The Relation Between Emphatic Tendency and Level of Compassion among Midwifery Students

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ABSTRACT

Objective: In this study, it has been aimed to determine the relation between the empathic tendency and compassion level in the students of midwifery department.

Methods: The study is a descriptive and analytical study. The data were collected by self-reporting method using "Empathic Tendency Scale" and "Compassion Scale". The study was conducted with a total of 335 midwifery students studying at university in Turkey.

Results: The students' empathic tendency score was found to be 67.38 ±5.86. The students' compassion score was found to be 94.63±11.58. The empathic tendency level of the students studying in the first grade is significantly higher than other grades. There is a positive correlation between the empathic tendency level and the sub-dimensions of the total compassion score, kindness, common humanity, and mindfulness.

Conclusion: It has been determined because of the study that the empathic tendency and compassion levels of the students of midwifery are high. Classes about empathy and compassion should be included in the midwifery curriculum for the students to graduate with this point of view.

Keywords: Midwifery, students, empathy, compassion

1. INTRODUCTION

Midwifery is a professional group providing care to the women, newborns, and their families in a delicate period such as pregnancy and birth. In this delicate period, the midwives should approach the pregnant and their families with an empathic viewpoint and in a compassionate way during the care they provide. Though it is concept hard to understand, empathy is defined as a mirror in our brain enabling us to put ourselves in someone's shoes and the main objective is to be able to completely understand the opposite person (1). Clinic empathy is the ability of understanding the state, viewpoint, feelings and actions of the patient based on their perceptions in an auxiliary or therapeutic way (2). When a care is provided to the patients with this point of view, the performances of the health professionals increase and their chance of experiencing burnout decreases (3, 4). Moreover; the quality of the care and patient satisfaction increase (5). Empathic communication in birth services confronts us as a part of the sentimental support. Women also expect sentimental support as much as the physical support from the midwives in the birth process (6). Empathy and compassion are a very important part of the sentimental support given to the women and are always in interaction with each other (7). However, as different from empathy, behavior is also added to the feeling and thought in the compassion. Compassion also contains the wish for easing the pain of others,

the cognitive process related to understanding the resource of the pain and the behavioral process related to performing compassionate actions (8). Compassionate midwifery care, empathy, communication, motivation to support those in need, empowerment of women, negotiation and pain relief activities with knowledge and skills. It also has a positive effect on maternal and child health (9). International Confederation of Midwives (ICM) also asserts that the midwifery care should be respectful for the human rights and compassionate (10). There is a need for the determination of the empathy, compassion levels of the midwifery students and the factors affecting them in the process before their graduation for a qualified midwifery care. However, there are few studies conducted with midwifery students (11, 12). In the study, it has been aimed to determine the empathic tendency and compassion levels of the students in midwifery department and the relation between these two concepts.

2. METHODS

2.1. Study Design

A cross-sectional, descriptive, and analytical study was conducted. The study was carried out in one midwifery

department at University in Central Anatolia, Turkey. All students who can speak and write Turkish were included in the study. Before the lesson, the students were visited by the researchers and asked to fill in the questionnaire form. It took about ten minutes to fill out the form.

Research Questions

- What is the empathic tendency level of students in midwifery department?
- What is the compassion level of students in midwifery department?
- Is there any relation between the empathic tendency and compassion levels of the students in midwifery department?

2.2. Sample

The population of the study consisted of all 389 midwifery students who studied in the academic year 2019-2020. The study was completed with a total sample of 335 students (86% response rate, failure to complete collection forms or other reasons).

2.3. Instruments

Student Description Form

This form was prepared by the researchers in according with the literature (11, 12). The form includes questions such as the class they studied, the high school they graduated from, and their marital status.

Empathic Tendency Scale (ETS)

The scale prepared regarding the measurement of the sentimental sensitivity of the individual against the phenomena about himself/herself was developed by Dokmen in 1989 (13). The highest score to be obtained from the scale is 100 and the lowest score is 20. Cronbach's alpha value was not found in the original study. In this study, the Cronbach Alpha coefficient of the scale was found to be 0.61.

