

Determination of Nurses' Perceptions of Nursing Diagnoses

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Abstract

BACKGROUND/AIMS: A nursing care plan is of great importance in detecting and evaluating a patient's health problems. The most important part of the care plan is making an accurate nursing diagnosis. As this is the first step, the perceptions of nurses about the process of making a correct diagnosis affects all care outcomes. In this respect, it is very important to measure nurses' perceptions of nursing diagnoses using systematic and standardized material.

MATERIALS AND METHODS: This descriptive study was conducted using the quantitative research method. It was conducted in a university hospital between the 16th of October and the 20th of November 2017. The sample of the study consisted of 56 nurses who agreed to participate in this study. The data were collected using a questionnaire including socio-demographic data and the "Perceptions of Nursing Diagnoses Survey". The data used were obtained using a face-to-face interview method. The SPSS 17 package program was used in the analysis.

RESULTS: The majority of the nurses (80.4%) participating in this study were women. 83.9% of them were language graduates, 50% had been employed for an average of one to four years, and 92.9% were clinical nurses. The mean score for the "definition and promotion of a career in nursing" sub-scale of the "Perception of Nursing Diagnoses Survey" (2.10±0.75) was the lowest, indicating that the nurses had the most positive perception of this aspect. The highest mean score was found in the sub-scale of "clearly determining the patient's condition" (3.10±0.65) and it was seen that nurses were inadequate in this area.

CONCLUSION: The Perception of Nursing Diagnoses Survey was used to examine all aspects of the nurses' perceptions of nursing diagnoses, which are one of the basic foundations of the practice of nursing. It was found that nurses had negative perceptions regarding the capacity of the nursing diagnosis to clearly define or understand the patient's condition.

Keywords: Nursing diagnosis, perception, nursing

INTRODUCTION

The nursing process is a systematic method of managing care. It has an important place in ensuring that nurses use a common language and that there is continuity of care. The nursing process is a scientific way of thinking which nurses are expected to internalize in order to have sufficient knowledge and skills when starting their professional lives.¹⁻³ A nursing diagnosis is an indispensable element of this process. According to NANDA, it is a clinical decision made by a nurse about the reactions of an individual, family or community to existing or potential health problems/life processes. These decisions allow for individualized

holistic care by addressing the patient's problems, identifying possible risks, and maintaining and improving their health.⁴⁻¹³ Nursing diagnoses also have an important place in both theoretical knowledge and nursing practices and they contribute to their development.²⁻¹¹ They make it easier for nurses to choose the interventions which they are authorized to carry out, and outline the goals to be achieved.^{1,4,5}

Although the importance of nursing diagnoses is undeniable, there are significant problems in making and applying them. In order to be able to apply these diagnoses, sufficient knowledge is required, and their importance should be well understood. Nurses' differing

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perceptions of nursing diagnoses and their contribution to practice may adversely affect their usage.¹⁻²⁵ The use of common terminology and universally accepted methods of planning patient care may also be affected. According to data obtained from Akın-Korhan et al.'s¹ "Nursing Diagnosis Perception Scale" validity/reliability study, nurses scored badly in the following areas: "clearly determining the patient's condition" (2.90 ± 0.57); "ease of use" (2.75 ± 0.50) and "conceptual direction" (2.73 ± 0.59). In the study completed by Avşar et al.⁴, when asked whether they experienced difficulties when making a diagnosis, 23% of nurses said "Yes", 29.4% said "No", and 53.1% said "Sometimes".

Having a positive perception of the use of the nursing diagnosis makes it easier to identify a patient's problems, plan patient care, and increase its quality. In this respect, it is important to create guidelines for the appropriate use of nursing diagnoses.¹³⁻¹⁷ The benefits of these guidelines include improving nurses' critical thinking and diagnostic competence, and being able to evaluate the relationship between interventions and patient outcomes.¹⁹⁻²⁸

The number of studies regarding nursing diagnoses is increasing. However, studies about the perception of nursing diagnoses are mostly conducted with students, rather than fully-qualified nurses. Some studies have stated that students are better at making diagnoses (when there is a limited number of diagnoses to be made). This has been explained as being due to them being in a period of continuing education.²⁷⁻²⁹ The results of this study will thus be beneficial in terms of the quality of care provided and will contribute to the literature about nursing. In this respect, the aim of the study was to determine how nursing diagnoses are perceived by nurses and the factors affecting this.

