



EXAMINING THE RELATIONSHIP BETWEEN PEDIATRIC NURSES' ATTITUDES TOWARDS ETHICAL PRINCIPLES AND MORAL INTELLIGENCE LEVELS

PEDİATRİ HEMŞİRELERİNİN ETİK İLKELERE YÖNELİK TUTUMLARI İLE AHLAKİ ZEKÂ DÜZEYLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

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ABSTRACT

Objective: This study aimed to examine the relationship between the moral intelligence levels of nurses working in pediatric clinics and their perspectives on ethical principles.

Method: This study was cross-sectional and descriptive-correlational. The data for the study were provided by nurses working in pediatric clinics of two public and two private hospitals in Istanbul between October and December 2022. There were 140 pediatric nurses in the study's sample. The Yakut-Moral Intelligence Scale, the Ethical Principles Attitude Scale, and the Descriptive Characteristics Form were used as data collection tools.

Results: The overall Ethical Principles Attitude Scale score ranged from 35 to 175 with a mean of 142.26±18.18. The average Moral Intelligence score fell between 20 and 100, with a mean of 78.53±10.15. It was found that there was a positive but low correlation between the total mean scores of the Yakut-Moral Intelligence Scale and the Ethical Principles Attitude Scale ($p<0.001$). It was determined that the moral intelligence levels of nurses working in private hospitals, nurses participating in a scientific event on ethics, and nurses who were satisfied with their professional life were higher ($p<0.05$).

Conclusion: It was found that nurses working in pediatric clinics, where providing care in line with ethical principles is very important, have high attitudes towards ethical principles. In this study, the finding of a positive relationship between pediatric nurses' attitudes towards ethical principles and their moral intelligence levels was considered as an important contribution to the scientific literature.

Key Words: Attitude, Ethics, Moral intelligence, Pediatric nursing

ÖZ

Amaç: Bu çalışmanın amacı, pediatri kliniklerinde çalışan hemşirelerin ahlaki zekâ düzeyleri ile etik ilkelere ilişkin bakış açıları arasındaki ilişkiyi incelemek olarak belirlendi.

Yöntem: Bu çalışma kesitsel ve tanımlayıcı-ilişkiseldir. Araştırmanın verileri, 2022 yılının Ekim ve Aralık ayları arasında, İstanbul'daki iki kamu ve iki özel hastanenin pediatri kliniklerinde çalışan hemşireler tarafından sağlandı. Çalışmanın örneklemini 140 pediatri hemşiresinden oluştu. Veri toplama aracı olarak Yakut-Ahlaki Zeka Ölçeği, Etik İlkeler Tutum Ölçeği ve Tanımlayıcı Özellikler Formu kullanıldı.

Bulgular: Etik İlkeler Tutum Ölçeği toplam puanı ortalaması 142.26±18.18 olup, 35 ile 175 arasında değişmektedir. Ahlakî Zeka toplam puanı ortalaması 78.53±10.15 olup, 20 ile 100 arasında değişmektedir. Yakut-Ahlaki Zeka Ölçeği ile Etik İlkeler Tutum Ölçeği toplam puan ortalamaları arasında pozitif yönde ancak düşük derecede korelasyon ilişkisi olduğu bulundu ($p<0.001$). Özel hastanede görev yapan hemşirelerin, etik konusunda bilimsel bir etkinliğe katılan hemşirelerin ve meslek hayatından memnun olan hemşirelerin ahlaki zeka düzeylerinin daha yüksek olduğu belirlendi ($p<0.05$).

Sonuç: Etik ilkeler doğrultusunda bakım vermenin oldukça önemli olduğu pediatri kliniklerinde görevli hemşirelerin etik ilkelere ilişkin tutumlarının yüksek olduğu bulundu. Bu çalışmada pediatri hemşirelerinin etik ilkelere ilişkin tutumları ile ahlaki zeka düzeyleri arasında pozitif bir ilişkinin olduğu bulunması bilimsel literatüre önemli bir katkı olarak değerlendirildi.

Anahtar Kelimeler: Tutum, Etik, Ahlakî zeka, Pediatri hemşireliği

INTRODUCTION

Nursing is a profession in which adherence to ethical principles is fundamental during the delivery of care to patients [1]. Values, beliefs, and ethical action patterns in clinical decision-making shape nursing practices that do not depend only on technical skills and knowledge [2]. Pediatric nurses are in direct and constant contact with children and their parents, and ethical decision-making is integral to their daily work [3]. Since children have limited autonomy, nurses in pediatric settings have a direct and unavoidable

responsibility to protect the rights of the children they serve [4]. The high ethical sensitivity of pediatric nurses contributes to professionalization and directly affects the quality of nursing care given to patients [5].