Compassion Scale (CS)

Compassion Scale was developed by Pommier (2011) and its Turkish validity and reliability were performed by Akdeniz and Deniz (2016) (14, 15). The scale consists of 24 questions in total. It consists of the sub-dimensions such as kindness, indifference, common humanity, separation, mindfulness, and disengagement. The subscales of indifference, separation and disengagement are reverse scored. The compassion level increases as the score attained from the scale increases. Cronbach's alpha internal consistency reliability coefficient for the whole scale was found to be 0.85. When the internal consistency reliability coefficient is calculated for the sub-dimensions, it is 0.73 for kindness, 0.64 for indifference, 0.66 for common humanity, 0.67 for separation, 0.70 for mindfulness, 0.60 for disengagement. In this study, the Cronbach's alpha coefficient for the whole scale was found to be 0.91. Internal

consistency reliability coefficients for the sub-dimensions were 0.69, 0.76, 0.66, 0.51, 0.69 and 0.50, respectively.

2.4. Ethical Considerations

Permits have been taken for the conduction of the study from Selcuk University Faculty of Health Sciences Ethics Committee (2019/14367) and from the institutions the study has been conducted. The verbal and written approvals of the students have been taken after they have been informed about the study.

2.5. Data Analysis

The licensed SPSS 20.0 was used for the data analysis. Non-parametric tests have been used in the analysis because the empathic tendency and compassion scale total scores and the affecting factors have not shown normal distribution according to Shapiro wilk test. Spearman Correlation analysis has been applied for the purpose of determining whether there is any relation between the empathic tendency and compassion level of the students. Mann-Whitney U test, Kruskal-Wallis H test and Spearman correlation analysis have been used in the analysis of the data.

3. RESULTS

A total of 335 students have participated in the study and the average age of the students is 20.18±1.67 (min: 17, max:33). The students' mean empathic tendency score was found to be 67.38 ±5.86 (Table 1). Also, 22.6% of them are at their first year, 24.7% are at their second year, 27.4% are at their third year and 25.3% are at their fourth and more years (Table 2). The graduated high school, marital status, social security, and the education of the students about the empathy do not affect the empathic tendency level (p>0.05) (Table 2). The students' mean compassion score was found to be 94.63 ±11.58. It has been found that the compassion scale score is only affected from the marital status, the compassion level of the single students is significantly higher than the married students (p<0.05). When the sub-dimension score median values and the affecting factors are considered, it has been determined that the year the student has been educated only affects the sub-dimension of the common humanity (p<0.05). This difference stems from the fact that the points of the students at the first year of their education are significantly higher. The sub-dimension points median values of indifference, separation, mindfulness, and disengagement show differences depending on the graduated high schools of the students. It has been determined that this difference in all four sub-dimensions stems from the fact that the scores median values of the students who graduated from science high schools are high. The kindness and common humanity sub-dimensions score median values of the students with social security are higher than those of the students with no social security (p<0.05). When the marital status of the students has been considered, the mindfulness sub-dimension

score of the single students is significantly higher than that of the married students. The education status related to the empathy are similar in terms of the compassion scale sub-dimensions score median values (p>0.05).

Table 1. The empathic tendency and compassion scale total and sub-dimension scores

Variable	Mean	Sd	Median	Q1*	Q3**	
Empathic Tendency Scale Total	67.38	5.86	68.0	64.00	71.00	
Compassion Scale Total	94.63	11.58	96.00	88.00	104.00	
Kindness Sub-Dimension	4.05	0.70	4.00	3.50	4.50	
Indifference Sub- Dimension	4.10	0.70	4.00	3.75	4.75	
Common Humanity	3.86	0.76	4.00	3.25	4.50	
Separation Sub- Dimension	4.02	0.65	4.00	3.50	4.50	
Mindfulness Sub- Dimension	3.89	0.68	4.00	3.50	4.50	
Disengagement Sub- Dimension	3.71	0.43	3.75	3.50	4.00	

^{*}Interquartile range 1 (25th percentiles)

Spearman correlation analysis shows that there is a positive relation between the empathic tendency level of the students and the sub-dimensions of total compassion score, kindness, common humanity, and mindfulness (Table 3).

