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How empathic are midwifery students?

Jak empatyczni są studenci położnictwa?

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STRESZCZENIE

JAK EMPATYCZNI SĄ STUDENCI POŁOŻNICTWA?

Cel pracy. Celem opisywanego badania była ocena poziomu empatii wśród studentów położnictwa na wydziałach w Chorwacji, Słowenii, Belgii i Polsce; każde państwo reprezentuje różne regiony Europy, ale jednocześnie wszystkie mają podobieństwa w kształceniu położnych ze względu na dyrektywy UE.

Materiał i metody. Przeprowadzono badanie ilościowe przy użyciu zwalidowanego narzędzia badawczego - Skali Empatii Położnej (MES), która została przetłumaczona w ramach procedury podwójnie ślepej próby dla każdego kraju. Zastosowano celową próbę studentów położnictwa, w tym studentów pierwszego, drugiego i trzeciego roku studiów licencjackich. Komisja etyczna wydziału zatwierdziła projekt badania. Obliczono podstawowe miary opisowe.

Wyniki. Stwierdzeniem, które uzyskało najwyższe wyniki na skali MES było „Wierzę, że empatia odgrywa ważną rolę w opiece położniczej", podczas gdy najmniej zgodne były stwierdzenia: „Emocje kobiet mnie nie dotyczą, Nie wzruszam się, gdy widzę, że kobieta płacze oraz Bardzo wrażliwe kobiety mnie irytują". W sumie średnie wartości nie różniły się między studentami położnictwa pierwszego i ostatniego roku, a średni wynik na MES-R wynosił 59.

Wnioski. Nie możemy stwierdzić, że obecny program nauczania w badanych instytucjach sprzyja poziomowi empatii uczniów, jednak pewne różnice wskazują na możliwe elementy kulturowe.

Słowa kluczowe: program nauczania, położnictwo empatyczne, postawa studentów, praca emocjonalna

ABSTRACT

HOW EMPATHIC ARE MIDWIFERY STUDENTS?

Aim. The aim of the described study was to evaluate levels of empathy among midwifery students in Faculties of Croatia, Slovenia, Belgium and Poland; each state representing different regions of Europe, but at the same time all of them have similarities of midwifery education due to EU directives.

Material and methods. Quantitative study was undertaken, by using a validated research instrument – Midwifery Empathy Scale (MES) that was translated through double blind procedure for each country. A purposive sample of midwifery students was used, including students of 1st year, 2nd year and 3rd year undergraduate studies . The Ethics committee of the faculty approved the research design. Basic descriptive measures were calculated.

Results. The statement that achieved highest rating on MES scale was »I believe that empathy plays an important role in midwifery care«, while the least agreed upon were: »Women's emotions do not concern me, I do not get emotionally affected when I see a woman cry and Very sensitive women irritate me«. Altogether, mean values did not differ when comparing 1st year and last year midwifery students, with average score being 59 on a MES-R.

Conclusions. We can not conclude that current curriculum in the researched institutions foster empathy levels of the students, however some differences indicated possible cultural components.

Key words: curriculum, empathic midwifery, students attitude, emotional work

INTRODUCTION

The Greek word Εμπάθεια [pron. Empatheia], empathy, means „to understand the feelings of another". Hojat et al. write about different levels of empathy in individuals, depending on their personal characteristics [1]. He claims that we are all born with predispositions for empathy, but this trait may or may not be stimulated and improved later in life.

Midwifery study programs should, therefore, foster empathy, since midwifery is a medical profession that includes great amount of emotional work. In the clinical setting, empathy would be composed of emotional, cognitive, moral and behavioural dimensions and some of these elements need to be addressed as a hidden curriculum of the study programmes of health professionals (hidden curriculum is considered here a set of professional beliefs, attitudes, norms and values that are philosophical standpoints of midwifery; students absorb them through role models in practical settings and via theoretical lessons) [2].

Studies report lower levels of empathic behaviour in health care (including midwifery care) than expected by users [3-5]. Empathy is strongly connected with caring behaviours and the shared decision making with women, which is an integral part of women-centred midwifery care [6-7].

