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Original research article

Assessment of nursing students' perceptions of professional competencies in providing medical care to patients with intellectual disabilities: An international pilot study of students from the Czech Republic and Poland

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Abstract
Background: Individuals with intellectual disabilities experience inequalities in healthcare.
Aim: In this cross-sectional study, we aimed to analyse the perceived professional competencies of nursing students from two countries: the Czech Republic and Poland in relation to providing medical care for patients with intellectual disabilities.
Methods: Two closed self-report questionnaires were used to examine the relationships between students' competency, their attitudes toward keeping a social distance from individuals with intellectual disabilities in healthcare, and their participation in training related to this issue. The sample consisted of 208 nursing students from two countries: the Czech Republic and Poland.
Results: Relationships were observed between students' self-assessed competencies and their social distance. Additionally, training in the field of care and treatment of individuals with intellectual disabilities played a differing role.
Conclusion: The findings highlight the complexity of developing nursing competencies in providing medical care for patients with intellectual disabilities. They suggest the need for tailored, context-sensitive training programs, ongoing research to uncover additional influencing factors, and a supportive educational environment that encourages honest dialogue and self-assessment.

Keywords: Comparative study; Competencies; Healthcare; Intellectual disability; Nursing students

Introduction

Individuals with intellectual disabilities experience higher rates of mental disorders, physical health conditions (McBride et al., 2021), and multi-comorbidity burden at earlier age (Cooper et al., 2015) than the general population. As such, they are more likely to utilize medical services (Maltais et al., 2020). However, access to healthcare for people with intellectual disabilities is challenging (Ali et al., 2013). They experience various discriminatory practices and health inequalities (Carneiro et al., 2023), such as the failure to make necessary adjustments to services (Michael and Richardson, 2008), problems with communication, and healthcare professionals' stigmatizing attitudes, lack of knowledge, low levels of confidence in providing treatment, and inappropriate behavior (Ali et al., 2013; Alshammari et al., 2018; Pelleboer-Gunnink et al., 2017), as well as diagnostic overshadowing (Dell-Armo and Tassé, 2024). Many of these challenges could be reduced if healthcare professionals had high competencies in providing medical care for patients with intellectual disabilities. At the undergraduate level, clinical nurse specialist programs in intellectual disabilities are offered only in the United Kingdom and Ireland (Doody et al., 2023). In Poland and the Czech Republic there are no clinical nurse specialist programs in intellectual disabilities, and no dedicated, structured, required curricula addressing comprehensive care for people with intellectual disabilities. Consequently, we know little about nursing students' competencies in providing medical care for patients with intellectual disabilities: their current level and whether they are being developed. We believe that developing and examining these competencies (both in in-service and pre-service nurses) is important. Yet, nursing students' feelings and thoughts regarding providing care for patients with intellectual disabilities remain relatively unexplored (Rozani et al., 2024).

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Nursing students' competency in working with people with intellectual disabilities, and their social distance and attitudes towards people with intellectual disabilities

Nurse competence encompasses multiple attributes, including knowledge integration, experience, critical thinking, proficient skills, caring, communication, environment, motivation, and professionalism (Smith, 2012). In this manuscript, we use the term competency, which, although commonly used interchangeably with the term competence, is narrower and primarily involves task-based evaluation of job performance (Smith, 2012). To our knowledge, there is a dearth of research on nursing students' competencies in working with patients with intellectual disabilities. Available studies more often relate to comprehensive or evidence-based practice competencies (Saunders et al., 2019), competencies in working with more diverse groups, such as people with disabilities in general (e.g., Polikandrioti et al., 2020), or specific aspects of competencies, such as knowledge about people with intellectual disabilities or knowledge about legislative regulations regarding people with disabilities (e.g., Aydoğan and Çetin, 2018; Edwards et al., 2022; Girli et al., 2016). They do not always focus on nursing students, but also on students studying various healthcare-related courses, or other healthcare professionals. To give an example, Girli et al (2016), who conducted research with 1,766 students attending the faculties of education and faculty of health, indicated that the majority of their respondents were not knowledgeable about legislative regulations regarding people with disabilities.

There is evidence suggesting links between nursing students' competencies, and social distance and attitudes towards people with intellectual disabilities. Social distance refers to one's willingness to engage with individuals from different groups (Bogardus, 1959), while attitudes encompass cognitive, affective, and behavioral dimensions (Fishbein and Ajzen, 1972; ten Klooster et al., 2009).