Table 3. Compassion scale total point and the relation between empathic tendency level and sub-dimensions

Variable*	Empathic Tendency Level			
	r	р		
Total compassion score	0.114	0.036		
Kindness sub-dimension	0.230	<0.001		
Indifference sub-dimension	-0.033	0.542		
Common humanity sub-dimension	0.126	0.021		
Separation sub-dimension	-0.039	0.474		
Mindfulness sub-dimension	0.157	0.004		
Disengagement sub-dimension	0.066	0.227		

^{*} Spearman correlation analysis

4. DISCUSSION

The study gives information about the empathic tendency and compassion levels of the students in midwifery department and the relation between them. Students' empathic tendency levels are generally high. It is significantly higher in the first-year students when compared to the students in other grades and decreases as the year of education increases. In a study conducted with the students of midwifery department in Turkey, the empathy skill levels of the first year students have similarly been found as higher when compared to the students in upper classes (11). Demirel et al. have found that the cognitive empathy and compassion levels of the first year students have been higher than the fourth grade students in

their study with the students in midwifery department (12). The empathy level of the medicine students also decreases during their educations and shows a sharp decrease especially in the third year of their education (16). In another study conducted in countries with different cultural structures, it was found that the medical faculty students studying in the USA have shown a decreasing trend of empathy levels over the years and there has been a reverse tendency of increase in Far East (17). Because of this difference among countries, it is thought that the empathy levels of students are affected by sociocultural factors.

One of the factors affecting the level of empathic tendency is gender. Quince et al. have reported that sentimental empathy level has decreased in men and not in women during medical education (18). Women studying in the medical school have higher empathy levels than men; and students with higher empathy level have a tendency to choose a more humanoriented specialty (19, 20). In paramedic students, it has been reported that male students could not have empathic communication with patients with drug addiction, whereas female students have had a much higher level of empathy than their male counterparts for all the patients regardless of their medical condition (21). Among the nursing students, empathy levels of female students have been found higher than male students (22). The fact that this study contains only the female students is thought to affect the empathic tendency level positively. The graduated high school, marital status, social security, and education status about empathy do not affect the level of empathic tendency. It is a thoughtprovoking situation that the level of empathy is inversely proportional to the year of education in a profession group that is educated in the field of health and is expected to have emotional support as well as physical support after graduation.

The compassion scale score has been found as 94.63±11.58 among all midwifery students. Ergin et al. have found the compassion scale score of midwives working in the delivery high (23). Total compassion point is influenced by the professional factors such as total compassion point, number of patients, rotating shift work, number of traumatic births and job satisfaction (23). In this study, it has been found that the total point of compassion scale has been affected only by the marital status; and the compassion levels of the single students have been significantly higher than those of the married students. Regarding the sub-dimensions of the scale, common humanity is higher in the first-grade students and higher in the students with social security than those without the security. In the students graduated from science high schools; indifference, separation, mindfulness, and disengagement sub-dimension points are higher than other students. The results obtained about the compassion level of the students are like the level of empathic tendency. The level of the common humanity decreases with the year of education. Students are expected to communicate better and be more sharing as they get to know each other. However, the emergence of the opposite situation is interpreted as a reflection of the competitive environment on student life.

^{**} Interquartile range 2 (75th percentiles)

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Table 2. The comparison of some properties of the students and their empathy scale total score, compassion scale sub-dimensions and total scores