As it was stated , the predisposition to empathy is considered an innate trait of a human being, but it can be nurtured and developed further. Students who apply for medical studies are usually those who have higher levels of empathy [8-9]. However, the program of study in a particular health discipline may provide opportunities to raise empathic behaviours, particularly in the clinical practice where clinical mentors can function as effective role models of being highly empathic to their clients [4,10-16]. In order to demonstrate empathy, mentors need to promote self-reflective practice and critical self-assessment [8].

Also midwifery teachers who teach theoretical parts of the study programme need to encourage empathy, for instance through lectures about the women-centred approach and fostering partnerships with women as a strong midwifery value. Curricula that is based only on theoretical knowledge and skills, without the development of personal virtues that impact attitudes and relationships, produce graduates who focus only on technical performance, while neglecting the development of personal qualities [13,17-18].

Empathic midwives, give patients more satisfying experiences during the transition to parenthood [3,10,19]. It can be argued that empathy is essential in midwifery graduates. Therefore, this has become a common research interest. Studies used different scales in order to estimate the level of empathy in midwifery students and midwives [20]. Therefore the results are inconclusive. Vivilaki et al. developed a scale for the measurement of empathy in the field of midwifery (MES – Midwifery Empathy Scale) and since then new studies have arisen, the results of which could provide more unified conclusions [6,15,21].

The aim of our study was to find out with the MES:

- How empathic are students?
- Are there any differences in levels of empathy, comparing midwifery students of certain faculties in Slovenia, Croatia, Belgium and Poland?

Similarities and differences among the countries included in the study

Despite the fact that all involved countries have implemented midwifery study programs in accordance with the EU directive that defines necessary theoretical subjects for midwifery study and sets the quantified criteria for number of practical procedures, we are aware that health systems and the position of midwives are different in every part of Europe. Also, different cultural backgrounds set the context of study programs (more or less autocratic approach to the patient in the healthcare systems) thus study outcomes can vary. Therefore the intention of the study was to conduct a study within representatives of faculties of different regions in Europe, in which the Slovenian faculty represents central area, one of Belgium's midwifery faculties represents west, the Croatian faculty in Rijeka represents south and Poland's faculty represents the east part of Europe. All these countries have direct entry midwifery studies (BSc level), which last three years. Since in countries in the north region of Europe, midwifery is usually a study after completing three years nursing programme first, the study was not conducted in those countries, since comparison of data would not be methodologically justified.

METHODS

The study was based on a quantitative research paradigm. A non-experimental method of empirical research was used.

Instrument

The research instrument was a questionnaire developed exclusively to measure midwives' empathy – the Midwifery Empathy Scale (MES) [15]. The instrument consists of 25 statements about specific circumstances that require an empathic response. Respondents were asked to rate each item on a 6-point Likert scale. The total MES score can then be calculated (respondents can score 25-150 points).

The permission was obtained from the authors of the MES scale to translate the questionnaire and use it for the study. The instrument was prepared in the double blind translation for each language (Slovenian, Croatian, Polish and Dutch). The first translator, who is midwifery teacher fluent in the English language translated the scale from the English language into the national language. The second translator, who is a professor of the English language translated scale from the national language to the English language. Both English versions of the scale, the original and the transalted,were compared and all significant differences that emerged in the process were discussed in the group of all inviduals, who were included in the translation, so that the best possible terminology was used in order to maintain the original meanings of the statements. After the national phase, all midwifery teachers involved in the translations met online and discussed relevant issues in order to ensure that the same things would be measured in all countries, despite culturally different backgrounds.

The test was conducted on 10 midwives, who were not students, before the main study in order to check comprehension. It was decided not to perform the pilot test among students in order not to contaminate the sample, especially because the samples in some of the countries (Slovenia and Croatia) were very small. Therefore the test of the questionnaire was done among young graduates, who had less than one year of the working experience. No changes in content were required.