Although positive attitudes towards people with intellectual disabilities have been reported (e.g., Gill et al., 2002), findings on nursing students' attitudes towards people with intellectual disabilities in comparison to other groups' attitudes remain inconsistent (ten Klooster et al., 2009), as they indicate either negative, stigmatizing attitudes (Au and Man, 2006; Hilalulla and Selvaraj, 2021; Sahin et al., 2020), or attitudes that are generally positive or more positive than in other groups; for example non-nursing students or the general population (Demirören et al., 2022; ten Klooster et al., 2009). Notably, nursing students more strongly endorsed the empowerment and similarity of people with intellectual disabilities compared to non-nursing students (ten Klooster et al., 2009).

Lack of experience and knowledge in caring for adults with intellectual disabilities – key components of students' competencies – leads to negative attitudes and emotions among nurses, such as discomfort, frustration, uncertainty, and fear, causing nurses to avoid contact with this patient group, ultimately affecting care quality (Desroches, 2019). In contrast, students with experience and greater knowledge tend to exhibit less social distance (Aydoğan and Çetin, 2018). Similarly, Huskin et al. (2018) found that regular contact reduced social distance. These results also correspond with qualitative findings which suggest that although nursing students with lived experiences caring for intellectually disabled people in psychiatric institutions found this task challenging, they developed a sense of compassion and a new way of looking at life (Temane et al., 2016).

The role of providing intellectual disability content within nursing courses

The United Nations (2006) Convention on the Rights of Persons with Disabilities emphasises equal healthcare access and the importance of training in ensuring equitable treatment for patients with intellectual disabilities (Article 25). Developing competencies in healthcare professionals, including future nurses, is crucial for ensuring this access. Nonetheless, as the analysis of curricula in various nursing schools confirms, these schools do not always provide content on intellectual disabilities (Trollor et al., 2018). This is despite evidence that intellectual disability-specific education, including evidence-based practice immersion, positively impacts nurses' attitudes, competencies, and skills (e.g., Demirören et al., 2022; Edwards et al., 2022; Gallagher-Ford et al., 2020; Sari et al., 2016). Research (Sari et al., 2016) suggests that knowledge about people with disabilities, including intellectual disabilities, which could be gained during such interventions, is related to more positive attitudes towards persons with intellectual disabilities.

Research aim

The subject of the research is the competencies of nursing students in providing medical care for patients with intellectual disabilities. The aim of the research was to analyse the perceived professional competencies of nursing students from two countries: the Czech Republic and Poland, in relation to providing medical care for patients with intellectual disabilities. Three research questions were formulated: How do the surveyed nursing students evaluate their preparation to provide healthcare for patients with intellectual disabilities? How does participation in training on the care and treatment of individuals with intellectual disabilities influence nursing students' perception of their own professional competencies in providing healthcare to such patients? What is the relationship between the evaluation of one's own competencies in providing healthcare to patients with intellectual disabilities and the social distance of the surveyed students towards such patients and recognizing their rights to medical services?

Materials and methods

The diagnostic survey method was used in the research. Data for analysis were collected through an online questionnaire presented to the surveyed students via a Google form (Google, Mountain View, CA, USA). The translation of the questionnaire items into English and Czech was conducted by the co-authors of the study. The research tools included: the Self-assess Competency in Working with Individuals with Intellectual Disabilities Scale (Competency Scale), the Distance Scale towards Patients with Intellectual Disabilities (Distance Scale), and a sociodemographic questionnaire. The Competency Scale for working with patients with intellectual disabilities was specifically constructed for students educated in medical fields. It consists of five statements describing a set of skills related to taking medical actions towards patients with intellectual disabilities. These statements are evaluated by the respondents on a five-point Likert scale (1 – lack of competence in the given area, 2 – low competence, 3 – average competence, 4 – high competence, 5 – very high competence). The reliability assessment showed high Cronbach's α coefficients (in the sample of students from the Czech Republic, it was 0.91; students from Poland – 0.93). The scale for perceiving the rights of patients with intellectual disabilities was specifically constructed

for students who are educated in medical fields and contained 14 statements evaluated by the respondents on a five-point Likert scale. During the validation process aimed at achieving the highest level of reliability, the number of scale items was reduced to six. Cronbach's α coefficients in the sample of students from the Czech Republic was 0.74; students from Poland – 0.79. The Distance Scale used in the current study was specifically developed to assess the declared readiness to accept a patient with intellectual disabilities in situations typical for hospitalisation, forming a continuum. As in the classic version developed by Bogardus, it involves determining the most comfortable distance for the respondent towards representatives of another group (Aiken, 2002, p. 28). Marody (1976, p.170) states that the results of this type of study contribute to establishing 'certain general tendencies around which the program for 'treating' the attitude object is crystallized'.