Moral intelligence includes the skills to distinguish right from wrong, be honest, make appropriate choices for the patient's benefit, and provide the best care in line with ethical principles [6]. The qualities that serve as the foundation for cultivating these abilities are respect, self-control, empathy, conscience, tolerance, compassion, and justice [7]. Individuals with high moral intelligence consistently link their

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behaviors to moral and ethical standards and maintain a balance between their views and values [8]. Moral intelligence guides human behavior and helps individuals take intelligent and optimal actions [9]. The literature states that nurses' ethical performance is greatly affected by their moral intelligence and criteria [10]. Thus, this study aimed to examine the relationship between pediatric nurses' attitudes toward ethical principles and their moral intelligence levels. Within the scope of the research, answers to the following questions were sought:

- What are pediatric nurses' moral intelligence scores?
- What views do pediatric nurses have regarding morality?
- Do the sociodemographic traits of pediatric nurses and their moral intelligence levels correlate with one another?
- Do the sociodemographic traits of pediatric nurses and their views on ethical principles correlate with one another?
- Do pediatric nurses' opinions toward ethical principles and their moral intelligence levels correlate with one another?

METHOD

Study Design

Nurses employed in the pediatric departments of four hospitals (two public hospitals, and two private hospitals) in Istanbul provided the data for this descriptive and cross-sectional study between October 1, 2022, and December 1, 2022.

Participants

The study population consisted of 208 pediatric nurses (public hospital:166, private hospitals:42). The sample formula of the known population was used to determine the number of participants included in the study. The sample size was accepted as p (probability of the event under study) =0.5 in the 95% confidence interval, and it was determined as 136 pediatric nurses for $\pm 5\%$ sampling errors. One hundred forty pediatric nurses participated in the study. 67.3% of the population has been reached. The random sampling method, one of the non-probability methods, was used to select the sample.

Inclusion Criteria:

- Being a nurse working in the pediatric setting,
- Volunteering to participate in the research,

Exclusion Criteria:

- Filling in the scales incompletely.

Outcome Measures

Descriptive Characteristics Form: This form, which was prepared by the researchers to determine the participants' sociodemographic characteristics, consists of a total of 14 questions [5,8,10].

Ethical Principles Attitude Scale (EPAS): This scale is used to determine nurses' attitudes towards ethical principles in health care practices. It is a valid and reliable (Cronbach's Alpha=0.85) scale developed by Uysal Kasap and Bahçecik in 2020. The scale includes 35 items and six sub-dimensions (Justice, Non-maleficence, Veracity, Respect for Autonomy, Beneficence, Confidentiality-Keeping Secret). The reliability coefficient of the "Justice" sub-dimension of the scale was calculated as .77, the "Non-maleficence" sub-dimension as .65, the "Veracity" sub-dimension as .63, the "Respect for Autonomy" sub-dimension as .65, the "Beneficence" sub-dimension as .72, and the "Confidentiality-Keeping Secret" sub-dimension as .65. Strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1) are the possible scores for the 5-point Likert-type items that make up the EPAS. On the scale, there are four reversal items. The scale yields scores that range from 35 to 175. Nurses who score around 175 on the scale are considered to have a strong attitude toward ethical principles, whilst those who score near 35 are considered to have a low approach

[11]. The scale's Cronbach's Alpha rating in the current investigation was 0.934.

Yakut-Moral Intelligence Scale (Y-MIS): This scale is used to measure the level of moral intelligence of individuals. It is a valid and reliable (Cronbach's Alpha=0.845) scale developed by Yakut and Yakut in 2021. The scale includes 20 questions and four sub-dimensions (Empathy, Conscience, Self-control, and Courtesy). The reliability coefficient of the "Empathy" sub-dimension of the scale was calculated as .827, the "Conscience" sub-dimension as .791, the "Self-control" sub-dimension as .803, and the "Courtesy" sub-dimension as .772. Five-point Likert-type questions make up the scale's items (1 being strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree). On the scale, 20 represents the lowest score and 100 represents the greatest. A high moral intelligence level is shown by the high score. All age groups and educational levels beyond primary school can use the scale [12]. The scale's Cronbach's Alpha value in the current investigation was determined to be 0.917.

Data Collection

Data were collected from the participants using the "Descriptive Characteristics Form", "Yakut-Moral Intelligence Scale" and "Ethical Principles Attitude Scale". The data were obtained through Google Forms (Google LLC, Menlo Park, CA, USA). Answering the questions took an average of 20 minutes.