Sample

The study was conducted in May and June of the 2022–2023 academic year. The 1st year students had already finished the first semester and had participated in lectures on ethics. They also had completed the clinical training prior to participation in the study. Purposive sampling was used. Midwifery students of the 1st year, the 2nd year and the 3rd year of midwifery study program at the Faculty of Health Studies at the University of Rijeka, the Faculty of Health Sciences at the University of Ljubljana, Medical Faculty at the University of Rzeszow in Poland and Erasmus Brussels University of Applied Sciences and Arts in Brussels, Belgium were invited to participate in the study. The number of students enrolled in faculties were:

A.) Slovenia – 83 students (33 in the 1st year, 28 in the 2nd year and 22 in the 3rd year)
B.) Poland – 147 students (53 in the 1st year, 50 in the 2nd year and 44 in the 3rd year)
C.) Croatia – 63 students (30 in the 1st year, 19 in the 2nd year and 14 in the 3rd year)
D.) Belgium – 210 students (98 in the 1st year, 42 in the 2nd year and 70 in the 3rd year).

The students were asked to fill in online questionnaires and the estimated time to complete it was 10 minutes. Their participation was voluntary and confidentiality of the data was assured. All participants gave the written consent to participate in the study as the first question in the online survey was an explanation of the study and a mandatory question – do they give the informed consent to participate in the study. After giving the informed consent, participants were able to open the questionnaire. Because male participants are rare, gender demographic data was not collected, to ensure their confidentiality. Since all faculties accept full time students after they have completed the secondary school, all participants were between 18–23 years old, so there was no need to ask about the age. The ethics committee of the faculty reviewed the research design and gave approval to conduct the study (ZF-DEK 442/2022).

Data analysis

Statistical analysis was performed using IBM SPSS statistics, Version 26. Descriptive characteristics were calculated (frequencies, percentages, mean values and standard deviation). Cronbach's coefficient alpha, a reliability coefficient used to assess reproducibility and consistency of the instrument, showed 0.8 (0.7 for Slovenia, 0.7 for Belgium, 0.8 for Poland and 0.8 for Croatia) while a minimum value of 0.70 is considered acceptable [22]. The T- test was performed to examine significant differences among countries ($p<0.05$).

RESULTS

Altogether 503 students were invited to participate. After the study was closed , questionnaires that were not fully answered were eliminated. For the final analysis 231 questionnaires were used; that gives an overall response rate of 46% (76% Slovenia, 33% Poland, 81% Croatia and 32% Belgium). The agreement of all participants with the statements of MES scale, divided according to the year of study, a is presented in the Table 1.

Table number 1 provides data on the agreement of students in different years of their midwifery studies with various statements related to empathy in midwifery. Responses of the students are based on a Likert scale ranging from 1 point (I totally agree) to 6 points (I totally disagree). The highest overall level of agreement (lowest mean score on the 6-point Likert scale) was for the following statements:

- I believe that empathy plays an important role in midwifery care (1.2);
- I feel satisfaction when women feel better with my care (1.2) and
- Women feel better when they sense that they are understood (1.6).

The lowest overall level of agreement (highest scores on Likert scale) was for the following statements:

- Women's emotions do not concern me (4.4);
- I do not get emotionally affected when I see a woman crying (4.4) and
- Very sensitive women irritate me (4.4).

Differences in overall scores of all participants in the 1st year, the 2nd year and the 3rd year of the study were tested with T test, but they were not statistically significant ($p>0.05$).

We compared agreement with MES statements among midwifery students from four different European countries: Slovenia, Belgium, Poland, and Croatia. The data is based on a Likert scale, where 1 point represents „I totally agree" and 6 points represents „I totally disagree". Table number 2 provides the average means of students' responses.

The overall mean of all participants was 2.9. When comparing deviation of different national samples from overall means, it can be seen a similar overall mean of Slovenian and Belgian students (2.1). On the other hand, means of Croatian and Polish students were also very close (3.0 and 3.1).

Great differences in means, despite the fact that they were not statistically significant, were found in the following statements:

- During the collection of medical information it is not important to pay attention to women's feelings (Slovenian mean of participants [2.1] in comparison to Poland's sample [5.6] or Croatian's sample [5.2])
- Woman's emotions do not concern me (Slovenian sample mean [1.7] in comparison to Poland sample mean[5.8])

- I don't get emotionally affected when I see woman crying (Slovenian sample mean [2.4], while the mean score in Polish sample reached [5.8])
- I don't think it is part of my job to occupy myself with the problems of the woman I care for (Slovenian sample mean [1.9], while another extreme is the Polish sample mean [5.3]).