Properties	N (%)	Empathy Scale Total Score Median (Q1-Q3)	Compassion Scale Total Score Median (Q1-Q3)	Kindness Sub- Dimension Scor Median (Q1-Q3)		Common Humanity Sub-Dimension Score Median (Q1-Q3)	Separation Sub- Dimension Score Median (Q1-Q3)	Mindfulness Sub- Dimension Score Median (Q1-Q3)	Disengagement Sub Dimension Score Median (Q1-Q3)
Education Year*					(8- 6-)	(62.62)			
First year	76 (22.6)	71.00 (68.00-76.00) 72.00 (67.25-75.00)	98.50(92.00-105.00)	4.25 (3.75-4.75)	4.25 (3.50-4.75)	4.25***(3.75-4.68)	4.25 (3.50-4.68)	4.00 (3.75-4.50)	3.75 (3.50-4.00)
Second year	83 (24.7)		94.00(84.00-102.00)	4.00 (3.50-4.50)	4.25 (3.75-4.75)	3.75 (3.25-4.25)	4.00 (3.50-4.50)	4.00 (3.25-4.25)	3.75 (3.50-4.00)
Third year	92 (27.4)		96.50(85.25-104.00)	4.00 (3.75-4.50)	4.25 (3.50-4.75)	4.00 (3.50-4.50)	4.12 (3.50-4.50)	4.00 (3.50-4.25)	3.75 (3.50-4.00)
Fourth year and more	84 (25.3)	71.00 (68.50-74.50)	96.00(90.00-103.00)	4.25 (3.62-4.75)	4.00 (3.75-4.50)	4.00 (3.25-4.50)	4.00 (3.50-4.50)	4.00 (3.75-4.50)	3.75 (3.50-4.00)
		p:0.017	p:0.184	p:0.120	p: 0.915	p: 0.003	p: 0.610	p: 0.156	p: 0.615
Graduated High School	ol								
* Medical High School	34 (10.1)	72.50 (66.75-78.25) 74.00 (72.50-77.00)	96.00 (87.00-103.25)	4.25 (3.50-4.75)	4.50 (3.75-4.75)	4.00 (3.50-4.50)	3.75 (3.50-4.25)	4.00 (3.43-4.31)	3.75 (3.50-3.81)
Science High School	6 (1.8)	72.00 (69.75-75.25) 72.00 (68.75-76.00) 70.00 (66.00-74.00) p: 0.627	104.00(100.00-109.25)	4.25 (3.68-4.75)	4.50*** (4.18-5.00)	4.25 (3.81-4.56)	4.62*** (4.18-4.81)	4.50*** (4.25-4.81)	4.00***(3.93-4.25)
Anatolian High School General High School	202(60.3) 22 (6.6)		94.00 (88.50-104.00) 94.00 (88.00-104.25)	3.87 (3.68-4.50)	4.37 (3.75-4.75) 4.00 (3.75-4.75)	4.00 (3.18-4.50) 4.00 (3.25-4.50)	4.25 (3.50-4.75) 4.25 (3.50-4.50)	4.00 (3.00-4.50) 4.00 (3.75-4.50)	3.75 (3.68-4.00) 3.75 (3.50-4.00)
Other	71 (21.2)		95.00(86.00-100.00) p: 0.088	` ′	4.00 (3.50-4.25) p: 0.017	4.00 (3.50-4.50) p: 0.849	4.00 (3.25-4.50) p: 0.024	4.00 (3.50-4.25) p: 0.010	3.75 (3.25-4.00) p: 0.030
Social Security Status*	*								
Yes 302(90.2)		72.00 (68.00-76.00) 69.00 (67.00-73.00) p: 0.239	96.00 (88.00-104.00)	4.00 (3.75-4.75)	4.25 (3.75-4.75)	4.00 (3.25-4.50)	4.00 (3.50-4.50)	4.00 (3.50 – 4.50)	3.75 (3.50-4.00)
No	33 (9.8)		94.00(88.00-100.00) p: 0.200		4.25 (3.50-4.50) p: 0.295	4.00 (3.25-4.50) p: 0.505	4.00 (3.62-4.32) p: 0.637	4.00 (3.25-4.50) p: 0.387	3.75 (3.50-4.00) p: 0.748
Marital status**									
Married	9 (2.7)	70.00 (68.00-73.50) 72.00 (68.00-76.00) p: 0.754	88.00 (73.00-98.50)	3.75 (3.00-4.12)	4.00 (3.62-4.12)	3.75 (2.62-4.50)	3.75 (3.00-4.50)	3.75 (2.50-4.00)	3.75 (3.25-3.87)
Single	326 (97.3)		96.00 (88.00-104.00) p: 0.048	` ′	4.25 (3.75-4.75) p: 0.171	4.00 (3.43-4.50) p: 0.306	4.00 (3.50-4.50) p: 0.230	4.00 (3.50-4.50) p: 0.016	3.75 (3.50-4.00) p: 0.232
Education abou	ıt								
empathy** Yes	58 (17.3) 277 (82.7) 335 (100)	72.00 (66.50-76.25) 71.00 (68.00-76.00) p: 0.949	100.00 (90.75-103.00) 95.00 (87.00-104.00) p: 0.22	4.00 (3.50-4.50)	4.37 (3.75-4.75) 4.25 (3.75-4.75) p: 0.149	4.00 (3.50-4.50) 4.00 (3.25-4.50) p: 0.496	4.00 (3.50-4.50) 4.00 (3.50-4.50) p: 0.706	4.00 (3.68-4.50) 4.00 (3.50-4.25) p: 0.341	3.75 (3.50-4.00) 3.75 (3.50-4.00) p: 0.927

