

The relationship between quality of working life and professional behaviour for nurses working in a university hospital

Sevil Masat, Research Assistance, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun 55200, Turkey
Tugba Cinarli*, Lecturer, Vocational School of Health Services, Ondokuz Mayıs University, Samsun 55200, Turkey
Asuman Sener, Lecturer, Vocational School of Health Services, Ondokuz Mayıs University, Samsun 55200, Turkey
Tugba Kavalali Erdogan, Research Assistance, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun 55200, Turkey
Gulhan Simsit, Nurse, Health Application and Research Center, Ondokuz Mayıs University, Samsun 55200, Turkey
Zeliha Koc, Associate Professor, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun 55200, Turkey

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Abstract

This study was a descriptive study aimed to determine the relationship between nurses' professional quality of work life and professional attitudes. The ability of nurses to work efficiently and productively depends on the development of a qualified environment that will support their professional practices. A descriptive cross-sectional study was carried out with 165 nurses working in a university hospital in the city of Samsun between 15 July and 15 August 2017. The total score average of the Nurses' Quality of Life Scale was found to be 105.9 ± 7.5 and the median score of Professional Attitude Inventory was found to be 118 (76–159). A statistically significant relationship was found between some socio-demographic and working characteristics of the nurses, the Professional Quality of Life Scale and Professional Attitude Inventory scores ($p < 0.05$). The findings show that there is no relationship between nurses' quality of professional life and their professional attitudes.

Keywords: Nurse, professional quality of life, professional attitude.

* ADDRESS FOR CORRESPONDENCE: **Tugba Cinarli**, Vocational School of Health Services, Ondokuz Mayıs University, Samsun 55200, Turkey. E-mail address: svlmst@gmail.com / Tel.: +0 362 312 19 19

1. Introduction

There are many definitions of life quality. The World Health Organization defines the quality of life as 'an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns' (World Health Organization Quality of Life Group, 1998). The quality of life may be associated with many factors, including individual's socio-demographic and clinical characteristics, as well as working and personal experiences (Catak & Bahcecik, 2015) and the inadequacies that may develop in health service delivery can directly or indirectly affect healthy/sick individuals and their relatives (Sirin, 2011).

The main goal of professional quality of life is to provide an environment for employees where they can work efficiently (Ozturk, Gulec, Er Guneri, Sevil & Gurmen, 2013). It is reported in the literature that a healthy and safe working environment protects employees' health and increases the quality of service offered (Catak & Bahcecik, 2015). It is also underlined that the professional quality of life of health workers in vital healthcare environment should be increased (Catak & Bahcecik, 2015). Nurses in particular can be affected by many factors such as heavy workload, shift work, continuous standing, fatigue, infection risk, negative interpersonal relationships, etc. (Ozturk et al., 2013) and it is reported that the features of the hospital environment may affect nursing care and patient safety (Gurses, Carayon & Wall, 2009).

With the rapid social change and technological developments experienced today, the professional attitudes of the employees together with their working life qualities are discussed more frequently (Adiguzel, Tanriverdi & Ozkan, 2011). Professionalism is the characteristics, behaviours, values and goals that characterise a profession (Mueller, 2015). Professionalism can be defined as the degree of commitment to the behavioural characteristics and values of a particular profession (Kim-Godwin, Baek & Wynd, 2010). The fact that both the service provider and the service recipient are human in the health system led to more frequent questioning of the professional attitudes and characteristics of professional members involved in healthcare (Adiguzel et al., 2011).

The ability of nurses to work efficiently and productively depends on the development of a qualified environment that will support their professional practices (Alan & Yildirim, 2016). It is reported in the literature that an extremely intense, complicated and disorganised environment affects professionalism in healthcare, health outcomes negatively and reduces patient satisfaction (Adiguzel et al., 2011; Alidina, 2013). Increasing the quality of health services depends on the management approach which has set quality as its main principle, the characteristics of the working environment and the professional attitudes and qualifications of the healthcare team members (Catak & Bahcecik, 2015). In this regard, this study was carried out to determine the relationship between the professional quality of life and professional attitudes of the nurses working in a university hospital. Appropriate strategies and recommendations will be developed in line with the findings of this research to increase the professional quality of life of nurses and to develop their professional attitudes.

