The Relationship Between Nursing Students' Attitudes Towards Nursing Diagnosis and Their Professional Values

Berna Akay¹ (D), Berna Köktürk Dalcalı² (D)

¹Faculty of Health Sciences, Department of Internal Medicine Nursing, Bandirma Onyedi Eylul University, Balikesir, Turkey ²Faculty of Health Sciences, Fundamentals of Nursing Department, Bandirma Onyedi Eylul University, Balikesir, Turkey

Berna AKAY Berna KÖKTÜRK DALCALI

Correspondence: Berna Akay
Faculty of Health Sciences, Department of
Internal Medicine Nursing, Bandirma Onyedi
Eylul University, Balikesir, Turkey
Phone: +905306126241

Received: 21 November 2022 **Accepted:** 19 February 2023

E-mail: bakay@bandirma.edu.tr

ABSTRACT

Purpose: The research was planned to examine the relationship between the attitudes of nursing students against the nursing diagnoses and their professional values.

Methods: The sample of this descriptive and correlational study consisted of 147 second, third- and fourth-year nursing students in the nursing department of a state university at the South Marmara Region. Personal information form was used to collect data, Positions on Nursing Diagnosis Scale was used to evaluate attitudes towards nursing diagnoses, and Nurses Professional Values Scale-Revised was used to evaluate professional values. The scales were converted into an online questionnaire in the Google® Survey database and were sent to students via electronic communication programs between February and May 2021. Descriptive statistics were used in the analysis of sociodemographic characteristics and scale responses, Pearson Correlation Analysis was used to examine the relationship of the scales.

Results: The mean age of the students participating in the study was 21.16 ± 1.43 . It was determined that the professional values score averages of students were at a high level with 120.54 ± 10.76 , and their attitudes towards nursing diagnosis mean scores were quite positive with 124.82 ± 15.87 and there was a moderately strong positive relationship between them (r=.472 p<.01).

Conclusion: Adoption of professional values by nursing students is an important element to provide an understanding of nursing knowledge and science. Nursing diagnoses are the visible face of nursing science in patient care. It is recommended to increase the course content that will positively affect the attitudes towards these two issues and to support it with inservice training in professional life.

Keywords: Attitudes; nursing diagnosis; nursing students; professionalism

Hemşirelik Öğrencilerinin Hemşirelik Tanılarına Yönelik Tutumları ile Mesleki Değerleri Arasındaki İlişki ...___

Amaç: Araştırma, hemşirelik öğrencilerinin hemşirelik tanılarına yönelik tutumları ile mesleki değerleri arasındaki ilişkiyi incelemek amacıyla planlanmıştır.

Gereç Yöntem: Tanımlayıcı ve ilişki arayıcı nitelikteki bu araştırmanın örneklemini Güney Marmara Bölgesi'ndeki bir devlet üniversitesinin hemşirelik bölümünde okuyan ikinci, üçüncü ve dördüncü sınıf hemşirelik öğrencilerinden 147 öğrenci oluşturmuştur. Veri toplamak için kişisel bilgi formu, hemşirelik tanılarına yönelik tutumları değerlendirmek için Hemşirelik Tanıları Hakkındaki Görüşler Ölçeği ve mesleki değerleri değerlendirmek için Revize Edilen Hemşirelerin Mesleki Değerler Ölçeği kullanılmıştır. Ölçekler, Google® Anket veri tabanında çevrimiçi bir ankete dönüştürülmüş ve elektronik iletişim programları aracılığıyla Şubat -Mayıs 2021 tarihleri arasında öğrencilere gönderilmiştir. Sosyodemografik özelliklerin ve ölçek yanıtlarının analizinde tanımlayıcı istatistikler kullanılırken, ölçeklerin ilişkisinin incelenmesinde Pearson Korelasyon Analizi kullanıldı.

Bulgular: Çalışmaya katılan öğrencilerin yaş ortalaması 21.16±1.43'tür. Hemşirelik öğrencilerinin mesleki değerlerinin puan ortalamasının 120.54±10.76 ile yüksek düzeyde, hemşirelik tanılarına yönelik tutumlarının 124.82±15.87 puan ortalaması ile oldukça olumlu olduğu ve aralarında orta düzeyde güçlü pozitif ilişki olduğu bulundu (r=.472 p<.01).