The respondent's task was to determine the intensity of acceptance in ten interpersonal situations on a five-point Likert scale. The scale achieved satisfactory reliability coefficients. Cronbach's α coefficients in the sample of Czech students were 0.71; Polish students – 0.77. Information obtained through the sociodemographic questionnaire, which included seven questions, was used to describe the study group.

The criterion for participation in the study was being a nursing student in Poland or the Czech Republic. A link to the survey questionnaire was provided to students with the approval of the university administration and through its communication channels.

Statistical analysis

The study group was described using the chi-square test, and the preliminary research results were presented by providing the mean, standard deviation, median, first quartile value, third quartile value, interquartile range (IQR), and minimum and maximum values. For the statistical analysis of the results of the perception scale of the rights of patients with intellectual disabilities, non-parametric tests were used. In measuring differences between groups of surveyed students from different countries, the Mann–Whitney *U* test was used. The effect size for the observed differences was calculated using Glass's biserial correlation coefficient statistic (rg). To measure differences between independent groups (nursing students who participated in courses preparing them to assist individuals with intellectual disabilities and nursing students who did not participate in such courses), the Mann–Whitney *U* test was used, and the effect size was determined based on Glass's biserial correlation coefficient (rg). In both cases, due to the non-parametric nature of the tests, the median and interquartile range (IQR) were used in the description of the research results. In measuring the relationship between the opinions on the rights of individuals with intellectual disabilities of the surveyed students and their interpersonal distance towards such patients, Spearman's rank correlation coefficient was used. All calculations were performed in Statistica version 13.3.

Ethical considerations

The study obtained approvals from two ethics committees of relevant universities in Poland and the Czech Republic [details hidden for peer review]. Respondents were provided with written and oral explanations regarding the study's aim and were reassured that their anonymity would be guaranteed, with no personal information gathered, and that the data obtained in the study would be used solely for scientific analysis.

Results

The study sample included 208 nursing students (Table 1) studying at medical universities or medical faculties of universities in two countries: the Czech Republic and Poland, including 190 (91.35%) women and 18 (8.65%) men.

Table 1. Characteristics of the group of surveyed nursing students

Characteristics of the study group	Nursing students from the Czech Republic (n = 88) n (/%)	Nursing students from Poland (n = 120) n (/%)	Total (N = 208) N (/%)
Gender			
female	78 (88.64)	112 (93.33)	190 (91.35)
male	10 (11.36)	8 (6.67)	18 (8.65)
	χ^2 = 1.417, df = 1, p = 0.234		
Age			
18–29	76 (86.36)	113 (94.17)	189 (90.87)
30 and more	12 (13.64)	7 (5.83)	19 (9.13)
	χ^2 = 3.724, df = 1, p = 0.054		
Study of year			
I–III	77 (87.50)	105 (87.50)	182 (87.50)
IV–V	11 (12.50)	15 (12.50)	26 (12.50)
	χ^2 = 0.00, df = 1, p = 1.000		
Have any of your friends or relatives been diagnosed with ID			
I don't know	0 (0.00)	0 (0.00)	0 (0.00)
yes	27 (30.68)	40 (33.33)	67 (32.21)
no	61 (69.32)	80 (66.67)	141 (67.79)
	χ^2 = 0.164, df = 1, p = 0.686		
Did you have a course /subject relating to working with people with intellectual disabilities at your university?			
yes	0 (0.00)	30 (25.00)	30 (14.42)
no	88 (100.00)	90 (75.00)	178 (85.58)
	χ^2 = 25.710, df = 1, p < 0.001		

The surveyed nursing student groups showed no significant differences in gender (χ^2 = 1.417, p = 0.234), age χ^2 = 3.724, p = 0.054), stage of education (χ^2 = 0.00, p = 1.000), or familiarity with individuals with intellectual disabilities (χ^2 = 0.164, p = 0.686). Most students were under 30 (86.36% students from the Czech Republic and 94.17% students from Poland), and in bachelor's or early-stage programs (87.50% in both countries). Also, in terms of having acquaintances or relatives with intellectual disabilities, there were no statistically significant differences between the two groups (χ^2 = 0.164, df = 1, p = 0.686). However, a significant difference was found in participation in university courses on intellectual disability care (χ^2 = 25.710, p < 0.001), with Czech students reporting no participation in such training.