1.1. Objective of the study

Conducted to determine the relationship between nurses' professional quality of life and their professional attitudes, this study sought answers to the following questions:

- What are the socio-demographic and professional characteristics of the nurses?
- At what level are nurses' professional quality of life and professional attitudes?
- Do the socio-demographic and professional characteristics of nurses affect their professional quality of life and professional attitudes?
- Is there a relationship between nurses' professional quality of life and professional attitudes?

2. Material and methods

2.1. Place and time of the research

This study was carried out as a descriptive and cross-sectional study between 15 July and 15 August 2017 to determine the relationship between the professional quality of life and professional attitudes of the nurses working in a university hospital.

2.2. Population and sample of the research

The nurses were selected through simple random sampling method from probabilistic sampling methods. This is a sampling method in which individuals can be equally chosen from the universe. The number of samples to represent the universe was found to be 165 with 6% error and at the 95% confidence limit from a total of 550 nurses working in the hospital where the study was conducted. When all of the 165 nurses were interviewed, the data collection process was over. Nurses who were 18 years old and over, female and male, and who volunteered to participate in the research were included in the research. Nurses who were on sick leave on the days when the interview was applied were not included in the sampling.

2.3. Tools of data collection

Data were collected using the information form, 'Professional Quality of Life Scale' and 'Professional Attitude Inventory'. The information form consists of a total of 21 questions aimed at determining the socio-demographic and professional characteristics of the nurses. The questionnaire was pre-tested in a group of 10 people and the nurses who participated in the pilot study were not included in the sampling.

2.3.1. Professional quality of life scale

Professional Quality of Life Scale is a six-point Likert-type scale developed by Brooks (2001) to measure the professional quality of life of nurses. The original scale consists of 42 items and four sub-dimensions including work environment, relations with managers, working conditions, work perception and support services. The validity reliability study of the Turkish form of the Professional Quality of Life Scale was carried out by Sirin (2011) and seven items (10, 13, 27, 29, 30, 36 and 37th items) were removed from the scale as a result of item-total score correlation analysis. In addition, within the scope of this study by Sirin (2011), construct validity was evaluated by descriptive factor analysis and factor analysis revealed that the scale had a five-factor structure. After Sirin's study, Working Environment sub-scale of the scale consists of nine items (4, 14, 21, 31, 34, 35, 38, 39 and 40), Relations with Managers sub-scale consists of five items (7, 9, 22, 26 and 33), Working Conditions sub-scale consists of 10 items (3, 5, 11, 12, 16, 17, 18, 20, 24 and 25) and Work Perception sub-scale consists of seven items (6, 15, 19, 28, 32 and 41). The lowest total score to be obtained from the scale is 35, the highest total score is 175 and high scores indicate that the professional quality of life is high. Sirin (2011) found that the Cronbach Alpha reliability coefficient of the 35-item scale is 0.89. In this study, the Cronbach Alpha reliability coefficient for the Professional Quality of Life Scale was found to be 0.75.

2.3.2. Professional attitude inventory

Professional Attitude Inventory is a Likert-type scale composed of 32 items developed by Erbil and Bakir (2009) to determine the professional attitudes of midwives and nurses. The items in the scale are scored as (5) strongly agree, (4) agree, (3) neither agree nor disagree, (2) disagree and (1) strongly disagree. The lowest score to be obtained from the Professional Attitude Inventory is 32, the highest score is 160. High scores indicate that the professional attitude is high. Erbil and Bakir determined the

Cronbach alpha reliability coefficient of the Professional Attitude Inventory as 0.89. In this study, the Cronbach alpha reliability coefficient of the Professional Attitude Inventory was found to be 0.92.

2.4. Data collection

After the nurses participating in the study were informed about the study and consent forms were received from them, the data were collected by the researchers. Data collection time lasted approximately 8–12 minutes. In order to collect the data, written permission was obtained from the administration of the university hospital where the study was to be conducted and consent forms were obtained from the nurses included in the study.

