(8,9). Nurses that face moral dilemmas during practice are liable for generating solutions under the guidance of universal moral principles (9).

In this study, it was aimed to examine the moral sensitivity of intensive care nurses in moral decision-making.

## Methods:

### Ethical Considerations

After receiving an 'Ethical Committee Approval' from the Ethical Committee of İnönü University for the study; required written permissions were obtained from the hospitals where the application would be conducted. We abided by the Helsinki Citizens Declaration throughout the study, informed the nurses that accepted to participate in the study about the study objective and data collection forms and received their verbal consent.

### Sample and setting

The target population of this descriptive and cross-sectional study consisted of 84 nurses who worked in intensive care units of university and public hospitals in the province of Malatya between February - March 2015 and accepted to participate in the study. The entire population was included in the study and no separate sample was selected.

### Data collection

The study data were collected using Socio-Demographic Data Form and Moral Sensitivity Questionnaire.

Socio-Demographic Data Form: This form contains 11 questions about the socio-

demographic features of nurses like age, educational background, as well as the duration of working and the state of studying nursing ethics, facing moral dilemmas and solving these moral dilemmas.

**Moral Sensitivity Questionnaire:** This questionnaire was developed by Kim Lutzen in Sweden in 1994 for the purpose of measuring moral sensitivity, and its validity and reliability study was conducted in our country by Hale Tosun in 2005. The questionnaire consists of totally 30 items and six lower dimensions. These lower dimensions include; autonomy (items 10,12,15,16,21,24 and 27), benefit (items 2,5,8 and 25), integrative approach (items 1,6,18,29 and 30), conflict (items 9,11 and 14), application (items 4,17,20 and 28) and orientation (items 7,13,19 and 22) (1,9,10). In this Likert type questionnaire, the scoring ranges between 1 and 7 ("1 point" signifies high sensitivity as strongly agree, "7 points" signifies low sensitivity as strongly disagree). Total score to be obtained from the questionnaire ranges between 30-210. High score signifies morally low sensitivity, whereas low score signifies morally high sensitivity. While adapting the questionnaire in our country, the Cronbach alpha value was determined as 0.84 (9). The Cronbach alpha value was determined as 0.736 in this study.

### Statistical analysis

The results were coded by the principal investigator and entered into the statistical analysis program SPSS 16.0 (Statistical Package for the Social Sciences). Descriptive statistics were used to generate

frequencies, means, minimum and maximum values, standard deviation, Anova variance analysis and Student t test. Significance was declared by p value of  $<0.05$ .

### Findings:

Table 1 shows the introductory features of intensive care nurses. 70,2% of nurses were in the age group of 18-34, 54,8% were married, 91,7% had bachelor's degree and 53,6% had studied ethics.

Table 2 shows the distribution of scores obtained by intensive care nurses from MSQ and lower dimensions. While the total moral sensitivity score of intensive care nurses ranged from minimum 51 to maximum 131; the average score was  $87,30 \pm 17,03$ . Average scores obtained by nurses from the lower dimensions of moral sensitivity were as;  $18,32 \pm 5,84$  (autonomy),  $11,41 \pm 4,40$  (benefit),  $10,67 \pm 2,97$  (integrative approach),  $13,46 \pm 4,78$  (conflict),  $11,05 \pm 3,08$  (application) and  $8,47 \pm 3,33$  (orientation).

Table 3 shows the distribution of scores obtained by intensive care nurses from moral sensitivity according to demographic features. As a result of our study, score averages of moral sensitivity were determined to be higher in nurses in the age group of 35-44 ( $93,76 \pm 13,65$ ) than the age group of 18-34 ( $84,57 \pm 17,67$ ) and in married nurses ( $90,82 \pm 15,61$ ) than single nurses ( $83,05 \pm 17,89$ ), and the difference between them was observed to be statistically significant ( $p < 0,05$ ). Score averages obtained by nurses that had bachelor's degree and postgraduate education from moral sensitivity were

respectively as;  $86,46 \pm 17,40$  and  $99,20 \pm 8,40$ . The difference between the score averages of moral sensitivity was not significant according to the educational background of nurses ( $p=0,265$ ). Score averages of moral sensitivity according to the duration of working in intensive care units were as follows;  $84,60 \pm 15,38$  in nurses that worked for 6-10 years,  $88,42 \pm 17,89$  in nurses that worked for 1-5 years and  $89,02 \pm 18,07$  in nurses that worked for 11 years and above, which was not statistically different ( $p>0,05$ ).

