

Research Paper

Relationships of Empathy Among Nurses Working at Teaching Hospitals With the Patterns of Parental Rearing

Zahraa Mahdi Abd Ali^{1*} , Safi Dakhil Nawam¹ *1. Department of Psychiatric Mental Health Nursing, College of Nursing, University of Kerbala, Kerbala, Iraq.***Citation** Mahdi Abd Ali Z, Nawam SD. Relationships of Empathy Among Nurses Working at Teaching Hospitals With the Patterns of Parental Rearing. *Iranian Rehabilitation Journal*. 2024; 22(2):195-204. <http://dx.doi.org/10.32598/irj.22.2.1619.6>**doi** <http://dx.doi.org/10.32598/irj.22.2.1619.6>**Article info:****Received:** 02 Aug 2023**Accepted:** 25 Nov 2023**Available Online:** 01 Jun 2024**Keywords:**

Parenting styles, Empathy, Nurse

ABSTRACT

Objectives: The development of effective connections between nurses and parents depends heavily on nurses' empathy. Parenting strategies and attitudes have an impact on the emotional connection between parents and children in a variety of scenarios. Accordingly, this descriptive correlation study evaluates the level of empathy and investigates the relationship between parenting styles and the empathy of nurses.

Methods: A purposive (non-probability) sample of 180 nurses was recruited in the current study and selected from four teaching hospitals in Kerbala City, Iraq, according to specific criteria. A pilot study was used to assess the questionnaire's reliability, and a panel of (17) experts was used to determine the questionnaire's content validity. The data were collected through interviews using two scales, namely the parental authority questionnaire, and the Jefferson scale of empathy physician/health professions. The data were investigated and interpreted using the SPSS software, version 22. Numbers and percentages were used to illustrate the quantitative qualities. The Spearman coefficient was applied to evaluate the relationships between the study variables. The significance level was considered a $P=0.05$.

Results: Nurses have a low level of empathy. There are significant correlations between the father's and mother's parenting styles (authoritative, permissive, and authoritarian dimensions) and empathy. In addition, there is a substantial association between nurses' empathy and job desire.

Discussion: Nurse empathy is vital for building strong connections with parents. Parenting styles affect the parent-child emotional bond in various situations. The study on parental rearing patterns and empathy among nurses at teaching hospitals revealed that nurses who have low empathy levels and parenting styles significantly relate to empathy. Nurses' empathy also impacts their job satisfaction. The study recommends adopting the authoritative parenting style to enhance empathy. Awareness programs through various media should educate parents about positive and negative parenting styles and their effects on children's futures. By promoting empathy and supportive parenting, parents can nurture empathetic and well-adjusted individuals. The parenting style of both fathers and mothers is associated with empathy among nurses, and job desire may be an important factor that is related to nurses' empathy.

*** Corresponding Author:****Zahraa Mahdi Abd Ali***Address:* Department of Psychiatric Mental Health Nursing, College of Nursing, University of Kerbala, Kerbala, Iraq.*Tel:* +96 (47) 816786295*E-mail:* zahraa.mahdi@s.uokerbala.edu.iq

Highlights

- Nurses' empathy is the capacity to understand and share another person's perspective without judgment, leading to improved nursing care.
- Parenting-rearing style refers to attitudes and child-educating practices that influence the emotional relationship between parent and their children.
- Nurse empathy can foster harmonious relations between nurses and parents.
- This study investigates empathy levels and the link between parental rearing patterns and empathy in hospital nurses.

Plain Language Summary

Nurse empathy plays a crucial role in fostering positive relationships between nurses and parents. Parenting style refers to attitudes and techniques used to raise children and affects the emotional bond between parents and children in various life situations. However, there is limited information about how parental rearing patterns relate to empathy among nurses in teaching hospitals in Iraq. To address this, researchers conducted a study using questionnaires to gather data from parents and hospital nurses in three main hospitals in Kerbala City, Iraq. Accordingly, nurses have low empathy levels, and there are significant links between parenting styles (authoritative, permissive, and authoritarian) and empathy. Additionally, nurses' empathy impacts their job satisfaction.