^{*}Kruskal-Wallis test, **Mann-Whitney U test, *** The group from which the difference is due according to the post hoc test, Bold values: Results are significant if p<0.05

Another result is that the level of empathy and compassion affects each other. For this reason, it is necessary to focus on how the empathy and compassion level of the students could be supported and nurtured in practice and education. Compassion and empathy are difficult to learn for clinicians (24, 25). There are not enough data on how to teach this concept in midwifery education (26). Ding has stated that simulation-supported education has developed empathy, communication skills and professional identity in pediatric nursing students (27). Donald (2019) has given a compassionbased care course to healthcare professionals and determined that the course has a positive effect on the participants (28). It has been determined in a study conducted with medical students that role modeling and compassion-based education are an ideal teaching method to gain compassion in clinical education (27). In line with all these data, similar interventions should be applied throughout midwifery education, the effects of these interventions on the empathic tendency and compassion level of the students should be determined and interventions determined to be effective in this direction should be added to the midwifery curriculum.

5. CONCLUSION

As a result of the study, it has been determined that the levels of empathic tendency and compassion of midwifery students have been good. However, the level of empathic tendency decreases as the year in which students receive education increases. A positive relationship has been found between the level of empathic tendency and the level of compassion. From an ethical point of view, a compassionate midwifery care is essential for qualified midwifery care. Classes about empathy and compassion should be included in the midwifery curriculum for the students to graduate with this perspective.

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REFERENCES

- [1] Hojat M. Empathy in Patient Care: Antecedents, Development, Measurement, and Outcomes. Philadelphia: Springer Science & Business Media; 2007.p.7-10.
- [2] Kesbakhi MS, Rohani C. Exploring oncology nurses' perception of the consequences of clinical empathy in patients and nurses: a qualitative study. Support Care Cancer 2020; 28(6):2985–2993.
- [3] Rohani C, Sedaghati Kesbakhi M, Mohtashami J. Clinical empathy with cancer patients: a content analysis of oncology nurses' perception. Patient Prefer Adh 2018; 12:1089–1098.
- [4] Wilkinson H, Whittington R, Perry L, Eames C. Examining the relationship between burnout and empathy in healthcare professionals: A systematic review. Burn Res 2017; 6:18-29.
- [5] Lelorain S, Bredart A, Dolbeault S, Sultan S. A systematic review of the associations between empathy measures and patient