2.5. Data analysis

Statistical analysis of the data obtained to determine the professional quality of life and the professional attitudes of the nurses included in the study were made using SPSS 21 package program in a computer environment. The normality of the data was evaluated through Kolmogorov–Smirnov and Shapiro–Wilk tests. While the data with normal distribution have been presented as arithmetic mean \pm standard deviation, the data without normal distribution have been presented as median (Minimum–Maximum). In the analysis of the data, percentage, frequency, one-way analysis of variance test statistic, independent sample test statistic, Mann–Whitney *U* Test Statistic and Kruskal–Wallis Test Statistic were used and Spearman correlation analysis was used in determining the relationship between the two scales.

3. Results

Of the 165 nurses participating in the study, 95.8% were women, 4.2% were men, 82.4% were married, 92.7% were undergraduate and the average age of the nurses was 32.8 ± 6.6 years (Table 1). Of the nurses included in the study, 32.1% worked in internal units, 7.9% worked as nurses in charge, 30.9% worked as nurses for 11–15 years, 63% worked as permanent staff, 70.9% became nurses willingly and 56.4% were pleased with the department they worked in (Table 2). The median score of the years worked as a nurse is 10 (1–34) and the median score of the total working hours per week is 40 (32–48).

The total score of the Professional Quality of Life Scale is 105.9 ± 7.5 . The median scores of Working Environment, Relations with Managers, Working Conditions, Work Perception and Support Services subscales were 28 (19–36), 15 (9–20), 28 (18–36), 22 (14–28) and 12 (7–18), respectively (Table 3). It was determined that Professional Quality of Life Scale scores did not differ according to age, marital status, educational status, family type, whether they have any children, number of children and monthly income ($p > 0.05$). Professional Quality of Life Scale scores differed according to the sex ($p = 0.005$) and it was determined that the average score of Male Nurses' Professional Quality of Life Scale was higher (Table 4).

It was also determined that Professional Quality of Life Scale scores did not differ ($p > 0.05$) according to the features related to working life such as department, duty in that department, the years worked as a nurse, the years worked in that hospital, the years worked at that department, working status in the hospital, working style, whether the nurse is pleased with the department he/she is working for, whether the nurse chose willingly the department he/she works and the number of patients cared per day. However, Professional Quality of Life Scale scores differed according to the total number of nurses working in the department ($p = 0.029$), whether the nurse chose the profession willingly ($p < 0.001$) and total working hours per week ($p = 0.013$). It was determined that Professional Quality of Life Scores of the nurses working in the departments with a total of 1–10 nurses were higher compared to the nurses working in the departments with a total of 11–20 nurses; Professional Quality of Life Scale median scores of the nurses who chose their profession willingly and who work between 32 and 40 hours per week were found to be higher (Table 5).

The median score of Professional Attitude Inventory was found to be 118 (76–159). Median scores of Professional Attitude Inventory do not differ according to socio-demographic characteristics of nurses such as age, marital status, educational status, whether they have any children, number of children and monthly income ($p > 0.05$). However, the median score of the Professional Attitude Inventory was found to differ according to the gender ($p = 0.030$) and family type ($p = 0.008$) of the nurses and it was determined that the median score of the Professional Attitude Inventory of women and the nurses with extended family was higher (Table 6).

Median score of Professional Attitude Inventory does not differ according to the features related to working life such as the duty of the nurses in the department, the years worked as a nurse, the years worked in that hospital, the years worked in that department, total number of nurses working in that department, working style, whether the nurse chose this profession willingly, whether the nurse chose this department willingly and total working hours per week ($p > 0.05$). However, the median score of Professional Attitude Inventory was found to differ according to the departments of the nurses ($p < 0.001$), working status in the hospital ($p = 0.030$), whether the nurses are pleased with their departments ($p < 0.001$) and the average number of patients who were given daily care ($p = 0.026$). The findings obtained revealed that the median score of Professional Attitude Inventory of the nurses who work in units other than internal and surgical units, who are permanent staff, are pleased with their departments and who give daily care to an average of 3–10 patients every day was higher.