Therefore, parents should adopt the authoritative parenting style, which positively influences empathy development. Awareness programs should be implemented through different media channels to educate parents about positive and negative parenting styles and their impact on children's future lives and careers. By promoting empathy and supportive parenting, parents can contribute to nurturing empathetic and well-adjusted individuals.

Introduction

According to studies in healthcare, empathy is a special psychological resource, due to its effects on patients and medical personnel, through the establishment of personal relationships and improved patient communication [1]. Empathy is a notion that was brought to medicine in the 1980s and is now observed as an essential skill for medical personnel [2]. After conducting a systematic review, in nurses who show empathy [3], the patients' levels of anxiety and discomfort are reduced; additionally, the ability of nurses to empathize helps them to understand the requirements that patients perceive. For these reasons, the significance of developing an empathetic relationship with patients and fundamental communication skills remains emphasized to nursing students in undergraduate programs [4]. Empathy is a type of social feeling that is frequently influenced by the surrounding environment, since the family is the primary setting for socialization in childhood, parental rearing has an certainly significant and long-lasting impact on how a child develops both their personality and their

capacity for thought [2]. The term parental rearing styles was initially created by Schaefer in the 19th century. He suggested four parental styles as follows: Authoritarian (affective coldness/high control), authoritative (high warmth/low control), overprotective (high warmth/high control), and neglecting (affective coldness/low control) [5]. Parenting style can be considered a collection of attitudes, objectives, and child-rearing practices that form the emotional climate of the parent-child connection and remain constant across a variety of life situations [6]. Much research has shown that a person's family of origin might have an impact on the level of empathy in an adult, a significant element influencing adult empathy is the poor parenting of preadolescents [7]. According to certain research, parenting styles may have a varied impact on emotional and cognitive empathy, which categorize empathy additionally, these results demonstrate that probably parenting styles are more associated with affective empathy, that strong prosocial conduct was associated with active empathy in children, and that these children had more supportive parents [8].

Only a few investigations have been conducted on how parental education and empathetic behavior affect the teaching hospital nurses in Iraq. Therefore, this study assesses nurses' level of empathy and its relationship to parenting practices.

Materials and Methods

Study design

In this study, the researchers used a descriptive-correlation design because of its suitability with the study goals to investigate the relationship between parental styles and empathy among nurses working at teaching hospitals in Kerbala City, Iraq. The study period was from September 26, 2022, to June 14, 2023.

Study setting

The data were collected from academic nurses who worked in four teaching hospitals in Kerbala City, Iraq (Kerbala Teaching Hospital for Children and Obstetrics, Al-Imam Al-Hussian Medical City, Al-Imamul, Hassan Al-Mujtaba Hospital, and Gynecology Teaching Hospital). The target population was 335 academic nurses working in four teaching hospitals in Kerbala City, Iraq.

Sample size and methods

A purposive (non-probability) sample of 180 nurses was selected according to specific inclusion criteria. The inclusion criteria comprised academic nurses with bachelor's degrees in nursing, working in various departments of the four main hospitals, providing direct nursing care to patients, and working in the morning and night shifts.

The sample size was estimated according to the Soper sample calculator [9]. The predicted effect size was 0.5, the desired statistical power level was 0.8, and the probability value was set at 0.05. The minimum sample size was 128 academic nurses, considering the possibility of incomplete or non-responses from the participants. The researchers selected a sample of 180 academic nurses to get more representation of the sample population and get more accurate results.

Study instruments

The researchers used an instrument consisting of three parts: Demographic information data, the parental authority questionnaire, and the Jefferson scale of empathy physician/health professions (HP-version).

Demographic data

The socio-demographic sheet included questions on nurses' age, gender, marital status, work shift, job desire, monthly income, hospital, and years of experience.