Sonuç: Hemşirelik öğrencilerinin mesleki değerleri benimsemeleri, hemşirelik bilgi ve bilim anlayışını sağlamada önemli bir unsurdur. Hemşirelik tanıları, hasta bakımında hemşirelik biliminin görünen yüzüdür. Bu iki konuya yönelik tutumları olumlu yönde etkileyecek ders içeriklerinin artırılması, meslek yaşantısında hizmet içi eğitimlerle desteklenmesi önerilmektedir.

Anahtar kelimeler: Hemşirelik öğrencileri; hemşirelik tanısı; profesyonellik; tutum

ursing is a professional profession that systematically provides individualized care to the healthy/ sick individual. The systematic approach, that is adopted in the delivery of care, emerges as the nursing process (1,2). The common point that unites the nurses, who are working in various fields, is the nursing process. Nursing diagnosis allows the nurse to make a clinical judgment about the patient's current or potential health condition and requirements based on the data collected from the patient and is considered as the main stage of the nursing process (3). Nursing diagnoses enable nurses to use professional language in sharing information, organizing information, making decisions, determining nursing practices and appropriate patient outcomes (4). In this way, the autonomy of nurses increases and they go beyond the traditional approach of this profession (3).

Using a standard terminology in nursing care ensures that all nurses have the same understanding of the patient's needs, nursing interventions are distinguished from other healthcare team interventions, and nursing care is recorded. Thus, it is ensured that nursing interventions become visible, the quality-of-care increases, and national/ international comparisons can be made (5). Curriculum in nursing schools should be arranged in line with this purpose. In order for graduate nurses to provide effective care; it is necessary to understand the philosophy of nursing, why they are doing the applications and to gain the knowledge, skills and behaviors suitable for professional nursing (6). The diagnosis of North American Nursing Diagnosis Association (NANDA) plays an important role in determining patient needs or potential risks during nursing student education (4,7). Creating positive attitudes towards NANDA nursing diagnoses in nursing students is a step towards improving compliance with NANDA in clinical practice (8).

However, there is no information in the literature about the factors affecting students' attitudes towards nursing diagnoses. Considering that values are one of the most important factors affecting attitudes, behaviors and practices of nurses, it is thought that attitudes towards nursing diagnoses may also be related to values (9).

To assess professional values, beliefs and attitudes of the practitioner and/or professional group in the nursing literature is defined as "the framework, standards and principles of action" and these values, in turn, affect the behavior of nurses (10). In clinical decision making, nurses think long and hard on what they have learned and what they believe to be true. Therefore, these values are both

the basis of nursing practices and guidelines for nurses in their interaction with patients, colleagues, other professions and society (11). Internalization of professional values provides the ability to resolve conflicts and identify priority actions, ensuring that a safe, quality and ethical care is maintained (12). Nurses use these professional values when giving care to healthy individuals /patients, making decisions about ethical dilemmas, and applying the nursing process. Nurses who adopt professional values gain competence in solving patient problems and determining priority actions, use the nursing process effectively and provide quality care. Professional values guide the correct nursing process practice by improving the critical thinking skills of nursing students (13,14).

It is thought that this study will contribute to the literature in terms of showing the relationship between nursing students' professional values and attitudes towards nursing diagnoses by examining them together.

MATERIAL AND METHODS

Aim and the Type of the Study

The study was planned in a descriptive, cross sectional and correlational manner. In this study, it was aimed to examine the views of nursing students about nursing diagnoses and their relationship with professional values.

Research Questions

- 1. What is the level of the attitudes of nursing students about nursing diagnoses?
- What is the level of professional values of nursing students?
- 3. Is there a relationship between nursing students' attitudes about nursing diagnoses and their professional values?

Sample

The sample of this study consisted of 328 second, thirdand fourth-year nursing students in the nursing department of a state university at the South Marmara Region of Türkiye. First-year students were excluded from the study because they did not have enough information about nursing diagnoses. Finally, 147 students who volunteered to participate in the study and filled out the electronic questionnaire completely were included in the study. The rate of participation is 44.8%.

Data Collection Tools

Data was collected with the help of personal information form, Positions on Nursing Diagnosis Scale, and Nurses Professional Values Scale-Revised.

Personal Information Form: It consists of five questions questioning the age, gender, class, income status and family structure of the students. The form was created by the researchers in the light of the relevant literature (9-11).