Ethical Approval

Before the research, necessary permissions were obtained from the Maltepe University Non-Interventional Studies Ethics Committee (date: 01.09.2022, approval number: 2022/21-08) and the hospitals where the study would be conducted. Before the study, an informed consent form was presented to the participants. After the participants approved the form, they were included in the study. It was made clear to participants that they could leave the study at any moment.

Statistical Analysis

Software called IBM SPSS (Statistical Package for the Social Science) 22.0 was used to examine the study's results. Categorical variables were given as number and percentage; continuous variables were given as mean and standard deviation. Using the Kolmogorov-Smirnov test, the data's normal distribution was examined. It was found that the data were not normally distributed. Mann-Whitney U test was used to compare the mean ranks of two independent groups and Kruskal-Wallis H analysis was used to compare the mean ranks of more than two independent groups. Spearman's correlation analysis was used to determine the relationship between the scale scores. Cronbach's alpha value was found using reliability analysis. At significance levels of $p < 0.05$, the data were assessed at a 95% confidence range.

RESULTS

The participants' ages ranged between 20 and 56 years, with a mean of 28.6 ± 6.258 years. It was revealed that 86.4% of the nurses were women, and 60% were undergraduate graduates. Further, 69.3% of the participants worked in the public hospital, 37.1% in the neonatal intensive care unit, and 85.7% in day and night shifts. 47.1% and 49.3% of the participants worked for 1 to 5 years. 43.6% of the participants stated that they were partially satisfied with their professional life, 70.7% faced an ethical problem, and 42.1% of them stated that they participated in a congress, symposium, or training on ethics (Table 1).

It was determined that the participants got an average score of 142.26 ± 18.18 from the EPAS, 35.18 ± 5.49 from the justice sub-dimension, 17.01 ± 2.73 from the non-maleficence sub-dimension, 19.00 ± 2.45 from the veracity sub-dimension, 32.26 ± 5.43 from the respect for autonomy sub-dimension, 21.71 ± 3.49 from the beneficence sub-dimension, and 17.07 ± 2.66 from the confidentiality-keeping secret sub-dimension. Further, the participants got 78.53 ± 10.15 points from the Y-MIS, 19.00 ± 2.93 points from the empathy sub-dimension,

21.02±3.26 points from the conscience sub-dimension, 18.28±3.32 points from the self-control sub-dimension, and 20.72±3.20 points from the courtesy sub-dimension of this scale (Table 2).

Table 1. Descriptive characteristics of participants (n=140)

Variables	N	%	
Gender	Female	121	86.4
	Male	19	13.6
Marital status	Married	50	35.7
	Single	90	64.3
Having kids	Yes	36	25.7
	No	104	74.3
Educational status	Less than a bachelor's degree	22	15.7
	Bachelor's degree	84	60
	Postgraduate degree	34	24.3
Employed institution	Public hospital	97	69.3
	Private hospital	43	30.7
Worked unit	Pediatric emergency	25	17.9
	Pediatric surgery	14	10
	Pediatric unit	35	25
	Pediatric intensive care unit	14	10
Types of work shifts	Neonatal intensive care unit	52	37.1
	Day shift only	20	14.3
Working period in the nursing profession	Day and night shift	120	85.7
	Less than 1 year	14	10
	Between 1 and 5 years	66	47.1
	Between 6 and 10 years	33	23.6
Working period in pediatric settings	11 years and above	27	19.3
	Less than 1 year	30	21.4
	Between 1 and 5 years	69	49.3
	Between 6 and 10 years	26	18.6
Satisfaction with professional life	11 years and above	15	10.7
	Yes	58	41.4
	Partially	61	43.6
Encountering an ethical problem	No	21	15
	Yes	99	70.7
Participation in a congress, symposium, or training on ethics	No	41	29.3
	Yes	59	42.1
	No	81	57.9

Min:minimum; Max:maximum; SD:standard deviation

Table 2. Distribution of the mean scores of the scales and subscales (n=140)

Scales	Min	Max	$\bar{X}\pm SD$
EPAS	52	166	142.26±18.18
Justice	8	40	35.18±5.49
Non-maleficence	4	20	17.01±2.73
Veracity	11	26	19.00±2.45
Respect for autonomy	8	40	32.26±5.43
Beneficence	6	25	21.71±3.49
Confidentiality, secret-keeping	8	20	17.07±2.66
Y-MIS	30	100	78.53±10.15
Empathy	8	25	19.00±2.93
Conscience	9	25	21.02±3.26
Self-control	7	25	18.28±3.32
Courtesy	7	25	20.72±3.20

EPAS:Ethical Principles Attitude Scale; Y-MIS:Yakut-Moral Intelligence Scale; Min:minimum; Max:maximum; SD:standard deviation

A low degree of positive correlation was found between the Y-MIS total mean score and the EPAS total mean, and a statistically significant relationship was found ($r=0.335$, $p<0.001$) (Table 3).