Table number 3 presents the average scores that students reached on MES-R (MES –recoded) in the 1st year the 2nd year and 3rd year of study on the scale from 25-150 scores. In order to calculate this, negative statements were recoded. Findings show that scores did not rise significantly during the study in any of the studied educational institutions.

DISCUSSION

Being supportive, compassionate and caring are crucial attributes of midwifery [3]. Therefore, studies on empathy in student midwives are becoming increasingly common [10,12,23]. Until now, all studies have mainly used the Jefferson Scale of Empathy for health professionals. Vivilaki et al. developed and validated a specific scale to assess empathy level in midwives [15]. However, not many studies using the MES have been performed and published to date, so the results of the presented study cannot be compared with many other results [6,15].

The study results support the claim that students, who start medical studies are relatively highly empathic [9]. Mean scores achieved on MES-R reflect other similar studies [6]. The question arises whether the level of empathy should be tested as an entry requirement for midwifery studies, and what level of empathy would be satisfactory? Is it possible to raise empathy during studies so that levels at the beginning of the study is irrelevant?

If we assume that empathy level can be increased during studies, as some authors claim, then empathy level does not play such a big role as an entry requirement [10-12]. However our cross-sectional data do not provide sufficient evidence to determine whether or how empathy develops during midwifery education. A longitudinal study or mixed-methods approach could offer more reliable insights into the curricular components that may influence empathic development. In the Slovenian questionnaire, an additional question was added at the end of the questionnaire, asking participants if according to their opinion theoretical parts or practice play more important role in gaining more empathy during their studies. 64 study participants answered the question, and they had the option to select their agreement on the 5-point Likert

Tab. 1. Agreement with the MES statements, according to the year of the study (Means of Likert scale; 1 point -I totally agree, 6 points – I totally disagree)

MES statements	Mean 1st year students n=83 (SD)*	Mean 2nd year students n=94 (SD)*	Mean 3rd year students n=54 (SD)*	Mean all participants N=231 (SD)*
I believe that empathy plays an important role in midwifery care.	1.3 (0.93)	1.1 (0.52)	1.2 (0.50)	1.2 (0.69)
Midwife should understand the emotional situation of the women and their families.	1.7 (1.02)	1.6 (0.91)	1.4 (0.86)	1.6 (0.94)
I can perceive the hidden feelings and thoughts of the women, whom I care for.	2.4 (0.94)	2.5 (0.76)	2.4 (0.92)	2.4 (0.86)
During collection of medical information it is not important to pay attention to women's feelings.	3.8 (2.09)	4.8 (1.81)	3.8 (1.98)	4.2 (2.00)
Woman's emotions do not concern me.	4.1 (1.92)	4.8 (1.86)	4.1 (2.04)	4.4 (1.95)
Women feel better when they sense that they are understood.	1.7 (1.10)	1.5 (0.99)	1.6 (0.98)	1.6 (1.03)
I recognize the body language of a woman.	2.1 (0.75)	2.3 (0.71)	2.2 (0.83)	2.2 (0.75)
Body language is not as important as verbal communication for the understanding of woman's feelings.	4.2 (1.44)	4.3 (1.36)	4.4 (1.42)	4.3 (1.40)
I recognize when a woman is silent because of embarrassment.	2.3 (0.80)	2.3 (0.89)	2.4 (0.87)	2.3 (0.85)
I don't get emotionally affected when I see woman crying.	4.1 (1.61)	4.8 (1.78)	4.2 (1.73)	4.4 (1.73)
It is difficult for a midwife to see things from a woman's perspective.	4.0 (1.44)	4.3 (1.64)	4.1 (1.24)	4.2 (1.49)
I try to stand in the woman's shoes, so I can better understand her.	1.9 (0.89)	1.7 (0.72)	2.0 (0.89)	1.8 (0.83)
I show that I am willing to listen to the woman by sitting near to her.	2.1 (0.99)	1.9 (1.05)	2.2 (0.82)	2.1 (0.98)
I would spend time taking care of women after my work hours.	2.6 (1.31)	2.7 (1.34)	2.8 (1.51)	2.7 (1.37)
A Midwife's touch encourages the woman.	1.9 (0.91)	2.4 (1.19)	2.1 (0.74)	2.2 (1.02)
I avoid touching the woman, who I care for, in order to keep a distance.	3.8 (1.59)	4.0 (1.45)	4.1 (1.51)	3.9 (1.51)
I think it is important to touch a woman, who I care for	2.3 (1.22)	2.1 (1.07)	2.2 (0.98)	2.2 (1.11)
Very sensitive women irritate me.	3.9 (1.58)	4.9 (2.29)	4.1 (1.59)	4.4 (1.95)
There were times that I witnessed a woman crying and I got emotional.	2.1 (1.00)	2.0 (1.11)	1.9 (1.05)	2.0 (1.05)
Many times I left work and I kept thinking of a woman I was caring for.	2.2 (1.03)	2.1 (1.09)	2.2 (1.18)	2.2 (1.09)
I don't think it is part of my job to occupy myself with the problems of the woman I care for .	3.9 (1.79)	4.4 (1.72)	4.1 (1.71)	4.1 (1.75)
I feel satisfaction when women feel better with my care.	1.3 (0.63)	1.3 (0.72)	1.1 (0.43)	1.2 (0.63)
If I realize that a woman is afraid, I spend time trying to reassure her.	1.7 (0.77)	1.8 (0.87)	1.6 (0.78)	1.7 (0.82)
I could step over hospital rules in order to help a woman.	3.2 (1.31)	3.3 (1.29)	3.5 (1.16)	3.3 (1.27)
I usually stay emotionally detached from the women, who are in my care.	4.2 (1.38)	4.4 (1.38)	4.0 (1.55)	4.3 (1.43)

