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**Krzysztof Sobczak^{1,C-D}, Iwona Modrzejewska^{1,B}, Agata Rudnik^{2,C-D}, Weronika Kaminska^{3,E},
Agata Zdun-Ryzewska^{4,D-E}**

EDUCATION OF NURSES AND MIDWIVES: BARRIERS AND FACILITATORS TO THE DEVELOPMENT OF EMPATHY

Edukacja pielęgniarek i położnych: bariery i czynniki ułatwiające rozwój empatii

¹ Department of Sociology of Medicine & Social Pathology, Medical University of Gdansk, Poland

² Psychology, University of Gdansk, Poland

³ Sociology, University of Gdansk, Poland

⁴ Department of Quality of Life Research, Medical University of Gdansk, Poland

Krzysztof Sobczak -  0000-0002-8354-2299

Abstract (in Polish):

Cel pracy: Kompetencje odnośnie empatii nie są wystarczająco rozwijane podczas studiów. Wśród przyczyn takiego stanu rzeczy wymienia się braki i bariery pojawiające się w toku kształcenia. Celem badań była analiza wewnętrznych barier, których eliminacja mogłaby zwiększyć efektywność i jakość kształcenia oraz rozwój umiejętności miękkich wśród studentów pielęgniarstwa i położnictwa.

Materiał i metody: W badaniu wzięło udział łącznie 396 studentów pielęgniarstwa (N = 248) i położnictwa (N = 148). Studenci wypełnili test ilorazu empatii (EQ-40) oraz kwestionariusz, który składał się z testu wiedzy oraz pytań samoopisowych dotyczących empatii.

Wyniki: Aż 44,5% studentów nie potrafiło podać poprawnej definicji empatii. Tylko 49,5% z nich potrafiło poprawnie zidentyfikować przejawy zachowań empatycznych. 82,6% określiło się jako osoby raczej lub zdecydowanie empatyczne, mimo że w teście EQ 67,2% uczniów uzyskało wynik średni, a 11,2% niski. 2,5% uczniów to osoby z autyzmem wysokofunkcyjnym. Większość studentów

przyznała, że odczuwa ciągle zmęczenie z powodu zbyt wielu obowiązków (72,2%) i zaobserwowaliśmy dodatnią korelację między zmęczeniem a empatią.

Wnioski: Badania ujawniają trudności związane z operacjonalizacją zachowań empatycznych. Studenci byli znacznie mniej empatyczni niż wynikało to z samooceny deklaratywnej. Doświadczenie stresu i zmęczenia może wpływać na efektywność kształcenia w zakresie umiejętności miękkich. Praca w swoim zawodzie na początkowym etapie może być czynnikiem zwiększającym empatię, zaangażowanie i troskę w opiece nad pacjentem.

Abstract (in English):

Aim: Empathic competencies are not developed sufficiently during studies. Among the reasons for this, there are deficiencies and barriers which occur in the course of education. The purpose of research was to analyse internal barriers whose elimination could increase efficiency and quality of education and development of soft skills.

Material and methods: A total of 396 students of nursing (N = 248) and midwifery (N = 148) participated in the study. The students completed the Empathy Quotient test (EQ-40) as well as a questionnaire, which consisted of a knowledge test and self-description questions on empathy.

Results: As many as 44.5% of the students were not able to provide a correct definition of empathy. Only 49.5% of the students were able to identify signs of empathic behaviours correctly. 82.6% defined themselves as rather or definitely empathic people in spite of the fact, that in the EQ test 67.2% of the students received an average result and 11.2% a low one. 2.5% students are individuals with high-functioning autism. Most students admitted that they experience constant tiredness because they have too many responsibilities (72.2 %) and we observed a positive correlation between tiredness and empathy.

Conclusions: The research reveals difficulties connected with the operationalisation of empathic behaviours. Students were much less empathic than according to their declarative self-assessment. The experience of stress and tiredness may impact the effectiveness of education when it comes to soft skills. Work in their profession at the initial stage may be a factor which increases empathy, commitment and care in patient care.

Keywords (in Polish): empatia, student pielęgniarstwa, Edukacja medyczna, student położnictwa.

Keywords (in English): empathy, nursing student, medical education, midwife student.