Examining Table 4; it was determined that nurses in the age group of 35-44 had significantly higher score averages of moral sensitivity than nurses in the age group of 18-34. There was a significant difference between the score averages of the lower dimensions of benefit and integrative approach according to age groups ( $p<0.05$ ). Accordingly, score averages of moral sensitivity were determined to be low in the lower dimensions of benefit, integrative approach, application and orientation in the age group of 18-34 and in the lower dimensions of autonomy and conflict in the age group of 35-44.

According to Table 5; while there was no statistically significant difference between the score averages of the lower dimensions of autonomy, conflict, application and orientation according to the marital status of intensive care nurses, there was a significant difference between the lower dimensions of benefit and integrative approach.

## Discussion:

It was determined that an important part of intensive care nurses that constituted the study sample (70.2%) were in the young age group (18-34) and had a duration of working of maximum 11 years and above (41.7%). In his study examining the moral sensitivity of intensive care nurses, Dikmen (2013) stated that 46% of nurses were in the age group of 25-35 and 44% had an occupational experience of 1-5 years. Other studies on intensive care nurses in our country have determined a low age average (1,4,11,12,13). These findings show a parallelism with our study results and indicate that generally young nurses are employed in intensive care units. In this study, it is also observed that more than half of intensive care nurses are young, which makes us think that they may experience difficulties in distinguishing moral problems and making correct decisions for their solution.

It was seen that 91.7% of intensive care nurses that participated in the study had bachelor's degree. In other studies that were conducted in our country, the rates of intensive care nurses to have bachelor's degree were determined as 61.2% (1), 32% (4), 46.1% (13) and 43.1% (14). As a result of our study, no difference was determined between the moral sensitivities of intensive care nurses according to their educational background, which might be associated with higher rates of nurses that constituted the sample group of the study to have bachelor's degree than other groups.

53.6% of nurses stated that they had studied ethics after graduation, but experienced moral problems throughout their career in

intensive care units. In our country, nurses that work in intensive care units are generally employed without training. However, intensive care units are where moral problems are experienced frequently (6,7,15,16). On the other hand, no significant difference was determined between the state of nurses to study ethics and total scores of moral sensitivity and lower dimensions.

This finding is associated with the fact that nurses had studied ethics mainly on the basis of theoretical subjects containing general information rather than applications concerning moral problems and their solutions. Intensive care nurses need to have developed moral sensitivity in order to recognize moral problems and make correct decisions (1,6,7).

As a result of our study; while no difference was determined between nurses' duration of working in intensive care units and educational background according to the total scores of moral sensitivity and lower dimensions, there was a significant difference between their age and marital status. Similarly, Başak et al. determined no difference between their duration of working in intensive care units, marital status and educational background and the total scores of moral sensitivity and lower dimensions (1). However, in the study of Tosun, it was determined that moral sensitivity was higher in the married nurses group than the single nurses group in the lower dimension of benefit (9). In the study, it was also determined that nurses aged 35 and older had lower score averages of moral sensitivity in the lower dimensions of

autonomy and conflict. In their study examining moral sensitivity in the general sample of nurses; Aksu and Akyol (2011) stated that nurses in the advanced age group had lower score averages of moral sensitivity in the lower dimension of integrative approach. Pekcan (2007) determined a difference in the lower dimension of integrative approach and Tosun (2005) in the lower dimensions of integrative approach and benefit, and they established that moral sensitivity increased as age advanced.

As a result of this study, the score average obtained by intensive care nurses from moral sensitivity was determined to be moderate ( $87,30 \pm 17,03$ ). Dikmen (2013) also determined the moral sensitivity of intensive care nurses to be moderate ( $87,51 \pm 27,79$ ). Other studies in literature also suggest that nurses have a moderate level of moral sensitivity (1,7,16,17,18).

## Conclusions:

In this study, it was determined that nurses who were included in the study had a moderate level of moral sensitivity. Age and marital status of intensive care nurses affect their moral sensitivity. It was determined that younger nurses had lower score averages of benefit and integrative approach; married nurses had higher score averages of moral sensitivity than single nurses; and there was an increase in the lower dimensions of benefit and integrative approach. It is recommended to conduct studies in larger groups so as to determine different variables that affect the moral sensitivity of intensive care nurses.