MATERIALS AND METHODS

This study was conducted as a descriptive study in order to determine nurses' perceptions of nursing diagnoses. This study took place in a university hospital. It was completed with patients in a private hospital which had two private intensive care units and four inpatient service units with a capacity of 100 beds. The patients were distributed among the nurses. In order to obtain data, each patient was monitored using a daily nurse observation form. Nurses use the care plan for diagnosis, implementation of treatment and evaluation. This care plan is commonly used for diagnoses (infection risks, risk of falling, etc.).

It was planned that all the nurses from the intensive care units and the inpatient service unit would take part in this study (89 nurses). However, the final sample of the study consisted of 56 (62.9%) nurses who agreed to participate in the study, and who were not on leave or on report at the time of this study.

The Introductory Characteristics Form and the Perceptions of Nursing Diagnosis Survey were used to collect the data. The Introductory Characteristics Form was prepared by the researcher in consultation with the literature.⁶⁻²⁴ The Introductory Characteristics Form collected information such as the nurses' age, gender, educational status, position at the hospital etc. Some of this socio-demographic data, e.g. year of graduation, years of employment etc., is thought to affect the perception of diagnosis. The data collected was analyzed with regard to its effect on making diagnoses. The Perceptions of Nursing Diagnosis Survey was developed by Olsen, Frost and Orth in 1991. The original Cronbach's alpha value of this scale was 0.94 and the Cronbach's alpha values of the sub-scales ranged from 0.79 to 0.92. The validity

and reliability study of the Turkish version was conducted by Akın-Korhan et al.¹ and its Cronbach's alpha value was found to be 0.84. The survey includes four sub-domains that assess the ease of use of nursing diagnoses, perceptions about the benefits to the profession, and the care process. In this scale, there are 9 items in the sub-domain which evaluates perceptions about the effect of the diagnoses on the definition and promotion of a career in nursing, 8 items in the sub-domain which evaluates perceptions about how diagnoses facilitate understanding of the patient's situation, 8 items in the sub-domain which evaluates perceptions about the ease of use of diagnoses, and 5 items related to the conceptual aspect of diagnoses. The scale is a 5-point Likert-type scale, and each item is scored from 5 "strongly agree" to 1 "strongly disagree". The total scale score is calculated by dividing the total score by the number of items. Lower scores indicate that nurses have a more positive perception of nursing diagnoses.

In the present study, the Cronbach's alpha value was 0.81 for the whole scale, while it was 0.75, 0.65, 0.78 and 0.68 for the sub-scale of "definition and promotion of a career in nursing", "clearly defining the patient's condition", "ease of use", and "conceptual aspects", respectively.

The Introductory Characteristics Form was applied to 10 nurses initially, and then the rest of the sample was included. The data were collected face-to-face over the course of three months during the nurses' afternoon shifts, although they also worked night shifts. The SPSS 17 program was used to analyze the data. The data were analyzed in terms of number, percentage frequency, standard deviation, average and vet testing.

Ethical Considerations

In order to conduct this research, written permission was obtained from the University Ethics Committee (approval number: 459, date: 26.10.2017) and the Hospital's Chief Physician. In addition, written consent was obtained from the nurses who volunteered to participate in this study.

RESULTS

As can be seen in Table 1, the mean age of the participants was $35 \pm$ and 80.4% of them were women. More than one third of them stated that they were living in Northern Cyprus and 67.9% of them were single. 83.9% stated that they had a bachelor's degree, 50% of them stated that they had been employed in the profession between one and four years, and 51.8% of them stated that they had worked in the clinic for between one to four years. Almost all of the nurses who participated in our study (92.9%) were working as clinical nurses. 83.9% of them worked in shifts, and 62.2% worked more than 40 hours per week; in other words they were working longer than the legal number of working hours. The nurses stated that they worked with an average of four nurses in each shift and provided care for five patients in that time.