- outcomes in cancer care. Psycho-oncology 2012; 21(12):1255-1264.
- [6] East CE, Biro MA, Fredericks S, Lau R. Support during pregnancy for women at increased risk of low birthweight babies. Cochrane Database Syst Rev 2019; 4:1-4.
- [7] Morgan A. Against compassion: in defence of a "hybrid" concept of empathy. Nursing philosophy: an international journal for healthcare professionals. Nurs Philos 2017; 18(3):1-6.
- [8] Neff KD, Pommier E. The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. Self and Ident 2013; 12(2):160-176.
- [9] Menage D, Bailey E, Lees S, Coad J. A concept analysis of compassionate midwifery. Journal of Adv Nurs 2017; 73(3):558-573.
- [10] Patterson J, Martin CJH, Karatzias T. Disempowered midwives and traumatised women: Exploring the parallel processes of care provider interaction that contribute to women developing Post Traumatic Stress Disorder (PTSD) post childbirth. Midwifery 2019; 76:21-35.
- [11] Cevahir R, Çınar N, Sözeri C, Şahin S, Kuğuoğlu S. Ebelik öğrencilerinin devam ettikleri sınıflara göre empatik becerilerinin değerlendirilmesi [Evaluation of the empathic skills of midwifery students with respect to the classes they are attending]. Fırat Sağlık Hizmetleri Dergisi 2008; 3(7):6-7. (Turkish)
- [12] Demirel G, Kaya N, Doğaner A. The effect of intercultural approaches of midwifery students on the level of compassion and empathy. Int Journal of Soc Res 2020;15(21): 282-300.
- [13] Dökmen Ü. Empatinin yeni bir modele dayanılarak ölçülmesi ve psikodrama ile geliştirilmesi. Ankara Üni Eğitim Bil Derg 1988;21(1-2):155-190. (Turkish)
- [14] Pommier EA. The compassion scale. Dissertation Abstracts International Section A: Humanities and Social Sciences 2011; 72:1174.
- [15] Akdeniz S, Deniz M. The Turkish adaptation of Compassion Scale: The validity and reliability study. The Journal of Happiness & Well-Being. 2016; 4(1):50-61.
- [16] Hojat M, Vergare MJ, Maxwell K, Brainard G, Herrine SK, Isenberg GA, Veloski J, Gonnella JS. The devil is in the third year: a longitudinal study of erosion of empathy in medical school [published correction appears in Acad Med 2009; 84(11):1182-1191. doi:10.1097/ACM.0b013e3181b17e55
- [17] Ponnamperuma G, Yeo SP, Samarasekera DD. Is empathy change in medical school geo-socioculturally influenced? Med Edu 2019;53(7): 655-665.
- [18] Quince TA, Parker RA, Wood DF, Benson JA. Stability of empathy among undergraduate medical students: a longitudinal study at one UK medical school. BMC Med Edu 2011; 11:1-9.
- [19] Santos MA, Grosseman S, Morelli TC, Giuliano IC, Erdmann TR. Empathy differences by gender and specialty preference in medical students: a study in Brazil. Int J Med Edu 2016; 7:149-153.
- [20] Magalhaes E, Salgueira AP, Costa P, Costa MJ. Empathy in senior year and first year medical students: a cross-sectional study. BMC Med Edu 2011; 11:1-7.
- [21] Williams BA, Boyle MJ, Brightwell R, Devenish S, Hartley P, McCall M, McMullen P, Munro G, O'Meara P, Webb VK. An assessment of undergraduate paramedic students' empathy levels. Int J Med Edu 2012; 3:98-102.

- [22] Hsiao CY, Tsai YF, Kao YC. Psychometric properties of a Chinese version of the Jefferson Scale of Empathy-Health Profession Students. J Psychiatr Ment Health Nurs 2013; 20(10):866-873.
- [23] Ergin A, Ozcan M, Aksoy SD. The compassion levels of midwives working in the delivery room. Nurs Ethics 2020; 27(3):887-898.
- [24] Bramley L, Matiti M. How does it really feel to be in my shoes? Patients' experiences of compassion within nursing care and their perceptions of developing compassionate nurses. J Clin Nurs 2014; 23(19-20):2790-2799.
- [25] Bray L, O'Brien MR, Kirton J, Zubairu K, Christiansen A. The role of professional education in developing compassionate practitioners: a mixed methods study exploring the perceptions

- of health professionals and pre-registration students. Nurse Educ Today 2014; 34(3):480-486.
- [26] Pearson M. Educating student midwives about compassion: A critical reflection. Br J Midw 2018; 26(4):261-263.
- [27] Ding X, Wang L, Sun J, Li DY, Zheng BY, He SW, Zhu LH, Latour JM. Effectiveness of empathy clinical education for children's nursing students: A quasi-experimental study. Nurse Educ Today 2020; 85:1-8.
- [28] Donald G, Wilson I, McCarthy J, Hall I, Crossley B, Adshead P, Shaw V, Dunne R, Dwyer T. Experiences of nurses and other health workers participating in a reflective course on compassion-based care. Br J Nurs 2019;28(15):1020-1025.

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