Positions on Nursing Diagnosis (POND) Scale: The POND scale, developed by Lunney and Krenz in 1994, is a tool that measures nursing students' thoughts about nursing diagnoses. The POND scale consists of 20 items. In each item, there are two items (one being the most positive and the other the most negative) representing the opposite characteristics, aiming to determine the opinions about the nursing process. In this scoring, which ranges from one to seven, one point represents the most negative and seven points represent the most positive thoughts. The minimum score that can be obtained from the scale is 20 and the maximum score is 140, and a high score indicates a positive attitude (15). Turkish validity and reliability study was conducted by Zaybak et al. (2020). The Cronbach alpha value of the scale is 0.95 (5). In this study, the Cronbach's alpha value was found to be 0.96.

Nurses Professional Values Scale-Revised (NPVS-R): It is a five-point Likert type (1-not important, 2-somewhat important, 3-important, 4-very important, 5-extremely important) was scale that was developed by Weis and Schank (2009) to determine the perception levels of nurses and nursing students about professional values. The total scores that can be obtained from the scale are between 26-130 (16). A high score indicates strong adherence to professional values. NPVS-R does not contain subdimensions. The Turkish validity and reliability study was conducted by Acaroğlu (2014). The Cronbach alpha value of the scale was found to be 0.96 (17). In this study, the Cronbach's alpha value was found to be 0.95.

Data Collection

Data collection tools were created in the Google® survey database and tools were sent to 2nd, 3rd and 4th grade nursing students through electronic communication programs (Whatsapp, Telegram) between February and May 2021. The data of the students who filled out the questionnaire completely were included in the research.

Data Analysis

The statistical analysis of the data collected in this study was performed using the SPSS (Statistical Package for the Social Sciences) 21.0 software. The kurtosis and skewness values were checked for the normality distribution. Values between -1.5- +1.5 are accepted as normal distribution. Both scales were found to have a normal distribution.

While descriptive statistics (frequency, percentage, mean, and standard deviation) were used in the analysis of socio-demographic characteristics and scale responses, Pearson Correlation Analysis was used to examine the relationship of the scales. Significance level was accepted as p<.05.

Ethical Aspect

In order to carry out the research, the permission numbered 2021-9 from the non-interventional ethics committee of a university and the permission of the institution where the research will be conducted were obtained. The students who participated in the study were informed about the research on the first page of the online link where the questions were included. It was stated that participation in the study was on a voluntary basis, their information would be kept confidential, they could withdraw from the study at any point in the study, and their participation in the study would not affect their course grades. Students who agreed to participate in the study were asked to tick the "I approve to participate in the study" consent box.

RESULTS

The mean age of the students participating in the study was 21.16±1.43. Among these students, 87.8% were female and 39.5% were in the second grade. Considering their income status; it was seen that the income of 77.5% of the students is equal to their expenses. It was seen that the family structure of 81.6% of the students consists of mother, father and children (Table 1).

Table 1. Sociodemographic Characteristics of Students				
Characteristic		Number (n=147)	Percentage	
Age (mean±sd)	21.16±1.43			
Gender (n/%)	Female	129	87.8	
	Male	18	12.2	
Grade (n/%)	2nd grade	58	39.5	
	3rd grade	32	21.8	
	4th grade	57	38.7	
Income status (n/%)	Income less than expenses	21	14.3	
	Income equals expense	114	77.5	
	Income more than expenses	12	8.2	
	Mother, father and children	120	81.6	
Family status	Parents are divorced	5	3.4	
(n/%)	There are elders living together with the family	16	10.9	
	Other	6	4.1	
sd: Standard deviation				

It was determined that the NPVS-R score averages of students were at a high level with 120.54±10.76, and their POND scale mean scores were quite positive with 124.82±15.87 (Table 2).

Table 2. NPVS-R and POND Scale Scores of Students				
Scale	Min-max	Mean ±sd		
NPVS-R	85-130	120.54±10.76		
POND	59-140	124.82±15.87		

NPVS_R: Nurses professional values scale – Revised POND: Positions on nursing diagnosis scale

sd: Standard deviation

The opinion scores of students about NANDA-I nursing diagnoses are given in Table 3. It was determined that the highest score was given to the item related to worth/value (6.55 ± 0.74) . The items related to the Relevancy (6.50 ± 0.83) were at the second place and items related to Importance (6.48 ± 0.87) were at the third place. It was determined that the lowest scores were given to the items about difficulty (5.29 ± 1.43) , creativity (5.53 ± 1.68) and clarity (6.02 ± 1.01) , respectively. It was seen that all items were given a score above 3.5, which is the midpoint of the scale (Table 3).