There was no statistically significant relationship between the Professional Quality of Life and Professional Attitude Inventory scores ($r = -0.103$, $p = 0.188$).

4. Discussion

In this study conducted in a university hospital in the Central Black Sea region of the north of Turkey, the average score of the Professional Quality of Life Scale of nurses was determined as 105.9 ± 7.5 . Considering that the lowest score that can be obtained from this scale is 35 and the highest score is 175, it can be said that the professional quality of life of nurses is at a medium level. Some studies which have reported that nurses have a professional quality of life at a medium level support the findings of this research in this regard (Catak & Bahcecik, 2015; Ozturk et al., 2013).

The median scores of the subscales of Nurses' Professional Quality of Life Scale—Work Environment, Relations with Managers, Working Conditions, Work Perception and Support Services were determined as 28 (19–36), 15 (9–20), 28 (18–36), 22 (14–28) and 12 (7–18), respectively. Considering that the lowest and highest score that can be obtained from the Working Environment, Relations with Managers, Working Conditions, Work Perception and Support Services subscales are (9–45), (5–25), (10–50), (7–35) and (4–20), respectively, it can be said that the quality of life of the nurses regarding their working environment, relations with the managers and support services are at a middle level, and the quality of life regarding work conditions and work perception is close to the middle level. A study conducted by Ozturk et al. (2013) reported that quality of life of nurses regarding work conditions is below middle level while work perception is slightly above the middle level, which also supports the findings of our research.

In this study, it was determined that the level of professional quality of life of nurses differs according to sex, and the level of professional quality of life of male nurses is higher than female nurses. When this finding is evaluated in terms of gender roles in Turkish society, it is thought that it may be due to women's responsibilities of taking care of children and other members of the family as well as their heavy workload.

It is reported in the literature that high work demands and heavy workload affect nurses' quality of work negatively (Gurses et al., 2009). In line with the literature, it was determined that the level of professional quality of life of the nurses working at departments with a total number of 1–10 nurses was higher when compared to the nurses working at departments with a total number of 11–20 and

21 and over nurses. In addition, in this study, it was found that the level of professional quality of life of the nurses working 32–40 hours weekly was higher, which is also in line with the literature.

Professional attitude which is indispensable for the establishment of standards of the profession and the presentation of quality service is a characteristic desired for the nursing profession as well as for all other professions (Erol, 2016). The median score of Professional Attitude Inventory was determined as 118 (76–159) in this study. Considering that the lowest score to be obtained from this scale is 32 and the highest score is 160, it can be said that the professional attitudes of the nurses are at a middle level. Contrary to our findings, in other studies examining the professional attitudes of nurses, it is reported that the level of professional attitude of nurses is higher (Bayraktar, Yilmaz & Khorshtd, 2016; Erol, 2016; Isci, 2015). It is thought that this difference between the findings may be due to differences in the socio-demographic characteristics and working life characteristics of the nurses included in the study.

In this study, it was found that Professional Attitude Inventory does not differ according to socio-demographic characteristics such as age, marital status, educational status, whether they have any children and total monthly income whereas gender and family type affect the professional attitude of the nurses. In a similar study that examined the professional attitudes of nurses working in a university hospital, it was found that professional attitude does not differ according to age and education level (Bayraktar et al., 2016), which is line with our findings; On the other hand, despite our research findings, the study of Karadag, Hisar and Elbas (2007) reported that professional behaviour is influenced by education level and as the level of education increases, professional behaviour increases.

In this study, it was determined that the score of Professional Attitude Inventory of nurses did not differ according to their duties in their departments. In a study examining nurses' professional attitudes, it is reported that nurses' positions do not affect their professional attitudes (Erol, 2016), which is in line with our findings. Contrary to our findings, in a study by Demir Dikmen et al. (2014) examining the professional attitudes of nurses working in a public hospital and the factors affecting them, it is reported that the professional attitudes of nurses working as responsible nurses are higher than nurses working in the departments. This difference in research findings is thought to be resulting from the quality of the education that nurses receive and their characteristics.