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Edukacja pielęgniarek i położnych

Corresponding author

Krzysztof Sobczak

Department of Sociology of Medicine & Social Pathology, Medical University of Gdansk, Poland;

email: krzysztof.sobczak@gumed.edu.pl

Authors (short)

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Background: Empathic competencies are not developed sufficiently during studies. Among the reasons for this, there are deficiencies and barriers which occur in the course of education.

Objectives: The purpose of research was to analyse internal barriers whose elimination could increase efficiency and quality of education and development of soft skills.

Design: Cross-sectional.

Methods: A total of 396 students of nursing (N = 248) and midwifery (N = 148) participated in the study. The students completed the Empathy Quotient test (EQ-40) as well as a questionnaire, which consisted of a knowledge test and self-description questions on empathy.

Results: As many as 44.5% of the students were not able to provide a correct definition of empathy. Only 49.5% of the students were able to identify signs of empathic behaviours correctly. 82.6% defined themselves as rather or definitely empathic people in spite of the fact, that in the EQ test 67.2% of the students received an average result and 11.2% a low one. 2.5% students are individuals with high-functioning autism. Most students admitted that they experience constant tiredness because they have too many responsibilities (72.2 %) and we observed a positive correlation between tiredness and empathy.

Conclusions: The research reveals difficulties connected with the operationalisation of empathic behaviours. Students were much less empathic than according to their declarative self-assessment.

Impact statement: The experience of stress and tiredness may impact the effectiveness of education when it comes to soft skills. Work in their profession at the initial stage may be a factor which increases empathy, commitment and care in patient care.

Keywords: empathy; nursing student; midwifery students; medical education

Introduction

Empathy has a fundamental meaning in building relations between nurses, midwives, and patients they care for (Alhassan, 2019; Yang et al., 2020). It is a key skill thanks to which one can provide effective care focused on a patient (Omid et al., 2018). There are many reports which indicate the effectiveness of programs developing empathy and emotional intelligence during studies (Di Lorenzo et al., 2019; Gholamzadeh et al., 2018; Lutter et al., 2018). However, soft skills acquired during the course of education may be insufficient in the face of the expectations of clinical centres or patients themselves (Beaudoin et al., 1998; Li et al., 2019). Multiple research projects have revealed the tendency for empathy levels to erode in the course of medical education (Hojat et al., 2009; Pedersen, 2009). In order to counteract such unfavourable phenomenon, certain medical schools

made attempts to include empathy analysis into the process of candidate selection (O’Sullivan et al., 2017)

The concept of measuring the level of empathy as an additional psychological criterion that would be applied to screen the candidates for medical school is intriguing. Nonetheless, its implementation appears to have exacerbated the problem of staff shortages in the health service. Our intention was to refer to the issue of erosion of empathy levels during medical education of nurses and midwives. The purpose of our research was to analyse internal barriers whose elimination could increase efficiency and quality of education and development of soft skills in medical students. We also intended to identify and examine factors which could prevent erosion of empathy, or even promote its development, in students receiving medical education.

Methods

Study design

In the long term, our research project is supposed to contribute to creating a new pedagogical approach, thanks to which it will be possible to optimise the development of soft skills in medical schools. Therefore, the purpose of this initial study was the analysis of knowledge and subjective assessment of empathy levels in students of nursing and midwifery in relation to the scores which they got in the empathy test.

Setting

The research tool consisted of a demographic part, additional protocol with self-description questions based on the distribution of answers in the 5-point Likert scale and closed-ended questions concerning the knowledge of empathy. The empathy measurement was conducted with the use of the Empathy Quotients test in its short version, which consists of 40 questions (Baron-Cohen, 2015; Baron-Cohen & Wheelwright, 2004). We used the Polish version of the test (Jankowiak-Siuda et al., 2017). According to the division into classes proposed by the author of the Empathy Quotient, we assumed that for class I EQ is 0-32, for class II 33-51, for class III 52-63 and for class IV 64-80 (Baron-Cohen, 2015).

While analysing answers to the questions, which contained cafeterias in the form of Likert scale, we divided them into three groups. The first one contained the answers: “strongly disagree” and “somewhat disagree”, the second one contained neutral answers: “neither agree nor disagree”, the third: “strongly agree” and “somewhat agree”.