*SD – standard deviation

Tab. 2. Agreement with the MES statements, according to the nationality (Means of Likert scale; 1 point-I totally agree, 6 points– I totally disagree)

MES statements	Mean Slovenian students n=63 (SD)*	Mean Belgium students n=68 (SD)*	Mean Polish students n=49 (SD)*	Mean Croatian students n= 51 (SD)*	Mean all participants N=231 (SD)*
I believe that empathy plays an important role in midwifery care.	1.1 (0.32)	1.4 (1.35)	1.1 (0.28)	1.3 (1.01)	1.2 (0.69)
Midwife should understand the emotional situation of the women and their families.	1.7 (0.84)	1.8 (0.96)	1.2 (0.42)	1.6 (1.28)	1.6 (0.94)
I can perceive the hidden feelings and thoughts of the women, whom I care for.	2.7 (0.77)	2.6 (1.01)	2.4 (0.76)	1.9 (0.66)	2.4 (0.86)
During colection of medical information it is not important to pay attention to women's feelings.	2.1 (1.33)	4.4 (1.79)	5.6 (0.83)	5.2 (1.54)	4.2 (2.00)
Woman's emotions do not concern me.	1.7 (0.84)	5.1 (1.17)	5.8 (0.63)	5.3 (1.28)	4.4 (1.95)
Women feel better when they sense that they are understood.	2.1 (1.33)	1.8 (0.99)	1.1 (0.28)	1.2 (0.76)	1.6 (1.03)
I recognize the body language of a woman.	2.1 (0.64)	2.3 (0.84)	2.4 (0.79)	1.9 (0.66)	2.2 (0.75)
Body language is not as important as verbal communication for the understanding of a woman's feelings.	3.1 (1.16)	4.7 (1.11)	4.3 (1.32)	5.1 (1.22)	4.3 (1.40)
I recognize when a woman is silent because of embarrassment.	2.2 (0.64)	2.5 (0.99)	2.4 (0.88)	2.1 (0.77)	2.3 (0.85)
I don't get emotionally affected when I see woman crying.	2.4 (1.19)	4.5 (1.28)	5.8 (0.78)	5.5 (0.99)	4.4 (1.73)
It is difficult for a midwife to see things from a woman's perspective.	2.8 (1.26)	4.2 (1.24)	5.2 (1.03)	4.9 (1.04)	4.2 (1.49)
I try to stand in the woman's shoes, so I can better understand her.	1.9 (0.66)	1.9 (1.09)	1.7 (0.71)	1.7 (0.70)	1.8 (0.83)
I show that I am willing to listen to the woman by sitting near to her.	2.2 (0.93)	2.4 (1.05)	1.8 (1.07)	1.6 (0.53)	2.1 (0.98)
I would spend time taking care of women after my work hours.	2.1 (1.05)	3.1 (1.30)	3.1 (1.48)	2.5 (1.43)	2.7 (1.37)
A midwife's touch encourages the woman.	2.1 (0.78)	2.3 (0.84)	2.8 (1.35)	1.6 (0.78)	2.2 (1.02)
I avoid touching the woman, who I care for, in order to keep a distance.	2.4 (1.13)	4.2 (1.22)	4.2 (1.23)	5.3 (0.75)	3.9 (1.51)
I think it is important to touch a woman, who I care for.	1.8 (0.71)	2.9 (1.16)	2.4 (1.13)	1.7 (0.91)	2.2 (1.11)
Very sensitive women irritate me.	2.5 (1.09)	4.9 (2.37)	5.1 (1.29)	5.3 (0.67)	4.4 (1.95)