Table 3. POND Scale Items Mean Scores				
Item		Mean ± sd		
1	Clarity	6.02±1.01		
2	Reality	6.30±0.91		
3	Pleasantry	6.14±1.00		
4	Strength	6.18±0.95		
5	Worth/value	6.55±0.74		
6	Positivity	6.40±0.85		
7	Intelligence	6.46±0.81		
8	Comfort	6.17±1.04		
9	Difficulty	5.29±1.43		
10	Meaningfulness	6.28±0.99		
11	Helpfulness	6.42±0.89		
12	Validity	6.34±0.91		
13	Significance	6.35±0.91		
14	Rewarding	6.31±0.95		
15	Creativity	5.53±1.68		
16	Convenience	6.29±0.98		
17	Acceptability	6.40±0.90		
18	Advantage	6.34±0.90		
19	Relevancy	6.50±0.83		
20	Importance	6.48±0.87		
Mean score of all items 6.24±0.79				

POND: Positions on nursing diagnosis scale sd: Standard deviation

When the relationship between POND and NPVS-R was examined by Pearson Correlation analysis, a positive moderately strong relationship was found (p<.01) (Table 4).

Table 4. The relationship between POND and NPVS-R				
	NPVS-R			
POND	r*= .472			
POND	p**=.000			
*Pearson Correlation, **p< .01 NPVS_R: Nurses professional values scale – Revised POND: Positions on nursing diagnosis scale				

DISCUSSION

In this study, which was conducted to examine the relationship between the attitudes of nursing students towards nursing diagnoses and professional values, it was determined that the attitudes of students towards nursing diagnoses were quite positive (124.82±15.87) and their perspectives on the importance of professional values were high (120.54±10.76). In many studies conducted in Türkiye, it has been determined that nursing students care about professional values (18-21). Studies have shown that education causes differences in the formation of professional values and that nursing educators have a significant impact on the adoption of professional values (11,22). These findings suggest that the nursing education given in our country is effective in adopting professional values. Similar studies that were conducted in various countries have also found that nursing students give great importance to professional values. Mean NPVS-R score of Indonesian, Spanish, Colombian nursing students and different program types in USA were found as 95.80 (23), 109.82, 116.30 (24), and 113.23-102.96 (25), respectively. Appropriate development of professional values is an important educational goal. Understanding the importance of these values and integrating them into clinical nursing from the beginning of the career increases the quality and safety of care (26). Both our study and the results of other studies are promising from this point of view.

In another study conducted with nursing students in our country; it was determined that the first three highest scores were for the items of importance, acceptability and relevancy, respectively (5). In the study conducted with Jordanian students, it was found that the three highest attitudes were towards the items of positivity, importance and relevancy (8). It was seen in this study that the first three highest scores for the POND scale are for the items of worth/value, relevancy and importance.

As the common findings of these three studies, it can be said that the students found the nursing diagnoses relevant and important. In the study of Zaybak et al. (2020), the lowest top three attitudes were towards the following items: difficulty, creativity and comfort. On the other hand, El-Rahman et al. (2017), found in their study the following three items as the lowest top three: comfort, difficulty and pleasantry. It was determined that the lowest three attitudes in our study were for the difficulty, creativity and clarity, respectively. According to the results of the study, it is seen as a common finding that nursing students have difficulties in using NANDA diagnoses, but it is noteworthy that in all three studies, the attitude scores towards all items had a higher average than the middle point. However, in their study on nurses, Ramezanian et al. (2017), detected that meaningfulness, pleasantry and reality items got the highest score and clarity, creativity and validity items were under the average point (27). In another study measuring the views of nurses, it was determined that the worth/value received the highest score, difficulty received the lowest score, and there was no item with a score below the average point (28).

In a study comparing the attitudes of nursing students and working nurses towards nursing diagnoses; It has been determined that nursing students have more positive attitudes towards diagnoses. It has been stated that this result may be due to the fact that nursing students are more in contact with diagnoses, and attitudes towards nursing diagnoses are associated with nursing diagnostic knowledge (29). It seems difficult to determine whether positive attitudes towards nursing diagnoses lead to more contact with nursing diagnoses or whether more contact with diagnoses leads to more positive attitudes. The study of Collins (2013) sheds some light on the answer to this question. Collins taught nurses 12 hours of nursing diagnoses, critical thinking, and clinical reasoning, and found that nurses who had more contact with nursing diagnoses displayed more positive attitudes (30). First-year students who have just started nursing education and who do not have sufficient knowledge about nursing diagnoses were not included in this study. It is thought that the high attitude scores in our study are due to the inclusion of second, third- and fourth-year students who have taken courses on nursing diagnoses and who frequently use nursing diagnoses in their clinical practice.