Parental authority questionnaire

A short version of the parental authority questionnaire was used [10]. The short version of this scale was used in the current study based on a prior study [11]. It includes 30 items, namely 15 items for the father and 15 items for the mother covering three dimensions of parental styles. The authoritative style which was investigated by 5 items [1, 3, 6, 9, 12]. The permissive style was assessed with 5 items [4, 8, 11, 13, 14], and the authoritarian style was examined with 5 items [2, 5, 7, 10, 15]. The scale has two identical images, one of which measures the mother's treatment style, and the other measures the father's treatment style from the sons' point of view. The response was scored based on a Likert scale as follows: Strongly disagree, disagree, neutral, agree, strongly agree.

Jefferson scale of empathy physician/health professions

The Jefferson scale of empathy physician/health professions was developed by Bakrey. in 2019 [11], and the researchers examined the data worth, scale assumptions, and reliability through the international quality of life assessment. The scale was translated into Arabic and was applied in this study. The Jefferson scale of empathy physician/health professions is a 20-item tool that is precisely developed to estimate empathy in the context of health careers education and patient care for administration to health careers students and general practitioners. Items are responded based on a 7-point Likert scale (from 1=strongly disagree to 7=strongly agree), in which, 10 items are immediately scored and favorably written. The remaining 10 items are negatively expressed (reverse scored) [14]. The range of possible scores is from 20 to 140. Higher mean scores indicate a greater level of self-reported empathy. The Arabic translation of the questionnaire was done in light of a previously published Arabic study [11].

Validity of the questionnaire

To make the instrument more valid, it was presented to a panel of experts [16, 17] (they had more than 10 years of practice) in the different fields related to the study title. Changes and modifications were made based on the experts' suggestions and recommendations to best fit to

nursing sample. Item 6 of the Jefferson scale of empathy was modified since people are diverse, it is hard for the researcher to see matters from the patients' viewpoints because people are different.

Pilot study

A pilot study was done before data collection to determine the study instrument's reliability. It was applied to [18] academic nurses working in the four main hospitals. They complete the forms before conducting a full-scale study. The average time taken to complete the form was 15-20 min which was considered acceptable. The pilot study was conducted from December 21st, 2022, to 25th December 2022. the sample of the pilot study was excluded from the original study.

Reliability of the instrument

The Cronbach α coefficients were used to test the reliability of the current study instrument. The result of the test showed acceptable and demonstrated construct validity. The Cronbach α was 0.70 for the Jefferson scale of empathy and 0.70 for the parental authority questionnaire. In addition, the statistical analyses included an intraclass correlation coefficient to evaluate the study's methodology, and the intraclass correlation coefficient value was sufficiently dependable (0.77).

Data collection

The self-administer scheme was utilized by asking the applicants to fill in the format of the inquiry form and fulfill the requests. Then the researchers explained the purpose of the study in a simple way to the nurse. An agreement of participation was obtained from the academic nurse before the interview.

Data analysis

The data were analyzed and interpreted via the SPSS software, version 22. The quantitative features were represented by numbers and percentages. To assess the correlations between the study variables, the Spearman Correlation Coefficient was used. The $P=0.05$ was considered statistically significant.

Results

The age group of 26-30 years was abundant (50.0%) among the nurses followed by the age group of ≤ 25 years (37.8%). Meanwhile, 52.8% of the participants were female and 52.2% of the nurses were married. The majority of the nurses had morning work shifts. A total

of 89.4% of the nurses had a good job desire, with a sufficient monthly income in most of them (64.4%) (Table 1).

Table 2 demonstrates the parenting style (father and mother). The average total means indicate that nursing staff face a moderate level of authority (father and mother), besides a lower level of both permissive and authoritarian parenting styles.

A total of 60% of nursing staff have a low level of empathy, and the average total means also specify a low level of empathy among the nursing staff (mean=59.2) (Table 3).

There was a highly significant correlation between the father's and mother's parenting style and the nurse's empathy (Table 4).