## Conflicts of Interest:

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper.

## Acknowledgments:

This research is orally presented in 2nd Internal and Surgical Intensive Care Nursing Congress on May 19–23, 2016 in İzmir, Turkey.

## Funding:

The authors received no financial support for the research and/or authorship of this article.

## References:

1. Başak, T., Uzun, Ş. and Arslan, F. (2010). Examining the moral sensitivity of intensive care nurses. *Gülhane Medical Journal*, 52, 76–81.
2. Algier L, Uyer G (1998) Moral Aspects of Intensive Care Nursing. Notices of the II.Symposium on Medical Ethics. Bioethics Association Publications, No: 3. Ankara: YÖK Printing House, pp:379- 384.
3. Bahçeçik N, Öztürk H (2003) The hospital moral climate survey in Turkey. *JONA's Healthcare Law Ethics and Regulation*, 5(4): 94-9.
4. Dikmen Y. (2013). Examining the Moral Sensitivity of Intensive Care Nurses. *Cumhuriyet Nursing Journal*, 2(1):1-7.
5. Tel H (2012) Common moral problems in intensive care units. *Cumhuriyet Nursing Journal*, 1(1):30-38.
6. Pekcan HS. (2007). Moral sensitivity of physicians and nurses that work in the

- province of Yalova and surroundings. (Marmara University, Institute of Health Sciences Unpublished Postgraduate Thesis. İstanbul ). Acquired from <https://tez.yok.gov.tr/UlusalTezMerkezi/>.
7. Savaşkan F (2006). Determining the Sensitivity of Nurses and Physicians that Work in Bed Treatment Institutions in the TRNC - Turkish Republic of Northern Cyprus toward Patient Rights. (İstanbul University Unpublished Postgraduate Thesis, İstanbul). Acquired from <https://tez.yok.gov.tr/UlusalTezMerkezi/>.
  8. Öztürk H, Hindistan S, Kasım S et al. (2009) Moral sensitivity of physicians and nurses in intensive care units. *Intensive Care Nursing Journal*, 13(2):77-84.
  9. Tosun, H. (2005). Determining the sensitivity of physicians and nurses toward moral dilemmas that are experienced in health practices (Doctoral Thesis, İstanbul University, Institute of Health Sciences, İstanbul). Acquired from <https://tez.yok.gov.tr/UlusalTezMerkezi/>.
  10. Lützen, K., Johansson, A., & Nordström, G. (2000). Moral sensitivity: Some differences between nurses and physicians. *Nursing Ethics*, 7, 520–530.
  11. Aytaç N, Naharcı H, Öztunç G. Knowledge levels of intensive care nurses that work at Adana training and research hospitals regarding hospital infections. *ADU Medical Faculty Journal* 2008; 9: 9-15.
  12. Göz F, Gürelli ŞŞ. Thoughts of intensive care nurses about organ donation. *Fırat Healthcare Services Journal* 2007; 2: 77-88.
  13. Çelen Ö, Karaalp T, Kaya S, Demir C, Teke A, Expectations of nurses that work in Intensive Care Units of Akdeniz A.

Gülhane Military Medical Faculty Training Hospital from in-service training programs and their thoughts about these programs. *Gülhane Medical Journal* 2007; 49: 25-31.

14. Hakverdioglu G, Demir A, Ulusoy FM. Evaluating the knowledge of intensive care nurses regarding physical restraint. *Turkish Clinics J Med Sci* 2006; 26:634-641.

15. Akdeniz S, Ünlü H. Intensive Care Nursing. *Intensive Care Journal* 2004; 4: 179-185.

16. Aksu T, Akyol A (2011) Examining the moral sensitivity of nurses in İzmir. *Turkish Clinics J Med Ethics*, 19(1):16-24.

17. Enes SPD, de Vries K. (2004) A survey of moral issues experienced by nurses caring for terminally ill elderly people. *Nurse Ethics*, 11(2):150-64.

18. Raines ML (2000) Ethical decision making in nurses. Relationships among moral reasoning coping style, and ethical stress. *JONAS Health Law Ethics Regul*, 2(1): 29-41.