There were times that I witnessed a woman crying and I got emotional.	2.0 (0.88)	2.5 (1.26)	1.8 (0.97)	1.6 (0.78)	2.0 (1.05)
Many times I left work and I kept thinking of a woman I was caring for.	2.1 (0.83)	2.7 (1.23)	2.0 (1.13)	1.7 (0.86)	2.2 (1.09)
I don't think it is part of my job to occupy myself with the problems of the woman I care for .	1.9 (1.13)	4.6 (1.15)	5.3 (1.02)	5.1 (1.00)	4.1 (1.75)
I feel satisfaction when women feel better with my care.	1.1 (0.36)	1.4 (0.85)	1.2 (0.72)	1.1 (0.33)	1.2 (0.63)
If I realize that a woman is afraid, I spend time trying to reassure her.	1.6 (0.61)	1.9 (0.98)	1.8 (0.96)	1.5 (0.54)	1.7 (0.82)
I could step over hospital rules in order to help a woman.	2.9 (0.87)	3.6 (1.31)	3.3 (1.49)	3.3 (1.31)	3.3 (1.27)
I usually stay emotionally detached from the women, who are in my care.	2.9 (1.20)	4.2 (1.19)	4.9 (1.10)	5.4 (0.72)	4.3 (1.43)
Total	**2.1**	**2.1**	**3.1**	**3,0**	**2.9**

*SD – standard deviation

Tab. 3. Scores on MES-R according to different years of study

MES-R results	Min score	Max score	Average score	SD
The 1st year of study (n= 83)	25	82	59.75	14.5
The 2nd year of study (n= 94)	31	93	55.20	14.7
The 3rd year of study (n= 54)	31	81	58.79	13.4

scale, on which1 point means disagreement and 5 points meant total agreement). The meant score for agreement with the statement "theoretical parts of the study, which are lectures and seminars, positively affect my empathic behaviour towards women" reached 3.69 (SD 1.17), while agreement with the statement "practical parts of the study,in clinical settings,positively affect my empathic behaviour towards women" reached a mean score of 4.01 (SD 0.96). Obviously, practice more profoundly shapes the attitudes of students. Therefore, it is crucial for students to have clinical mentors with values and beliefs that pose a role model for empathic behaviour. If clinical mentors are empathic towards women and students, students gain empathy.

The results of the study correlate with those of Vivilaki et al. [15]. However, their study included midwives who had already completed their studies and were professionally active, so the comparison of the findings is limited. On the contrary, Erdemoglu et al. researched empathy in midwifery students, using MES-R and also found high levels of empathy in midwifery students (63.64) [6]. However they also concluded that empathy explained only 16 % of the total variance in the caring behaviours of the midwifery students. They assume that other factors play an important role.