Table 5 shows no significant relationship between nurses' empathy and their age, gender, marital status, work shifts, monthly income, and years of experience at $P>0.05$, except for their job desire, the results show a significant relationship with the empathy of the nurses at $P<0.05$.

Discussion

The average number of nurses face a moderate level of authoritative style (father and mother). There was a low level of both permissive and authoritarian parenting styles. This finding is consistent with another study [11] that found both parents' authoritative parenting techniques to be of a moderately high standard. Concerning the assessment of empathy, the study indicated that nurses have a low degree of empathy, which was in line with another researcher who found that the lower the level of empathy, the higher the academic year of the student [13]. As well, another research investigation demonstrated that, except for nursing students, paramedic students had statistically worse results for empathy [14].

The outcomes of the present survey, on the other hand, differ from the results of a study by Williams et al. that observed the empathy levels in nursing, undergraduate emergency health, and midwifery students and found that midwifery students had higher empathy levels than emergency health and nursing students [15]. Additionally, a study testing occupational therapy students' empathy at a Spanish institution revealed that these students demonstrated a high level of empathy [16].

Table 1. Characteristics of the study sample

Demographic data	Rating and Intervals	No. (%)
Age (y)	≤25	68(37.8)
	26–30	90(50.0)
	31–35	12(6.7)
	36–40	7(3.9)
	>41	3(1.7)
Gender	Male	85(47.2)
	Female	95(52.8)
Family status	Single	94(52.2)
	Divorced	2(1.1)
	Married	83(46.1)
	Widowed	1(0.6)
Work shifts	Morning	134(74.4)
	Evening	46(25.6)
Job desire	Yes	161(89.4)
	No	19(10.6)
Monthly income	Sufficient	116(64.4)
	Insufficient	16(8.9)
	Barely sufficient	48(26.7)
Hospital	Al-Imam Al-Hussian Medical City	78(43.3)
	Al-Imam Al-Hassan Al-Mujtaba Teaching Hospital	74(41.1)
	Kerbala Teaching Hospital for children	14(7.8)
	Obstetrics and Gynecology Teaching Hospital	14(7.8)
Years of experience	≤5	146(81.1)
	6–10	21(11.7)
	11–15	6(3.3)
	16–20	7(3.9)

The discrepancy in results may be explained by the various study tools, study samples, or population. Several authors discussed barriers to nurses acting empathically, including time constraints, shift work, difficult interactions with patients, carers, and coworkers, workload, deadline pressures, and competitiveness [17].

Regarding correlation between the parenting styles and empathy, the current study indicates a highly significant relationship between the father's and mother's parenting styles (authoritative, permissive, and authoritarian dimensions) and empathy. The present study findings are in line with the study conducted by other researchers [19] that demonstrated authoritative parenting was favorably cor-

Table 2. Assessment of parenting style

Parenting Styles	Father			Mother		
	Mean±SD	Assessment	%	Mean±SD	Assessment	%
Authoritative	2.6±0.8	Moderate	51.4	2.4±0.7	Moderate	48.7
Permissive	2.1±0.7	Low	41.7	2.2±0.7	Low	42.9
Authoritarianism	2.0±0.8	Low	40.3	1.9±0.8	Low	37.6

Notes: Low: Mean=1-2.3; Moderate: Mean=2.3-3.67; High: Mean=3.7-5.1.

Iranian Rehabilitation Journal

Table 3. Assessment of empathy

Empathy Levels	No. (%)	Mean	Overall Assessment
Low	108(60.0)		
Moderate	69(38.3)	59.2	Low
High	3(1.7)		

Notes: Low: Score=20-60; Moderate: Score=61-100; High: Score=101-140.

Iranian Rehabilitation Journal

related with empathy, which was in line with our expectations; nevertheless, no significant correlations between empathy with permissive, authoritarian, or neglectful parenting were discovered. In addition, a study conducted by [20] revealed authoritative parenting practices are positively associated with empathy, according to the relationship between nurses' empathy and their demographic data.