An individual's being successful in his/her professional life is closely related to his/her knowing the responsibilities of his/her job and whether he/she has chosen that profession willingly (Karamanoglu, Ozer & Tugcu, 2009). In this study, it was determined that the years worked as a nurse did not affect the Professional Attitude Inventory score. Contrary to our findings, in some studies examining the relationship between the years worked as a nurse and professional attitude, it is reported that increase in the years worked as a nurse affected the professional attitude positively (Celik & Hisar, 2012; Demir Dikmen et al., 2014; Kim-Godwin et al., 2010).

In this study, it was determined that there is no relation between the professional quality of life of the nurses and their professional attitudes. As far as the authors know, there is no study in the literature examining the relationship between the professional quality of life of nurses and their professional attitudes. On the other hand, there are studies that examine the relationship between job satisfaction, a concept closely related to the professional quality of life, and professional attitudes of nurses. In a study conducted by Hwang et al. (2009) to compare factors affecting job satisfaction among Korean and Chinese nurses, it is reported that professionalism is the most important factor affecting job satisfaction. In another study by Yang and Kim (2013), it is reported that there is a positive relationship between the professionalism and job satisfaction of the nurses included in the scope of the study. Hampton and Hampton (2004) examined the relationship between professionalism and job satisfaction of nurses by structural equation modelling and reported that these two concepts are positively related in the nurses included in the scope of the study.

The vast majority of healthcare professionals who work in healthcare institutions are nurses. Among the entire healthcare professionals, nurses spend the most time with the patient and the patient or his/her family firstly contact nurses. Therefore, they provide the most communication within the team of healthcare professionals (Kizilirmak & Demir, 2016). It is reported in the literature that, for the provision of quality in patient care, professional quality of life of nurses is an important factor and that high professional quality of life of nurses increases patient satisfaction (Ozturk et al., 2013). Another factor that is extremely important in providing quality healthcare is professionalism. Since nurses provide care for healthy and sick individuals with different characteristics, it is important that nurses exhibit a professional attitude (Tarhan, Kilic & Yildiz, 2016). In this regard, it is important that the factors affecting the professionalism of the nurses are defined, strategies are developed to improve their professional attitude and a working atmosphere is created where the needs and expectations of the nurses are met.

5. Conclusion

In this study which was conducted to determine the relationship between the professional quality of life and professional attitudes of nurses working in a university hospital, nurses' Job Quality Scale scores were found to differ according to the total number of nurses working in the department, whether the nurse willingly chose to be a nurse and total working hours per week. On the other hand, the median score of the Professional Attitude Inventory was found to differ according to the department where the nurses worked, whether they are pleased with the department they work in and the average number of patients given daily care. No statistically significant relationship was found between the scores of Professional Quality of Life and Professional Attitude Inventory.

In accordance with the findings obtained from the research, it is recommended that;

- Working conditions for nurses should be improved,
- The number of nurses in the clinics should be balanced and the number of patients per nurse should be considered,
- Adequate and trained personnel should be employed in departments such as internal and surgical units where the workload is high,
- The preferences of nurses about the departments they want to work in should be considered,
- Programmes intended to improve the professional quality of life of nurses should be implemented by managers.

6. Limitations of the research

In this study, data were collected through the questionnaires through which the nurses evaluated themselves. The fact that the findings are not based on simultaneous interviews with the nurses and the fact that the nurses could not be observed to assess the relationship between professional quality of life and professional attitudes is a limitation of this study.