In the comparison of the scores of the participants from the Y-MIS in terms of the institution they work for, it was found that those who work in private hospitals, those who are satisfied with their professional life,

and those who attend a congress, symposium or training on ethics had higher average scores from the Y-MIS. There was a statistically significant difference between them ($p<0.05$) (Table 4).

Table 3. The relationship between the EPAS and Y-MIS (n=140)

Scales	N	R	p
EPAS			
Y-MIS	140	0.335*	0.000**

EPAS:Ethical Principles Attitude Scale; Y-MIS:Yakut-Moral Intelligence Scale

Table 4. Comparison of EPAS and Y-MIS total mean scores according to some variables of participants (n=140)

Variables	EPAS		Y-MIS	
	$\bar{X}\pm SD$	Test p	$\bar{X}\pm SD$	Test p
Gender				
Female	143.31±17.25	940.50 ^a	78.65±10.09	1133 ^a
Male	135.57±22.65	0.203	77.78±10.75	0.920
Having kids				
Yes	139.16±25.47	1.856 ^a	76.41±13.87	1854 ^a
No	143.33±14.86	0.939	79.26±8.45	0.933
Educational status				
Less than a bachelor's degree	142.72±23.91		79.77±14.92	
Bachelor's degree	141.94±17.30	0.720 ^b	78.16±7.83	2.378 ^b
Postgraduate degree	142.76±16.55	0.698	78.64±11.69	0.305
Working period in the nursing profession				
Less than 1 year	143.42±16.72		80.42±8.96	
Between 1 and 5 years	139.54±17.86	4.479 ^b	78.62±9.88	1.106 ^b
Between 6 and 10 years	145.18±15.31	0.214	77.81±6.45	0.776
11 years and above	144.74±22.44		78.22±10.15	
Employed institution				
Public hospital	140.75±17.93	1.670 ^a	77.48±9.30	1549 ^a
Private hospital	145.67±18.46	0.061	80.90±11.62	0.015*
Satisfaction with professional life				
Yes	141.91±21.15		80.58±11.78	
Partially	142.83±16.95	0.866 ^b	77.67±9.36	12.057 ^b
No	141.57±12.58	0.649	75.38±5.69	0.002*
Encountering an ethical problem				
Yes	142.55±16.44	1986 ^a	79.20±9.34	1919 ^a
No	141.56±22.02	0.840	76.92±11.85	0.614
Participation in a congress, symposium, or training on ethics				
Yes	142.33±19.92	2297 ^a	79.30±12.06	1912 ^a
No	142.20±16.92	0.696	77.97±8.53	0.044*

EPAS:Ethical Principles Attitude Scale; Y-MIS:Yakut-Moral Intelligence Scale; SD:Standard deviation; ^aMann-Whitney U test; ^bKruskal-Wallis H test, * $p<0.05$

DISCUSSION

Nursing, which focuses on people, is a profession in which moral values and adherence to ethical principles are essential [1]. The attitudes of pediatric nurses who care for susceptible children towards ethical principles are critical [13]. Issues such as more violations of rights in pediatric settings, children being more vulnerable than adults, establishing relationships with the family, and participation of parents in child-related decisions increase the importance of ethical principles in pediatric nursing. In addition, compliance with ethical principles in pediatric nursing becomes more complicated with technological developments, care models, and cultural care practices [3,14,15]. The pediatric nurses' attitude in the current study towards ethical principles was considered quite positive in terms of professionalization. Because the high attitudes of pediatric nurses toward ethical principles will directly affect the quality of nursing care, they give to patients. Similar to this study, in a study conducted with nurses working in pediatric oncology clinics, it was found that nurses' adherence to ethical codes was optimal [16]. In a study examining the knowledge and practices of pediatric nurses on ethical codes, most pediatric clinic nurses act in compliance with ethical codes [17].