Our results found no significant association between nurses' empathy and their age, gender, marital status, work shifts, monthly income, and years of experience, except for their job desire, the study results indicate a significant relationship with the nurses' empathy. The present study findings are in line with another study [18] which concluded that there are no relationship was found

Table 4. Correlation between the parenting styles and empathy

Parenting Styles	Spearman Correlation	Empathy
Father (authoritative dimension)	r	0.203
	P	0.006
Mother (authoritative dimension)	r	0.212
	P	0.004
Father (permissive dimension)	r	0.207
	P	0.005
Mother (permissive dimension)	r	0.250
	P	0.001
Father (authoritarianism dimension)	r	0.280
	P	0.000
Mother (authoritarianism dimension)	r	0.309
	P	0.000

Iranian Rehabilitation Journal

Table 5. Relationship between nurses' empathy and their characteristic data

Characteristics	Intervals and Rating	Empathy			P
		Low	Moderate	High	
Age (y)	≤25	46	21	1	0.672
	26–30	51	37	2	
	31–35	5	7	0	
	36–40	5	2	0	
	>41	1	2	0	
Sex	Male	55	30	0	0.160
	Female	53	39	3	
Marital status	Single	58	33	3	0.556
	Married	49	34	0	
	Divorced	1	1	0	
	Widowed	0	1	0	
Work shifts	Morning	82	49	3	0.454
	Evening	26	20	0	
Job desire	Yes	102	56	3	0.016
	No	6	13	0	
Monthly income	Sufficient	74	41	1	0.393
	Insufficient	9	7	0	
	Barely sufficient	25	21	2	
Hospital	Al-Imam Al-Hussian medical city	45	32	1	0.807
	Al-Imam Al-Hassan Al-Mujtaba	48	24	2	
	Kerbala teaching hospital for children	8	6	0	
	Obstetrics and gynecology	7	7	0	
Years of experience	≤5	88	55	3	0.986
	6–10	12	9	0	
	11–15	4	2	0	
	16–20	4	3	0	

between the levels of empathy and age, marital status, total period of employment in nursing, and shift work. Also, another study [21] shows no found in the association between marital status and job experience.

In addition, the results of a study [22] showed a non-significant difference in nurse empathy was found for age, gender, and marital status. In the same line, a previous study [23] showed no significant relationship between age, gender, marital status, type of shift work,

work experience, and empathy. There is a study [24] whose results demonstrated a significant correlation between empathy and household monthly income; this finding is in contrast with our present study. In addition, a study [25] reported that empathy scores were significantly associated with household income.

Regarding job desire, the current study demonstrated a significant relationship with nurse empathy. Empathy was significantly and negatively correlated with job satisfaction in other studies [1]. These outcomes are in line with our study.

The study acclaims parents in general and mothers especially use the authoritative style, which has a positive effect on increasing empathy [26, 27] and is a style that is considered to be more beneficial and most optimal parenting style, also recommends preparing awareness programs through various media for parents about instructed in the best positive style that must be followed and negative style that must be avoided in rearing children and importance of parental styles because of its impact on their lives and jobs in the future.

Conclusions

The parenting style of both fathers and mothers is associated with empathy among nurses and job desire may be an important factor that is related to nurses' empathy. Further, well-designed larger studies are recommended about parenting styles and their relation to empathy among nurses.

Ethical Considerations

Compliance with ethical guidelines

The College of Nursing/University of Karbala has independently examined the study protocol and granted official clearance for the study to be carried out (Code: IRB: CN-2022-0043-MN). After receiving the study's title and questionnaire, the College of Nursing's Ethics Committee evaluated the study's instruments (questionnaire) and approved the conduct of the study. The Declaration of Helsinki was followed throughout the entire study protocol.

Funding

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

Authors' contributions.

Investigation, data collection, data collection and writing the original draft: Zahraa Mahdi Abd Ali; Conceptualization: Safi Dakhil; Final approval: All authors.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors express their appreciation for the hospital's administrative and nursing staff, parents, and participating nurses for their kind support.