The graphical presentation of students' perceptions of their competencies in working with patients with intellectual disabilities shows a wide variation in responses among students from the surveyed countries. The lower median value regarding the assessment of the health status of a patient with intellectual disabilities in the case of nursing students from the Czech Republic (Chart 1) is noteworthy, as is the higher median value in the group of students from Poland regarding the ability to assess the needs of a patient with intellectual disabilities. For the remaining scale items, median values do not differ, but the range of results is not the same (Charts 1, 2).

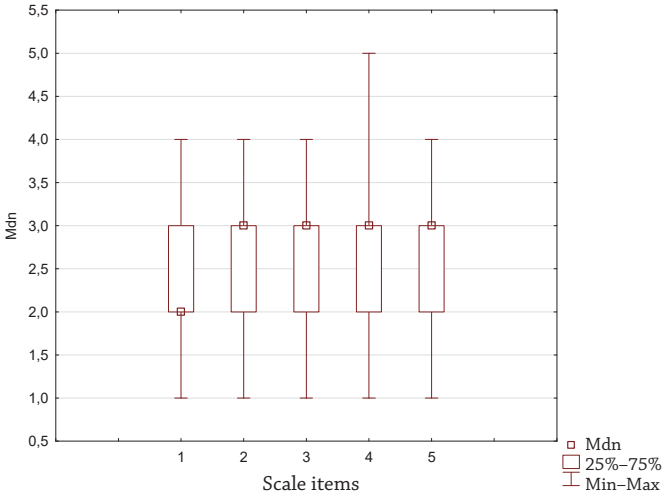

Chart 1. Competencies – responses of students from the Czech Republic

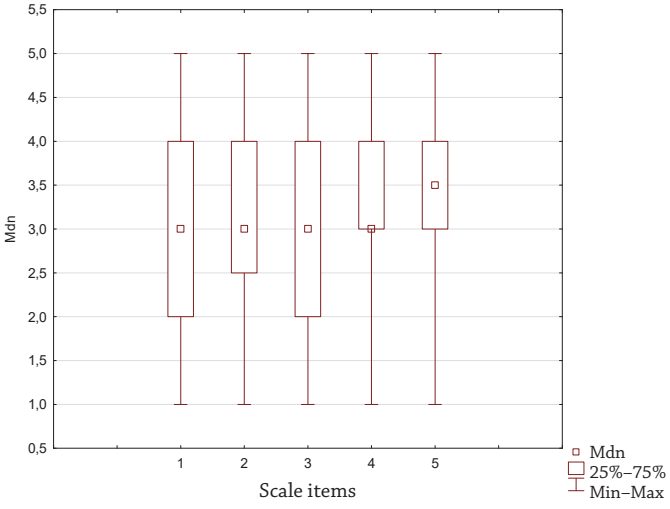

Chart 2. Competencies – responses of students from Poland

Based on the preliminary analysis of the entire study group (N = 208), without dividing into subgroups (based on the country), an average level of competency in working with a patient with intellectual disabilities was determined. While the surveyed students rated their competencies in communication with a patient with intellectual disabilities most positively (M = 3.11), the ability to assess the health status of a patient with intellectual disabilities within the scope of their specialty was rated the lowest (M = 2.70) (Table 2).

Since response profiles on the competency scale for working with patients with intellectual disabilities in all surveyed groups deviated from a normal distribution, non-parametric tests were used to estimate between-group differences.

The analysis shows significant differences between Czech and Polish students in self-assessed competencies for caring for patients with intellectual disabilities (Table 3). Students from the Czech Republic rated their own competencies in providing medical care for patients with intellectual disabilities lower than students from Poland.