As seen in Table 2, 78.6% of the nurses participating in this study stated that they had received information about nursing diagnoses. 64.9% of them had received this information during their formal education, while 14.3% had received information during in-service training. 88.7% of the participants stated that they had sufficient information about nursing diagnoses, and 87.5% of them stated that these diagnoses should be used in patient care. However, only 55.4% stated that they provided care using nursing diagnoses. 42.8% of nurses stated that they would like to receive more education about nursing diagnoses.

Table 1. Distribution of the data on the socio-demographic characteristics of the nurses

Socio-demographic characteristics, (n=56)	Number	%
Gender		
Female	45	80.4
Male	11	19.4
Place of residence		
Turkish Republic	18	32.1
Turkish Republic of Northern Cyprus	22	39.3
TR + TRNC	14	25
Other	2	3.6
Marital status		
Married	18	32.1
Single	38	67.9
Educational status		
High school degree (vocational school of health)	2	3.6
Associate's degree	4	7.1
Bachelor's degree	47	83.9
Postgraduate degree	3	5.4
Working years in the profession		
0-11 months	16	28.6
1-4 years	28	50
5-20 years	12	21.4
Working years in the clinic		
0-11 months	17	30.4
1-4 years	29	51.8
5-20 years	9	17.8
Status		
Chief nurse	4	7.1
Clinic nurse	52	92.9
Shift		
Daytime	9	16.1
Night	47	83.9
Working hours		
40 hours a week	35	62.2
40 hours or over a week	21	37.8
Number of nurses working together in the shift		
1-4	48	85.7
5+	8	14.3
Number of patients receiving care during the shift		
1-5	29	51.8
6+	27	48.2

As seen in Table 3, the mean score of the nurses for the Perceptions of Nursing Diagnoses Survey ranged from a minimum of 1.10 to a maximum of 4.55, and their average score was 2.23 ± 0.40 . The mean score of the nurses for the "definition and promotion of a career in nursing" sub-scale was 2.10 ± 0.75 , their mean score for the "clearly defining the patient's condition" sub-scale was 3.10 ± 0.62 , their mean score for the "ease of use" sub-scale was 2.25 ± 0.53 , and their mean score for the "conceptual aspects" sub-scale was 2.85 ± 0.58 .

Table 2. Distribution of the data related to the nursing diagnoses of the nurses

Socio-demographic characteristics, (n=56)	Number	%
Sufficient knowledge status for nursing diagnoses		
Yes	48	88.7
No	8	14.3
Status of receiving information/training on nursing diagnosis		
Yes	44	78.6
No	12	21.4
The resource of nursing diagnoses training		
In service	8	14.3
VSOH-AD-BD	33	64.9
Congress	1	1.8
Other	2	3.6
No information or training received	12	21.4
Willingness to receive further training regarding nursing diagnoses		
Yes	24	42.8
No	32	57.2
Status of using nursing diagnoses in clinics		
Yes	31	55.4
No	10	17.9
Partially	15	26.8
Status of using ND by receiving training		
Yes	39	69.6
No	7	12.5
Partially	10	17.9
Status of having ideas on using nursing diagnoses in patient care		
Yes	49	87.5
No	2	3.6
Partially	5	8.9
VSOH-AD-BD: Vocational school of health or Associate's degree Bachelor degree and over.		

Table 4 compares some of the characteristics of the nurses and the average scores for the sub-scale of the Perceptions of Nursing Diagnosis Survey. The mean score for the survey was 2.30 ± 0.45 for male nurses, while the mean score for the "definition and promotion of a career in nursing profession" was higher for males (2.13 ± 0.65). The female nurses' scores were higher for the other three areas ("clearly defining the patient's condition": 3.55 ± 0.71 ; "ease of use": 2.42 ± 0.50 ; and "conceptual aspects": 2.92 ± 0.65). However, these differences in results were not found to be statistically significant. When marital status is taken into consideration, the results for nurses who were married, the scores for the whole survey (3.10 ± 0.42) and for "conceptual aspects" (3.5 ± 0.35) were found to be higher. For single nurses, the scores were higher for the "definition and promotion of a career in nursing" (3.2 ± 0.32), "clearly defining the patient's condition" (3.1 ± 0.57), and "ease of use" (5.2 ± 0.28) sub-scales. Those nurses who had a bachelor's degree or below had scores of 3.5 ± 0.25 for the whole survey, and 4.2 ± 0.52 for the "ease of use" sub-scale, while the scores for those with a bachelor's degree or above the were 3.5 ± 0.26 for the "definition and promotion of a career in nursing"; 4.6 ± 0.32 for the "clearly defining the patient's condition"; and 3.2 ± 0.42 for the "conceptual aspects" sub-scales. These results were calculated to have a higher average. The scores for those