Table 1. Distribution of socio-demographic characteristics of nurses (N = 165)

Features		n	%
Age groups	20–30	56	33.9
	31–40	89	53.9
	41 and over	20	12.1
Gender	Female	158	95.8
	Male	7	4.2
Marital status	Married	136	82.4
	Single	29	17.6
Education level	Vocational	3	1.8
	School of		

	Health		
	Associate degree	5	3.0
	Undergraduate	153	92.7
	Graduate	4	2.4
Family type	Extended family	18	10.9
	Nuclear family	147	89.1
Whether they have any children	Yes	126	76.4
	No	39	23.6
Number of children (<i>n</i> = 126)	1	51	40.5
	2	55	43.7
	3	20	15.9
Monthly income	2,000–3,999 TL	97	58.8
	4,000–5,999 TL	63	38.2
	6,000 TL and over	5	3.0

Table 2. Distribution of working conditions of nurses (N = 165)

Features		<i>n</i>	%
Department	Internal units	53	32.1
	Surgical units	34	20.6
	Other units	78	47.3
Duty in the department	Department nurse	152	92.1
	Chief nurse	13	7.9
The years worked as a nurse	1–5 years	44	26.7
	6–10 years	45	27.3
	11–15 years	51	30.9
	16–20 years	9	5.5
	21 years and over	16	9.7
The years worked in that hospital	1–5 years	69	41.8
	6–10 years	35	21.2
	11–15 years	39	23.6
	16–20 years	8	4.8
	21 years and over	14	8.5
The years worked in that department	1–5 years	80	48.5
	6–10 years	42	25.5
	11–15 years	35	21.2
	16 years and over	8	4.8
Total number of nurses working in the department	1–10	26	15.8
	11–20	72	43.6
	21 years and over	67	40.6
Working status in the hospital	Permanent staff	104	63.0
	Contractual	61	37.0
Working type	Always during the day	30	18.2
	Working in shifts	135	81.8
Whether they chose their profession willingly	Yes	117	70.9
	No	48	29.1
Whether they are pleased with their department	I am pleased	93	56.4
	I am partly pleased	62	37.6

	I am not pleased	10	6.1
Whether they chose their department willingly	Yes	50	30.3
	No	115	69.7
Total weekly working hours	32–40 hours	145	87.9
	41 hours and over	20	12.1
Average number of patients given daily care	3–10 patients	96	58.2
	11–20 patients	29	17.6
	21–30 patients	40	24.2

Table 3. Total score average of professional quality of life scale and the median scores of sub-dimension

Sub-dimensions	Med (Min–Max)
Working environment sub-dimension	28 (19–36)
Relations with managers sub-dimension	15 (9–20)
Working conditions sub-dimension	28 (18–36)
Work perception sub-dimension	22 (14–28)
Support services sub-dimension	12 (7–18)
Professional quality of life scale	AM ± SD
	105.9 ± 7.5

AM = arithmetic mean, SD = standard deviation, Med = median.

Table 4. Comparison of socio-demographic characteristics of nurses and professional quality of life scores

Features		AM ± SD med (min–max)	p value; test value
Age groups	20–30	105.8 ± 8.3	$p = 0.655$; $F = 0.425$
	31–40	105.7 ± 7.1	
	41 and over	107.4 ± 6.7	
Gender	Female	105.6 ± 7.4	$p = 0.005$; $t = -2.832$
	Male	113.6 ± 5.7	
Marital status	Married	105.8 ± 7.2	$p = 0.592$; $t = -0.536$
	Single	106.6 ± 8.7	
Education level	Vocational School of Health	106.7 ± 9.9	$p = 0.986$; $F = 0.048$
	Associate degree	107 ± 6.8	
	Undergraduate	105.9 ± 7.5	
	Graduate	105.8 ± 7.1	
Family type	Extended family	103.9 ± 8.9	$p = 0.238$; $t = -1.183$
	Nuclear family	106.1 ± 7.3	
Whether they have any children	Yes	107 (76–122)	$p = 0.972$; $U = 2,448$
	No	105 (89–127)	
Number of children	1	106 ± 5.7	$p = 0.871$; $F = 0.138$
	2	105.4 ± 8.1	
	3	106 ± 7.2	
Monthly income	2,000–3,999 TL	105.8 ± 8.3	$p = 0.534$; $F = 0.630$
	4,000–5,999 TL	105.7 ± 6.1	
	6,000 TL and over	109.6 ± 4.6	

AM = arithmetic mean, SD = standard deviation, t = independent sample t test statistic, F = one-way variance analysis test statistic, U = Mann–Whitney U test statistic.