Table 2. Descriptive statistics (N = 208)

Competencies in providing medical care for patients with intellectual disabilities	M	SD	Mdn	Q1	Q3	IQR	Min.	Max.
Conducting health assessments for patients with intellectual disabilities within the scope of my specialty	2.70	1.05	3.00	2.00	3.00	1.00	1.00	5.00
Cooperation with a patient with ID in the treatment process	2.87	1.07	3.00	2.00	3.00	1.00	1.00	5.00
Providing care for patients with ID within the scope of my specialty	3.00	1.07	3.00	2.00	4.00	2.00	1.00	5.00
Communication with a patient with ID	3.11	1.06	3.00	3.00	4.00	1.00	1.00	5.00
Assessment of the needs of a patient with ID	3.04	1.06	3.00	2.00	4.00	2.00	1.00	5.00

Note: M – mean, SD – standard deviation, Mdn – median, Q1 – first quartile (lower quartile), Q3 – third quartile (upper quartile), IQR – interquartile range, Min. – minimum value, Max. – maximum value

Table 3. Self-assessment of competencies in providing medical care for patients with intellectual disabilities in the surveyed students

Competencies in providing medical care for patients with intellectual disabilities	Nursing students from the Czech Republic (1)		Nursing students from Poland (2)		Z	*p*	r_g
	Mdn	IQR	Mdn	IQR			
Conducting health assessments for patients with ID within the scope of my specialty	2.00	1.00	3.00	2.00	–4.580	<0.000	0.35
Cooperation with a patient with ID in the treatment process	3.00	1.00	3.00	3.5	–4.714	<0.000	0.37
Providing care for patients with ID within the scope of my specialty	3.00	1.00	3.00	2.00	–4.037	<0.000	0.31
Communication with a patient with ID	3.00	1.00	3.00	1.00	–4.829	<0.000	0.37
Assessment of the needs of a patient with ID	3.00	1.00	3.00	1.00	–6.459	<0.000	0.50

Note: Mdn – median, IQR – interquartile range, ε2 – epsilon-squared statistic, Z – value of the Mann–Whitney *U* test, *p* – *p*-value, r_g – Glass's biserial correlation coefficient

The effect size, indicating the strength of the association between group membership and competency evaluation, was moderate (r_g = 0.31–0.50). It was highest in the case of the ability to assess the needs of a patient with intellectual disabilities (r_g = 0.50), which may be a particularly valuable practical guideline for developing specific strategies to increase nursing students' awareness of the needs of patients with intellectual disabilities.

A comparative analysis of competencies in providing medical care for patients with intellectual disabilities between students who participated in courses on providing medical assistance to individuals with intellectual disabilities (*n* = 30) and students who did not participate in such training (*n* = 178) revealed a statistically significant difference in favour of students who participated in the training. The results presented in Table 4 indicate that students who completed specialised courses rate their competencies in providing medical care for patients with intellectual disabilities higher.

The impact of completing training in the care of patients with intellectual disabilities on the assessment of competencies among the surveyed students was found to be moderate (most rg values ranged from 0.31 to 0.50), and weak (in the case of communication skills with patients with intellectual disabilities). The generally higher scores among the surveyed students in this area (Table 2) likely reduce the significance of training participation for the development of communication skills.

An analysis of correlation coefficients indicates a relationship between the evaluation of one's own competencies in providing medical care for patients with intellectual disabilities and distance in relationships with such patients among students from Poland (r_S = 0.20, $p < 0.05$). More detailed analyses can be seen in Table 5. Also, when analysing the relationship between the evaluation of one's own competencies in providing medical care for patients with intellectual disabilities and recognising the rights of patients with such disabilities (Table 6), a significant correlation was only found in the group of students from Poland (r_S = 0.31, $p < 0.05$).

Table 4. Competencies of nursing students with and without specialised training in providing medical care for patients with intellectual disabilities

Competencies in providing medical care for patients with intellectual disabilities	Nursing students who did not participate in courses preparing them to support individuals with ID (*n* = 178) (1)		Nursing students who participated in courses preparing them to support individuals with ID (*n* = 30) (2)		Z	*p*	r_g
	Mdn	IQR	Mdn	IQR			
Conducting health assessments for patients with ID within the scope of my specialty	3.00	1.00	3.00	1.00	–3.655	<0.000	0.40
Cooperation with a patient with ID in the treatment process	3.00	1.00	3.00	1.00	–3.227	0.001	0.35
Providing care for patients with ID within the scope of my specialty	3.00	1.00	4.00	2.00	–3.396	0.001	0.37
Communication with a patient with ID	3.00	2.00	3.00	2.00	–2.537	0.011	0.27
Assessment of the needs of a patient with ID	3.00	2.00	4.00	2.00	–3.735	<0.000	0.41