In a study that compared the importance that nursing students and nurses gave to professional values, the importance given to professional values by both groups was found to be high, and it was also determined that the perspective of nursing students on the importance of professional values was more positive than that of the nurses (11). It is thought that the reason for students have a more positive perspective on professional values than nurses, as in nursing diagnoses, may be related to the fact that professional values are mentioned in many courses and their knowledge is fresh. However, the way nurses work (31), time constraints and lack of knowledge (32), not seeing the professional value they deserve, lack of motivation, burnout syndrome (11,20), education level (31,33) can affect the level of caring about professional values and use of nursing diagnoses.

In our study, a moderately strong positive relationship was found between attitudes towards nursing diagnoses and professional values. In the study of Su and Köse (2021), similar to our study, it was determined that as the professional values of nursing students increased, their perception of nursing diagnoses increased (18).

Limitations

The fact that the data is based on the statements of the participants is one of the limitations of the study. The fact that the study was conducted in a single center limits the generalization of the study results. The fact that first year students were not included in the study is another limitation. It is recommended that future studies be conducted with a larger sample size in different geographical regions and academic units (state and foundation universities).

CONCLUSION

In this study, it was found that there was a moderately strong positive and high level relationship between nursing students' attitudes about nursing diagnoses and their professional values. It is thought that the high level of professional values of nursing students will cause them to use the nursing process more effectively in the future, to provide quality care and thus to provide more satisfaction from the profession.

It is predicted that the autonomy and visibility of nursing will improve, and the gap between theory and practice will be reduced by increasing the topics related to professional values and nursing diagnoses in the course contents and ensuring that students adhere to these values and diagnoses throughout their professional lives.

DECLARATIONS

Acknowledgments

The authors would like to thank the students who participated in the study.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict Of Interest

The authors declare that no conflict of interest.

Ethics Approval

Ethical approval was obtained from Bandırma Onyedi Eylul University Health Sciences Non Interventional Researches Ethics Committee on 14 February 2021 (Decision no: 2021-9).

REFERENCES

- Dikmen Y, Ak B, Yorgun, S. Teorikten Pratiğe: Bilgisayar Destekli Hemşirelik Süreci Uygulaması, Journal of Human Rhythm 2015; 1(4): 162-167.
- Baraki Z, Girmay F, Kidanu K, Gerensea H, Gezehgne D, Teklay H. A cross sectional study on nursing process implementation and associated factors among nurses working in selected hospitals of Central and Northwest zones, Tigray Region, Ethiopia. BMC Nurs. 2017; 16(54):1-9.
- Lumillo-Gutierrez I, Romero-Sánchez JM, D'Agostino F, Paramio-Cuevas JC, Fabrellas N, Moreno-Corral LJ, Paloma-Castro O. Nurses' characteristics and practice environments: Comparison between clusters with different attitude and utilisation profiles regarding nursing diagnosis. J Nurs Manag. 2019;27(1):93-102.
- Yönt GH, Khorshid L, Eşer İ. Examination of nursing diagnoses used by nursing students and their opinions about nursing diagnoses. International Journal of Nursing Terminologies and Classifications 2009;20(4): 162-168.
- Zaybak A, İsmailoğlu EG., Erol A, Özdemir H. (). Adaptation of the positions on nursing diagnosis scale to Turkish. Turkiye Klinikleri Journal of Nursing Sciences 2020;12(4), 520-527.
- Orak NS, Alpar ŞE. Validity and reliability of the nurses' professional values scale's Turkish version. Marmara Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi 2012;2(1):22-31.
- Ogunfowokan AA, Oluwatosin AO, Olajubu AO, Alao OA, Faremi AF. Student nurses' perceived use of NANDA-I nursing diagnoses in the community setting. Int J Nurs Knowl. 2013;24(1):37-43.
- Abed El-Rahman M, Al Kalaldeh MT, Malak MZ. Perceptions and Attitudes Toward NANDA-I Nursing Diagnoses: A Crosssectional study of Jordanian nursing students. Int J Nurs Knowl. 2017;28(1):13-18.
- Dalcalı BK, Şendir M. Determining the relationship between nurses personal values and their ethical sensitivity. Florence Nightingale Journal of Nursing 2016;24(1):1-9.
- İlaslan E, Geçkil E, Kol E, Erkul M. Examination of the professional values of the nurses and the associated factors. Perspectives in Psychiatric Care 2021;57(1):56-65.