Participants

We conducted an analysis of the level of empathy in students of nursing (N = 248) and midwifery (N = 148). Among the participants of the study, 95% were women. First year students were the largest group of respondents (27.5%). The remaining years were represented by similar numbers of students (which were 17.7% for the 2nd year, 18.7% for the 3rd year, 17.9% for the 4th year and 18.2% for the 5th year). A significant majority of the respondents (68.3%) declared that their field of study was their first choice.

Ethical considerations

The students of the Medical University of Gdansk were asked to fill in anonymous survey questionnaires. Participation in the study was anonymous and voluntary. The project received a positive evaluation of the Ethics committee for Research Projects in the Institute of Psychology at the University of Gdansk (4/2019).

Statistical methods

The IBM Statistica 13.1 software was used for statistical analysis. We used the analysis of average and standard deviation. The distribution of density was conducted too. We used the ANOVA variance analysis to observe the mean between the groups. Student's t-test was used for comparing the two groups. Pearson's chi-squared test was used for analysing the correlations between discontinuous variables and the statistic heterogeneity of groups. In the study we also used Pearson's linear correlation coefficient. We assumed the difference for $p < 0.05$ as statistically important.

Results

The research showed that as many as 44.5% of the students were not able to provide a correct definition of empathy (N = 386). Only 49.5% of the students were able to identify the signs of empathic behaviours correctly. At the same time, 84% of the respondents (N = 364) declared that they could accurately recognise emotion in other people. 82.65% considered themselves rather or definitely empathic. Only 4.5% admitted they were not very empathic. When we asked the students about their socialization experience, as many as 27.8% revealed, that when they were children, their parents had not talked about emotion to them. 12.6% of the respondents were not able to provide answer referring to their experience in this respect.

To test the level of empathy, we used the EQ-40 test. Our study has revealed that 1% of the respondents had the highest level of empathy (class IV), 17.7% received a result above the average (class III). 67.2% of the respondents were on the average level (class II). Low level of empathy has been revealed in 14.2% students. According to the psychometric assumptions of the EQ-40 test, the result ≤ 20 points is received by people with Asperger Syndrome spectrum (AS) or High-Functioning Autism (HFA). Among the study participants, this result was received by 6 female students of nursing and 4 female students of midwifery.

We did not manage to confirm the relation between low level of empathy (class I in the EQ test), lack of knowledge about empathy ($\chi^2 = 0.271$; $df = 1$; $p = 0.602$) and the ability to indicate the right signs of empathic behaviours ($\chi^2 = 1.435$; $df = 1$; $p = 0.230$). Similarly, the high or average result in the EQ test (class IV and III) did not correlate with the knowledge of empathy ($\chi^2 = 0.333$; $df = 1$; $p = 0.563$) and the ability to recognise empathic behaviours ($\chi^2 = 0.159$; $df = 1$; $p = 0.690$).

The analysis of average distribution of empathy revealed similar results for both fields of study (M = 42.6, SD = 10.2 for nursing students and M = 42.2, SD = 9.4 for midwifery). It is worth noting that for the standardized values of the test, the average result for women is 47.2 (Baron-Cohen & Wheelwright, 2004).

Environmental factors are also linked to the level of empathy and emotional intelligence. After analysing this sphere, we have shown that most students experience constant tiredness because they have too many responsibilities (72.2%) and the level of their tiredness correlated positively with

declared empathy. We have noticed that the empathy quotient in the study group grew with the growing level of tiredness ($r = 0.1$, $p < 0.05$). It is worth noting that half of the respondents admitted that they combined studies with paid work. We have also noted that in the first year of study 26.6% of the students took up jobs during their education, in the second year 47.1% and in the third year 44.6%. Exactly 60% of the first year of the master's degree programme and 87.5% of students of the second year said that they combined studies with work. In reference to these variables, we have observed differences in the level of subjectively declared empathy between the group who did not work ($M = 3.98$, $SD = 0.89$) and the group of working students ($M = 4.27$, $SD = 0.76$). A statistically significant higher level of empathy occurred in the group of students who worked ($t = -3.47$, $p < 0.001$).