References:

- [1] Yue Z, Qin Y, Li Y, Wang J, Nicholas S, Maitland E, et al. Empathy and burnout in medical staff: Mediating role of job satisfaction and job commitment. *BMC Public Health*. 2022; 22(1):1033 [DOI:10.1186/s12889-022-13405-4] [PMID] [PMCID]
- [2] Li CQ, Ma Q, Liu YY, Jing KJ. Are parental rearing patterns and learning burnout correlated with empathy amongst undergraduate nursing students? *International Journal of Nursing Sciences*. 2018; 5(4):409-413. [DOI:10.1016/j.ijnss.2018.07.005] [PMID] [PMCID]
- [3] Yu J, Kirk M. Evaluation of empathy measurement tools in nursing: Systematic review. *Journal of Advanced Nursing*. 2009; 65(9):1790-806. [DOI:10.1111/j.1365-2648.2009.05071.x] [PMID]
- [4] Altwalbeh D, Khamaiseh A, Algaralleh A. Self-reported empathy among nursing students at a university in Jordan. *The Open Nursing Journal*. 2018; 12(1):255-63. [DOI:10.2174/1874434601812010255]
- [5] Huang L, Wang Z, Yao Y, Shan C, Wang H, Zhu M, et al. Exploring the association between parental rearing styles and medical students' critical thinking disposition in China. *BMC Medical Education*. 2015; 15:88. [DOI:10.1186/s12909-015-0367-5] [PMID] [PMCID]
- [6] Gorostiaga A, Aliri J, Balluerka N, Lameirinhas J. Parenting styles and internalizing symptoms in adolescence: A systematic literature review. *International Journal of Environmental Research and Public Health*. 2019; 16(17):3192. [DOI:10.3390/ijerph16173192] [PMID] [PMCID]
- [7] Guo Q, Feng L. The associations between perceived parenting styles, empathy, and altruistic choices in economic games: A study of Chinese children. *Frontiers in Psychology*. 2017; 8:1843. [DOI:10.3389/fpsyg.2017.01843] [PMID] [PMCID]
- [8] Wang S, Hu H, Wang X, Dong B, Zhang T. The hidden danger in family environment: The role of self-reported parenting style in cognitive and affective empathy among offenders. *Frontiers in Psychology*. 2021; 12:588993. [DOI:10.3389/fpsyg.2021.588993] [PMID] [PMCID]