Table 3. Mean scores of the nurses on the sub-scales of perceptions of nursing diagnoses survey

Scale and sub-scales	Min.	Max.	Mean	SD
Perceptions of nursing diagnoses survey	1.10	4.55	2.23	0.40
Definition and promotion of the nursing profession sub-scale	1.13	5.00	2.10	0.75
Clearly defining the patient's condition sub-scale	1.18	4.80	3.10	0.62
Ease of use sub-scale	1.15	4.42	2.25	0.53
Conceptual aspect sub-scale	1.00	4.35	2.85	0.58

Min.: minimum, Max.: maximum, SD: standard deviation.

Table 4. The mean scores of the nurses on the perceptions of nursing diagnoses survey and its Sub-scales according to their introductory characteristics

Introductory characteristics	Perceptions of nursing diagnoses		The definition and promotion of the nursing profession		Clearly defining the patient's condition		Ease of use		Conceptual aspect		p
	X	SD	X	SD	X	SD	X	SD	X	SD	
Gender											
Female	2.30	0.45	2.13	0.65	3.55	0.71	2.42	0.50	2.92	0.65	0.262
Male	2.46	0.47	2.42	0.70	3.45	0.68	2.36	0.47	2.76	0.55	
t	0.367		0.003		1,066		0.904		0.016		-
Marital status											
Married	3.10	0.42	2.54	0.36	2.5	0.65	4.1	0.36	3.5	0.35	0.1
Single	2.91	0.33	3.2	0.25	3.1	0.57	5.2	0.28	2.8	0.42	
t	0.457		1,267		0.192		0.106		3,095		-
Educational status											
Vocational school of health or associate's degree	3.5	0.25	2.3	0.34	3.4	0.25	4.2	0.52	2.8	0.54	0.301
Bachelor degree and over	2.1	0.41	3.5	0.26	4.6	0.32	2.8	0.45	3.2	0.42	
t	0.537		2,578		1,301		0.234		0.765		-
Working years in the profession											
<5 years	3.3	0.27	3.5	0.21	3.5	0.25	2.5	0.28	3.2	0.27	0.065
≥5 years	4.7	0.31	4.2	0.32	4.2	0.31	3.8	0.32	4.1	0.31	
t	0.752		2,289		0.030		1,544		0.407		-
Working years in clinic											
<5 years	3.2	0.26	2.4	0.23	2.6	0.24	3.5	0.29	3.8	0.25	0.542
≥5 years	4.1	0.32	3.1	0.25	3.6	0.35	4.7	0.31	4.7	0.51	
t	0.345		1,129		0.154		0.170		1,493		-
Status in clinic											
Chief nurse	3.5	0.28	3.3	0.26	2.5	0.28	3.4	0.25	3.2	0.27	0.421
Clinic nurse	4.7	0.41	3.6	0.31	3.8	0.32	4.6	0.32	4.1	0.31	
t	0.356		0.013		0.678		1,686		0.016		-

who had been in the nursing profession and had worked at a clinic for five years or more also had a higher average overall.