- Poorchangizi B, Borhani F, Abbaszadeh A, Mirzaee M, Farokhzadian
 J. The importance of professional values from nursing students'
 perspective. BMC Nurs. 2019;18(26):1-7.
- 12. Can Ş, Acaroğlu R. Relation of professional values of the nurses with their individualized care perceptions. Florence Nightingale Journal of Nursing 2015;23(1): 32-40.
- Zengin M, Yayan E H, Yıldırım N, Akın E, Mamiş E. Effect of professional values upon professional attitudes of pediatric nurses. Sağlık Bilimleri ve Meslekleri Dergisi 2018;5(3): 316-23.
- 14. Olmaz D, Karakurt P. The extent to which nurses knowledge and apply the nursing process when giving care. Dokuz Eylül Üniversitesi Hemsirelik Fakültesi Elektronik Dergisi 2019; 12(1): 3-14.
- Lunney M, Krenz M. Adaptation and validation of the "positions on Nursing Diagnosis" tool to Portuguese language. Brazilian J Nurs. 1994;59(2):136-67.
- Weis D, Schank MJ. Development and psychometric evaluation of the Nurses Professional Values Scale--Revised. J Nurs Meas. 2009;17(3):221-231.
- 17. Acaroğlu R. Reliability and validity of Turkish version of the nurses professional values scale Revised. Florence Nightingale Journal of Nursing 2014;22(1): 8-16.
- Su S, Köse KN. Investigate the relationship between nursing students' professional values and perception of nursing diagnosis. Journal of General Health Sciences 2021;3(1):20-28.
- Caner N, Sezer Efe Y, Erdem E, Başdaş Ö, Bayat M, Yıldırım M. Professional values and ethical sensitivity in intern nurses. Journal of Health Sciences 2019;28(3):123-128.
- 20. Arkan G, Ordin YS, Haney MÖ. The relationship between nursing students' burnout levels and their professional values. Acibadem University Health Sciences Journal 2019;10(3):443-450.
- Yağcan H, Uludağ E, Okumuş H. The comparison of nursing students' emotional intelligence and professional values. Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi 2021;14(3): 224-231.
- 22. Bang KS, Kang JH, Jun MH, Kim HS, Son HM, Yu SJ, Kwon MK, Kim JS. Professional values in Korean undergraduate nursing students. Nurse Educ Today. 2011;31(1):72-75.
- 23. Nelwati, Abdullah KL, Chong MC. Factors influencing professional values among Indonesian undergraduate nursing students. Nurse Educ Pract. 2019;41:102648.
- 24. Rodríguez-Gázquez MLÁ, Basurto Hoyuelos S, González-López JR. Countries' cultures and professional nursing values: Cross-cultural evidence from Spanish and Colombian nursing students. Nurse Educ Pract. 2021;50:102953.
- 25. Feller LM, Fisher M, Larson J, Schweinle W. Nursing students' professional value development: Can we do better? Nurs Educ Perspect. 2019;40(6):317-321.
- Green G. Examining professional values among nursing students during education: A comparative study. Nursing Forum 2020;55 (4):589-594.
- 27. Ramezanian T, Mohammadipour F, Mohammadi R, Kordestani-Moghaddam P. Translation and psychometric properties of the Persian version of the position on nursing diagnosis scale. Nursing Open 2021;8:1615-1624.
- 28. D'Agostino F, Vellone E, Cerro E, Di Sarra L, Juárez-Vela R, Ghezzi V, Zega M, Alvaro R. Psychometric evaluation of the Positions on Nursing Diagnosis scale. Appl Nurs Res. 2016;29:e1-6.
- 29. Olivia APV, de Almeida Lopes D, Volpato MP, Hayashi AAM. Positions on nursing diagnosis: Attitudes of nurses and nursing students. ACTA Paulista de Enfermagem 2005;18(4):361-367.
- 30. Collins A. Effect of continuing nursing education on nurses' attitude toward and accuracy of nursing diagnosis. International Journal of Nursing Knowledge 2013;24 (3): 122-128.

- 31. Dündar T, Özsoy S, Topbaş B, Aksu H. Professional values and influencing factors in nursing. Journal of Ege University Nursing Faculty, 2019;35(1):11-19.
- 32. Mahmoud MH, Bayoumy HM. Barriers and facilitators for execution of nursing process from nurses perspective. International Journal of Advanced Research, 2014;2 (2): 300-315.
- 33. Sibandze BT, Scafide KN. Among nurses, how does education level impact professional values? A systematic review. International Nursing Studies 2018;65(1): 65-77.