- [9] Free Statistics Calculators. A-priori sample size calculator for structural equation models [Internet]. 2024 [Updated 2024 May 6]. Available from: [\[Link\]](#)
- [10] Buri JR. Parental authority questionnaire. *Journal of Personality Assessment*. 1991; 57(1):110-9. [DOI:10.1207/s15327752jpa5701_13] [PMID]
- [11] Bakri MNeY. Parenting styles and their relationship to the academic achievement motivation among high school students in Jerusalem [Doctoral dissertation]. Palestine: Al-Quds Open University; 2019. [\[Link\]](#)
- [12] Hojat M, Gonnella JS, Nasca TJ, Mangione S, Veloksi JJ, Magee M. The Jefferson scale of physician empathy: Further psychometric data and differences by gender and specialty at item level. *Academic Medicine*. 2002; 77(10 Suppl):S58-60. [DOI:10.1097/00001888-200210001-00019] [PMID]
- [13] Sedaghati Kesbakhli M, Rohani C. Changes in the level of nursing students' empathy during four years education. 2019; [Unpublished]. [DOI:10.21203/rs.2.13729/v1]
- [14] Williams B, Brown T, McKenna L, Boyle MJ, Palermo C, Nestel D, et al. Empathy levels among health professional students: A cross-sectional study at two universities in Australia. *Advances in Medical Education and Practice*. 2014; 5:107-13. [DOI:10.2147/AMEP.S57569] [PMID] [PMCID]
- [15] Mazin J, Mousa, Hayder Abdul-Amir Al-Hindy, Amir Saheb Al-Mumin. Evaluation of serum cystatin C levels in multiple myeloma: Diagnostic significance and clinical implications. *Review of Clinical Pharmacology and Pharmacokinetics, International Edition*. 2024; 38: Supl2, 145-8. [DOI:10.61873/HHPT2430]
- [16] Matalinares-Calvet ML, Díaz-Acosta AG, Rivas-Díaz LH, Arenas-Iparraguirre CA, Baca-Romero D, Raymundo-Villalva O, et al. Dysfunctional parenting styles, empathy and socio-demographic variables in Nursing, Human Medicine and Psychology students. *Acta Colombiana de Psicología*. 2019; 22(2):112-24. [DOI:10.14718/ACP.2019.22.2.6]
- [17] Ferri P, Guerra E, Marcheselli L, Cunico L, Di Lorenzo R. Empathy and burnout: An analytic cross-sectional study among nurses and nursing students. *Acta Bio-Medica*. 2015; 86(Suppl 2):104-15. [PMID]
- [18] Özdemir K, Sevimli Güler D, Şahin S, Ünsal A, Kuni F. Assessment of empathy and anger management of nurses. *Journal of Health Science and Profession*. 2019; 6(3):470-8. [\[Link\]](#)
- [19] Heynen E, van der Helm P, Simon E, Stams G, Assink M. Parenting style and empathy in youth: A three-level meta-analysis. In: Jolliffe D, Farrington D, editors. *Empathy versus offending, aggression and bullying: Advancing knowledge using the basic empathy scale*. London: Routledge; 2021. [DOI:10.4324/9780429287459-5]
- [20] Meredith S. Effects of parenting on empathy and callous-unemotional traits in college students [Master thesis]. Texas: Sam Houston State; 2019. [\[Link\]](#)
- [21] Roger R, Sarwar H, Afzal M. Associated factors of empathy level among nurses in tertiary care hospital lahore: Factors associated with empathy level in nurses. *Pakistan Journal of Health Sciences*. 2022; 3(7):209-14. [DOI:10.54393/pjhs.v3i07.132]
- [22] Khalid M, Ishtiaq R, Fatima L, Ahmed H, Masood A, Khan TM, et al. Burnout and empathy: A cross-sectional study among resident physicians in public sector hospitals of a developing country. *European Journal of Medical and Health Sciences*. 2021; 3(4):945. [DOI:10.24018/ejmed.2021.3.4.945]
- [23] Ghaedi F, Ashouri E, Soheili M, Sahragerd M. Nurses' empathy in different wards: A cross-sectional study. *Iranian Journal of Nursing and Midwifery Research*. 2020; 25(2):117-21. [DOI:10.4103/ijnmr.IJNMR_84_19] [PMID] [PMCID]
- [24] Kuo JC, Cheng JF, Chen YL, Livneh H, Tsai TY. An exploration of empathy and correlates among Taiwanese nurses. *Japan Journal of Nursing science*. 2012; 9(2):169-76. [DOI:10.1111/j.1742-7924.2011.00199.x] [PMID]
- [25] Hasan S, Al-Sharqawi N, Dashti F, AbdulAziz M, Abdullah A, Shukkur M, et al. Level of empathy among medical students in Kuwait University, Kuwait. *Medical Principles and Practice*. 2013; 22(4):385-9. [DOI:10.1159/000348300] [PMID] [PMCID]
- [26] Abdulrasol ZA, Lafta MA, Kadim MA, Al-Hindi H, Obaid AF. Empowerment of Iraqi women and its effect on their quality of life. *Open Access Macedonian Journal of Medical Sciences*. 2022; 10(E):1415-9. [DOI:10.3889/oamjms.2022.10046]
- [27] Joudah Fadheel Q, Talib Naser R, Abdul-Amir Al-Hindy H. Evaluation of practice of prescribing and monitoring among hospitalized Iraqi patients. *HIV Nursing*. 2022; 22(1):71-6. [DOI:10.31838/hiv22.01.11]

This Page Intentionally Left Blank