DISCUSSION

This research examined the perceptions of nurses working in a university hospital regarding nursing diagnoses. Nurses' perceptions of nursing diagnoses, how they interpret data and their individual knowledge may vary. Assessing these differences using a standardized scale provides both objectivity and makes them easier to interpret. The ability to make

a nursing diagnosis and plan interventions suitable for that diagnosis are provided through systematic nursing education. Nurses are also supported through in-service training when they start their professional life.⁸⁻²⁶

The average score of the nurses participating in this study for "the definition and promotion of a career in the nursing profession" sub-scale was the lowest, indicating a more positive perception. The reason for this is thought to be that the nurses had been working for five years on average. It is also thought that periodic in-service training had an

effect in the institution where this study was conducted. In the validity and reliability study of Akın-Korhan et al.¹, the lowest average score was obtained in this field, and the nurses were found to have a positive perception of their profession. In the study conducted by Karaca and Aslan¹⁷, it was reported that students regard the nursing care process more positively. In addition, they reported that the increasing workload of nurses as they started their professional life had a negative effect on their ability to use and diagnose care.¹⁵⁻¹⁷⁻³⁰ Axelson et al.⁷ in their study on Swedish nurses' ability to make accurate nursing diagnosis reported that the nurses' stealing process has advantages such as saving time and being systematic. Contrary to this situation, they stated that they were insufficient in diagnosis as in our study. Çınar Yücel et al.¹⁰ reported in their study that the nursing students had a highly positive perception of the nursing profession, and this supports the results of our study.

In this study, the highest average score was determined in the "clearly defining the patient's condition" sub-scale. The increase in the average score obtained from the scale indicates that there was a more negative perception. In the study by Collins⁹ on the effect of continuous education on nurses, nurses are reported to be inadequate in making a diagnosis before training. In a study conducted by Uysal et al.²⁹, the nursing students were reported to prefer medical diagnoses to nursing diagnoses. There are clearly difficulties in using nursing diagnoses in practice and during education, and more systematic and concrete thinking is required in this area. Working nurses avoid focusing on the medical diagnosis of patients.¹⁶⁻²⁸ Ogunfowokan et al.²³ in their study of leading nurses for the NANDA-1 guide stated that students had sufficient knowledge in making and using diagnosis but their knowledge was insufficient for correct diagnosis skills. In the study conducted by Erika et al.¹⁴ about Minnesotan nurses' perceptions of nursing diagnoses, they stated that nurses were confused about diagnoses and had a negative perception. Nursing diagnoses and medical diagnoses are different from each other. A medical diagnosis aims to help the patient using a standard treatment that does not change from one patient to another. A nursing diagnosis varies from one patient to another and enables an individual to achieve complete well-being.^{5-21,22}

Although the "conceptual aspect" and "ease of use" of the scale had moderate average scores, the average scores for "clearly defining the patient's condition" were better. A nurse's ability to learn the nursing process requires a conceptual understanding. In their study of nurses working in a hospital in Nigeria aimed at perceiving the nursing process, Edet et al.¹² stated that nurses had positive perceptions towards the nursing process as they did in our study, and they were beneficial for many uses. In this respect, supporting nurses who use "concept maps" makes the nursing process easier to understand. Concept maps are tools that provide meaningful learning and can be used to help retain information in the long-term memory. They also play a role in facilitating remembering by ensuring that information is stored in a certain order.¹⁸⁻²⁰

CONCLUSION

The Perception of Nursing Diagnosis Survey was used to examine the basic foundation of the nursing profession, namely nursing diagnosis. It was found that nurses had a negative perception of nursing diagnoses in terms of whether they helped to clearly understand the patient's condition. The number of people in our sample was low, and it is thought that studying larger groups may well lead to different results. It is also necessary to examine why nurses are unable to adequately

carry out the care process. It is recommended that the factors that affect the care process be investigated in different types of in-depth studies (e.g., phenomenological studies). This will be useful for in-service training regarding the nursing process both during nursing education and in the professional life. Most studies on the perception of nursing diagnoses in the literature have been carried out with students, and it is recommended that the focus be placed on fully-qualified nurses.

ETHICS

Ethics Committee Approval: In order to conduct this research, written permission was obtained from the University Ethics Committee (approval number: 459, date: 26.10.2017) and the Hospital's Chief Physician.

Informed Consent: In addition, written consent was obtained from the nurses who volunteered to participate in this study.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: E.B., H.B., Design: E.B., H.B., Supervision: E.B., H.B., Data Collection and/or Processing: E.B., H.B., Analysis and/or Interpretation: E.B., H.B., Literature Search: E.B., H.B., Writing: E.B., H.B., Critical Review: E.B., H.B.

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