Generally speaking, intelligence is the capacity to think, learn, and adjust to new circumstances. There are various forms of intelligence, such as moral, emotional, spiritual, and cognitive [18]. Moral intelligence is the ability to distinguish between right and wrong [19]. In other words, it refers to an individual's ability to process and manage ethical problems [20]. Moral intelligence is not inherited; it is a skill that is acquired and developed [21]. It was discovered that the moral intelligence scores of the nurses participating in the present study were relatively high (78.53 ± 10.15 ; within a range of 20-100). In a study conducted in Iran, it was found that the moral intelligence score of the nurses was 4.35 ± 0.56 (min:1-max:5) [1]. In another study conducted with 99 nurses working in the emergency department, similar to our study, nurses' moral intelligence levels were found to be high [6]. Two studies conducted in Iran at different times reported that nurses' moral intelligence scores were reasonable, similar to our study [10,22]. In a study conducted with nurses working in departments other than pediatric settings (internal units, surgical units, intensive care units, and polyclinic) in Türkiye, it was found that the moral intelligence levels of the participants were high [21]. In a study conducted with nurses working in the intensive care unit, unlike our study, it was determined that the moral intelligence of most nurses ($n=168$; 62.9%) was moderate [8]. The high moral intelligence level of the nurses included in our study, and the nurses participating in other studies may confirm the nursing profession's moral and professional nature [1,6,10,21,22].

The relationship between nurses' moral intelligence and their attitudes toward ethical principles has not been the subject of any research in the literature. Our findings were described in this context using a small number of indirect sources, and our comments on those findings were kept front and center. This study found that nurses' views toward ethical principles and their moral intelligence levels had a weakly positive correlation. Nurses who score well on moral intelligence also exhibit a strong commitment to ethical standards. Following ethical guidelines when providing patient care is essential for nurses in this professional field. Human intellect is directly tied to comprehending and putting ethical concepts into practice [20]. Strong ethical beliefs and adherence to them [19] are necessary for moral intelligence, which is the cornerstone and foundation of nursing ethics [23]. Based on the results of this study, it can be concluded that raising nurses' moral intelligence levels is crucial to boosting their adherence to ethical standards. Furthermore, the significance nurses have on moral principles and the moral actions they exhibit in their caregiving practices is evidenced by their high moral intelligence scores. Nurses with high moral intelligence levels provide better treatment and are more satisfied with their patients. According to a study conducted in Turkey, nurses' care behaviors improve in tandem with their moral intelligence levels [21]. Additionally, an Iranian study found a strong

and direct correlation between moral intelligence and nursing care quality [22]. According to a different study, patient satisfaction and nurses' moral intelligence level were significantly and favorably correlated [10].

The current study ascertained that the moral intelligence levels of the nurses who were satisfied with their professional life and participated in a congress, symposium, or training on ethics were higher. Other characteristics (such as gender, having children, and education level) of the nurses participating in our study did not affect their moral intelligence scores. In contrast to our findings, a study that sought to ascertain the moral intelligence levels of nurses found a direct and substantial correlation between the moral intelligence levels of nurses and the number of years they had worked [1]. A study involving emergency department nurses revealed that female nurses possessed higher levels of moral intelligence. Furthermore, the work experience of nurses did not influence their moral intelligence in this study, which is consistent with our studies [6]. In another study, it was discovered that none of the demographic variables of nurses had a critical effect on moral intelligence [22]. This difference in the results of the research may be due to factors such as the individual characteristics of the participants, the geographical region they live in, the working environment, and organizational, social, and cultural characteristics.

Limitations

This study was limited to the participation of pediatric nurses working in the pediatric units of four hospitals in Istanbul. As a result, the results of this study might not be applicable to pediatric nurses employed in other hospitals, areas, or nations.

CONCLUSION

The study's findings highlighted the importance of pediatric nurses' moral intelligence development in delivering ethical patient care. By drastically altering nurses' perspectives on patients, themselves, and the profession, determining and developing moral intelligence abilities can aid in professional growth. Therefore, one of the prerequisites for this profession in the modern world has been the ability of nurses to develop moral intelligence and gain moral knowledge. Determining and enhancing the moral intelligence of nurses employed in pediatric and other clinics is crucial in this regard. To enhance nurses' moral and ethical thought processes, ongoing in-service training should be conducted. In future studies, training programs should be developed to improve the moral intelligence levels of nurses, and the reflections of such training programs on nursing care practices should be examined.

In conclusion, our study offers valuable and meaningful insights for both nursing education and clinical practices. The findings highlight the critical role of in-service training, ethical awareness initiatives, and moral intelligence development programs in enhancing the quality of care in pediatric nursing. Such educational programs are expected to improve not only individual nursing practices but also team interactions and overall healthcare standards. Moreover, fostering ethical principles and moral intelligence can enable nurses to build stronger trust-based relationships with patients and their families while effectively adhering to professional nursing ethics. In this context, our study emphasizes the necessity of developing long-term strategies aimed at enhancing nurses' ethical sensitivity and integrating these strategies into clinical settings.

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