Discussion

In our study, we have revealed a deficiency in the students' knowledge and understanding of the notion of "empathy" and the operationalisation of empathic behaviours. Students overestimate their skills. They are much less empathic than they think. A factor of a systemic character may be the reason for this situation. Education in schools which train future medical professionals is still narrowed down to biomedical axiology. Developing knowledge and skills based on the "find it and fix it" way of thinking favours the technically skilled approach, the ability of prompt classification, diagnosing, and introducing therapeutic and care standards. However, this approach does not favour empathic behaviours (Ziółkowska-Rudowicz & Kładna, 2014). Students find out that empathy is a key competence in the professions of nursing and midwifery, but the "hidden agenda" is unfavourable for the development of this skill (Newton et al., 2008; Ward et al., 2012). The deficiencies connected with the students' own experiences seem to be an additional limitation. Over 40% of our respondents admitted that talking to their parents about emotion was not a sufficiently emphasized part of their socialization. As many studies point out, effective development of soft skills during the academic education is a very limited experience (Ferri et al., 2019). There are reports which point at wrong educational models of clinical apprenticeship. In those models, teachers, who by definition should present a model behaviour, do not show sensitivity through their activities (Beaudoin et al., 1998). In reference to these reports, we have noticed a slight change in the level of empathy after the third year of studies. Many studies indicate this pattern (Chen et al., 2012; Ferri et al., 2015). In our results, we have observed it only to a limited extent in students of nursing.

The students, who participated in our study, revealed a high level of tiredness which, among others, resulted from the necessity to combine their studies with paid work. However, during the analysis we noticed that the students who chose to combine their education with work have a higher level of empathy. Although we have not gathered data on where they worked, almost all the students of midwifery and nursing who participated in our study found employment in their profession. This may mean that professional experience, at least at the beginning of a career, is a factor which increases the level of empathy and compassion. Professional experience was pointed out as a significant factor in predicting empathy in nurses by, among others, Ghaedi et al. (Ghaedi et al., 2020). The combination of studying and caring for patients may be a source of stress which motivates for effective work and care (Gibbons et al., 2008). It is also worth noting that the bachelor programme curriculum emphasizes contents connected mainly with cognitive empathy. Taking up

the job of a nurse or a midwife, at least at its early stage, is connected with the tangible experience of a patient and participation in the autonomic responsibility for his or her condition. This perspective may be an empathising factor.

A reference should also be made to the social phenomenon of empathy regression. The decreasing level of empathy is a phenomenon which translates into educational processes (Konrath et al., 2011). In our opinion, the only effective measure which could improve the situation regarding this phenomenon in education of nurses and midwives would be an implementation of changes to the curriculum of the bachelor programme. They should be implemented at the early stage of the training and include learning to manage own emotion and stress (Gholamzadeh et al., 2018; Kavradım et al., 2019). The new pedagogy should include empathy and compassion training as well as mindfulness of own emotions (Beddoe & Murphy, 2004). During the clinical apprenticeship it is important to give the students a chance to develop and evaluate their own skills resulting from clinical experience (Cunico et al., 2012; Di Lorenzo et al., 2019). As we are aware of the fact that students of schools, which prepare for medical professions, experience additional factors which have negative impact on their psychosomatic functioning (among others, they witness various kinds of patients' suffering or even their death), it needs to be assumed that dedicated psychological counselling throughout the studies is necessary (Mitchell, 2018; Pacheco et al., 2017).

The results of our study need to be interpreted carefully. Aware of the advantages and limitations of quantitative research, we chose to use it in the project's first stage. Its aim was to analyse the densities and correlations between the level of empathy and the variables adapted in the study. Thanks to this, we have defined the directions of further exploration. We are aware that to achieve the adopted goal in the form of developing particular guidelines for a training programme in-depth studies are needed. Therefore, we are planning to enrich this perspective with qualitative research with the use of interpretative phenomenological analysis (IPA) (Smith et al., 2009).

Conclusions

In spite of the fact that empathy is one of the basic competences in patient care, a significant proportion of students did not understand the concept of empathy. The students had difficulties with the operationalisation of empathic behaviours in a theoretical model. Generally, students of nursing and midwifery turned out to be much less empathic than they self-assessment had suggested. The analysis of averages received in the EQ test revealed a relatively low level of empathy. In our opinion, many barriers, including the excessive stress and tiredness may translate into the effectiveness of training, also when it comes to operationalisation of soft skills. Beginning work after finishing BA studies may, on the other hand, be a factor which increases empathy, commitment and care in dealing with patients.

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Disclosure statement

The author reports no conflicts of interest in this work.

Data availability statement

The datasets used and analysed during the current study are available from the corresponding author on reasonable request.

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