## Table and Charts:

**Table 1.** Demographic Features of Intensive Care Nurses (n:84)

Demographic Features		Number (n)	Percentage (%)
Age	18-34	59	70,2
	35-44	25	29,8
Marital status			
	Married	46	54,8
	Single	38	45,2
Educational background			
	Associate degree	2	2,4
	Undergraduate	77	91,7
	Postgraduate	5	6,0

**Duration of working**

1-5 years	19	22,6
6-10 years	30	35,7
11 years and above	35	41,7

**Unit where they work**

Pediatric Surgery and Burn Intensive Care	14	16,7
Neonatal Intensive Care	13	15,5
General Surgery Intensive Care	9	10,7
Internal Diseases Intensive Care	11	13,1
Cardiovascular Surgery Intensive Care	20	23,8
Neurosurgery Intensive Care	17	20,2

**State of Studying Ethics**

Yes	45	53,6
No	39	46,4

**Table 2.** Distribution of Scores Obtained by Intensive Care Nurses from Moral Sensitivity Questionnaire (n:84)

Scores	Item Number	Cronbach's alpha	Mean±SS
Total Moral Sensitivity	30	0,736	87,30±17,03
Autonomy	7	0,631	18,32±5,84
Benefit	4	0,539	11,41±4,40
Integrative Approach	5	0,354	10,67±2,97
Conflict	3	0,384	13,46±4,78
Application	4	0,381	11,05±3,08
Orientation	4	0,323	8,47±3,33



**Table.3.** Distribution of Scores Obtained by Intensive Care Nurses According to Demographic Features (n=84)

Demographic Features		Number(n)	Mean±SS	Test and Significance
Age	18-34	59	84,57±17,67	t:-2,318
	35-44	25	93,76±13,65	p:0,036
Marital status				
	Married	46	90,82±15,61	t:2,126
	Single	38	83,05±17,89	p:0,037
Educational background				
	Associate Degree	2	90,00±0,00	F:1,349
	Bachelor's Degree	77	86,46±17,40	p:0,265
	Postgraduate	5	99,20±8,40	
Duration of working				
	1-5 years	19	88,42±17,89	F:0,592
	6-10 years	30	84,60±15,38	p:0,555
	11 years and above	35	89,02±18,07	
Unit where they work				
	Pediatric Surgery and Burn ICU	14	80,57±17,51	
	Neonatal ICU	13	91,00±19,91	F:1,240
	General Surgery ICU	9	82,22±17,00	p:0,299
	Internal Diseases ICU	11	95,00±14,32	
	Cardiovascular Surgery ICU	20	86,20±16,06	
	Neurosurgery ICU	17	89,05±16,36	
State of Studying Ethics				
	Yes	45	85,93±17,44	t:-0,794
	No	39	88,89±16,62	p:0,439

**Table 4.** Distribution of Score Averages Obtained from Moral Sensitivity According to the Variable of Age+

MSQ and lower dimensions Significance	Age		Test	
	18-34 (n=59)	35-44 (n=25)		
	Mean±SS	Mean±SS		
Autonomy	18,40± 5,92	18,12±5,73	t:0.205	p:0.134
Benefit	10,93±4,96	12,56±2,38	t:-1.562	p:0.000
Integrative Approach	9,96±2,92	12,36±2,39	t:-3.609	p:0.040
Conflict	13,57±5,18	13,20±3,76	t:0.328	p:0.186
Application	10,66±3,00	12,00±3,12	t:-1.844	p:0.595
Orientation	7,81 ± 2,95	10,04 ± 3,71	t:-2.919	p:0.285

**Table 5.** Distribution of Score Averages Obtained from Moral Sensitivity According to the Variable of Marital Status

MSQ and lower dimensions Significance	Marital Status		Test	
	Married (n=46)	Single (n=38)		
	Mean±SS	Mean±SS		
Autonomy	18,67± 5,86	17,89±5,85	t:0.607	p:0.540
Benefit	12,28±3,34	10,36±5,27	t:2.019	p:0.001
Integrative Approach	11,45±2,59	9,73±3,15	t:2.739	p:0.024
Conflict	13,63±3,92	13,26±5,69	t:0.348	p:0.064
Application	10,95±3,31	11,18±2,81	t:-0.335	p:0.105
Orientation	9,56 ± 3,25	7,15 ± 2,97	t:3.506	p:0.895