Table 5. Comparison of the working environment of nurses and professional quality of life scores

Features	Med (min-max)	AO ± SS	p value; test value
Department	Internal units	107 (76-122)	$p = 0.929$;
	Surgical units	107 (89-120)	$\chi^2 = 0.147$
	Other units	105.5 (92-117)	
Duty in the department	Department nurse	105.8 ± 7.5	$p = 0.562$;
	Chief nurse	107.1 ± 7.4	$t = -0.594$
The years worked as a nurse	1-5 years	106 (89-127)	$p = 0.720$;
	6-10 years	107 (91-114)	$\chi^2 = 2.084$
	11-15 years	104 (92-122)	
	16-20 Years	109 (76-120)	
	21 years and over	108 (92-119)	
The years worked in that hospital	1-5 years	107 (89-127)	$p = 0.969$;
	6-10 years	106 (91-114)	$\chi^2 = 0.541$
	11-15 years	105 (97-122)	
	16-20 Years	108.5 (76-120)	
	21 years and over	108 (92-119)	
The years worked in that department	1-5 years	107 (89-127)	$p = 0.816$;
	6-10 years	106 (76-120)	$\chi^2 = 0.940$
	11-15 years	104 (97-122)	
	16 years and over	108 (92-113)	
Total number of nurses working in the department	1-10	109 (76-120) A	$p = 0.029$;
	11-20	104 (89-119) B	$\chi^2 = 7.064$
	21 years and over	107 (92-127) AB	
Working status in the hospital	Permanent staff	106.5 ± 7	$p = 0.178$;
	Contractual	104.9 ± 8.1	$t = 1.352$
Working type	Always during the day	107.8 ± 6.8	$p = 0.126$;
	Working in shifts	105.5 ± 7.6	$t = 1.539$
Whether they chose their profession willingly	Yes	108 (89-127)	$p < 0.001$;
	No	102.5 (76-126)	$U = 1,627.5$
Whether they are pleased with their department	I am pleased	106 (92-127)	$p = 0.477$;
	I am partly pleased	108 (76-122)	$\chi^2 = 1.479$
	I am not pleased	107.5 (89-114)	
Whether they chose their department willingly	Yes	107.2 ± 50	$p = 0.157$;
	No	105.4 ± 115	$t = 1.423$
Total weekly working hours	32-40 hours	107 (91-127)	$p = 0.013$;
	41 hours and over	102.5 (76-115)	$U = 952.5$
Average number of patients given daily care	3-10 patients	106.6 ± 7.2	$p = 0.128$;
	11-20 patients	106.6 ± 5.9	$F = 2.082$
	21-30 patients	103.8 ± 8.8	

AM = arithmetic mean, SD = standard deviation, t = independent sample t test statistic, F = one-way variance analysis test statistic, U = Mann-Whitney U test statistic, χ^2 = Kruskal-Wallis test statistic.

Table 6. Comparison of socio-demographic characteristics of nurses and professional attitude inventory scores

Features	Med (min-max)	p value; Test Value
Age groups	20-30	117.5 (76-149)
	31-40	125 (84-155)
	41 and over	116 (84-159)
Gender	Female	119.5 (76-159)
	Male	100 (85-149)
Marital status	Married	119.5 (84-159)
	Single	118 (76-149)
Education level	Vocational	137 (109-143)
	School of Health	
	Associate degree	112 (90-159)
	Undergraduate	118 (76-155)
Family type	Graduate	126.5 (111-148)
	Extended family	137 (109-150)
	Nuclear family	118 (76-159)
Whether they have any children	Yes	121 (84-159)
	No	118 (76-149)
Number of children	1	118 (84-150)
	2	131 (85-159)
	3	119.5 (84-141)
Monthly income	2,000-3,999 TL	118 (76-159)
	4,000-5,999 TL	118 (84-154)
	6,000 TL and over	128 (85-149)

χ^2 = Kruskal-Wallis test statistic, U = Mann-Whitney U test statistic.

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