One study assumed is that theoretical parts of the study program as well can have an effect on the empathic behaviour of students. It is argued that faculties can use certain methods to teach empathy, such as 'medical memories' [17]. The multifactorial background of altruistic behaviour in midwifery has to be further researched. The debate over whether the course of study itself increases empathic behaviour, or whether it is the maturity of students that naturally develops during the course of study, has also not yet reached consensus [10]. A qualitative study would be

beneficial to assess the strengths of midwifery education programs from the students perspective.

There were some notable variations in how students included in the study, who were from the different institutions,perceive and value empathy in midwifery care, despite the fact that overall means were relatively similar. The study programs are unified with a European directive, which prescribes the amount of clinical practice, number of practical procedures and theoretical contents of the midwifery study. Therefore authors' assumption is that this reflects different cultural views, norms and values. Especially more autocratic healthcare systems might suppress empathic behaviours of midwives, since their caring behaviour can be subordinated by medicine.

The fact that students' responses from different institutions on certain MES statements differed highlights the need to adjust implementations of education and training for promotion of empathic behaviour.

It should be considered that empathy might also be a factor in the development of traumatic stress for midwives, which may cause the burnout. Therefore midwives must also be self-protective to some degree [19]. The profession itself can be emotionally demanding, which may pose a threat to midwives' mental health. Non-empathic behaviour can be considered a defence mechanism in order to preserve personal integrity. One of the strategies for preserving mental health of midwifery students might be the inclusion of mindful techniques in study programmes [24].

The main limitation of the study are small sample size. Although the final sample size of 231 respondents is adequate for some analyses, it is important to note that smaller samples from faculties in individual countries may not fully capture the diversity of midwifery students within those nations. First example is Slovenia, with only one faculty that accepts 30 students per year, so the sample included in the study were all students of the midwifery in the country, while in Belgium there are many midwifery schools, with a yearly intake of midwifery students in all faculties being 832, so 210 students included in the study, is only small proportion of midwifery students in Belgium. This limits possibilities for generalisation of the findings, although it still gives important insights and indicates the importance of more in-depth research in this field for the future.

It should be noted that although the same instrument was implemented across institutions from four European regions, comparisons regarding the year of study within individual institutions were not calculated due to significant differences in sample size. This limitation may affect the ability to draw year-specific insights or trends within each institution. Differences in samples also limit conclusions on specific cultural influences that might affect empathy levels. As the purposive sampling method was used, the sample may also not fully represent the entire population of midwifery students. Students who are more likely to participate in research or who feel more confident in their empathy skills might be over represented (selection bias), while those who might be less confident or less motivated to engage in such studies may be under-represented.

Midwifery departments are usually small, so it is difficult to create large samples in midwifery studies. Another chararcteristic of midwifery education is that male students are rare. Therefore gender demographic data were not collected. While this was done to protect the confidentiality of male students, it may also limit the ability to examine how different demographic characteristics of participants influence levels of empathy in midwifery students. The age of graduates was relatively the same in all countries, in a range of 18 to 23 years. All midwifery faculties where the survey was conducted accept students after the secondary school and offer 3-year, full-time programs. For the future studies it would be beneficial to gather also other demographic data, like place of residence of participants – rural/urban area, religion, etc. Demographic data would help to estimate whether some differences in empathy levels might be a result of demographic characteristics of participants rather than the educational program itself.

CONCLUSIONS

One of midwives' characteristics should be empathy and the aim of the study was to find out whether midwifery students in different study programmes, who live in different countries across Europe, have different levels of empathy. Through the study of the empathy of midwifery students of different educational institutions, who were representatives of four different European regions, we found no evidence to suggest that empathy levels significantly improved during the study. Empathy levels stayed almost the same in the 3rd year of the study as at entrance.

Similar mean scores on the MES between midwifery students from Brussels and Ljubljana and students from Rzeszow and Rijeka might indicate an effect of different cultural backgrounds that might play a role in healthcare systems, and the ability of health professionals to express empathic behaviour. It might be important to investigate whether such attitude is more common in western parts of Europe in comparison with less paternalistic model of healthcare system. Further research is needed to find out which elements of the study program play important roles in fostering empathy among midwifery students. Through identification of these elements specific suggestions for implementation of the study programs may be formulated.

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