Note: Z – value of the Mann–Whitney *U* test, *p* – *p*-value, r_g – Glass's biserial correlation coefficient

Table 5. Relationship between self-evaluation of competencies and social distance toward patients with intellectual disabilities among surveyed nursing students

Competencies in providing medical care for patients with intellectual disabilities	Nursing students from the Czech Republic (1)	Nursing students from Poland (2)
Conducting health assessments for patients with ID within the scope of my specialty	0.12	0.09
Cooperation with a patient with ID in the treatment process	0.13	0.14
Providing care for patients with ID within the scope of my specialty	0.14	0.21*
Communication with a patient with ID	0.18	0.22*
Assessment of the needs of a patient with ID	0.19	0.12

Note: * $p < 0.05$

Table 6. Relationship between self-evaluation of competencies and recognition of patient rights for individuals with intellectual disabilities among surveyed nursing students

Competencies in providing medical care for patients with intellectual disabilities	Nursing students from the Czech Republic (1)	Nursing students from Poland (2)
Conducting health assessments for patients with ID within the scope of my specialty	–0.10	0.33*
Cooperation with a patient with ID in the treatment process	–0.03	0.23*
Providing care for patients with ID within the scope of my specialty	–0.06	0.27*
Communication with a patient with ID	0.06	0.25*
Assessment of the needs of a patient with ID	–0.10	0.18*

Note: * $p < 0.05$

In both cases, the correlations are positive. Particularly in the case of recognising the rights of patients with intellectual disabilities, where the association with a higher self-assessment of competencies to provide medical services to such patients seems natural and consistent. As for the correlations between competencies and social distance toward patients with disabilities (measured using a scale with positive statements that express acceptance of patients with intellectual disabilities in various interpersonal situations within healthcare settings), the competencies most strongly associated with social distance were communication and caregiving skills. No statistically significant relationship was found between these variables ($r_S = 0.15$) among students from the Czech Republic.

Discussion

Our results show that nursing students from both countries perceive their competencies in working with patients with intellectual disabilities as average, with notable differences influenced by local legislation, resource availability, and societal attitudes.

Consistent with earlier research (e.g., Demirören et al., 2022; Edwards et al., 2022; Rozani et al., 2024), the current study indicates that participation in courses on providing medical assistance to individuals with intellectual disabilities contributed to a positive evaluation of one's own competencies in all analysed areas. This could be one of the main reasons students from the Czech Republic rated their own competencies in caring for patients with intellectual disabilities lower than students from Poland. Others may be connected with differences in the structure and focus of medical curricula between the two countries, as well as varying levels of exposure to clinical practice involving individuals with intellectual disabilities during training. Additionally, cultural attitudes and societal perceptions toward intellectual disabilities could play a role, potentially influencing students' confidence and self-assessment of their competencies in this area.

The results of the analysis of the correlations between the evaluation of one's own competencies in providing medical care for patients with intellectual disabilities and social distance in relationships, as well as between the evaluation of one's own competencies in providing medical care for patients with intellectual disabilities and recognising the rights of patients with such disabilities, suggest that such a relationship may exist and may play a significant role in developing the competencies of future nurses towards patients with intellectual disabilities. This is in line with prior research (Aydoğan and Çetin, 2018; Desroches, 2019; Doody et al., 2022; Huskin et al., 2018; Rozani et al., 2024) that suggests correlations between students' social distance, attitudes and perceptions, and their experience, knowledge and behaviours in the healthcare setting. For example, Rozani et al. (2024) indicate a positive correlation between high levels of perceived competence in providing care for people with intellectual disabilities and positive emotions and thoughts. Although, as they explain, competence was not an explanatory variable of professional behaviour in the final regression. We believe that the training needs of different groups may vary significantly.

Implications for practice and further research

The findings have several implications for the education and training of nursing students in relation to working with patients with intellectual disabilities. Consistent with prior research (e.g., Demirören et al., 2022; Edwards et al., 2022; Rozani et al., 2024), this study indicates that to develop quality professional skills for caring for people with intellectual disabilities, nursing educators should provide trainings related to working with people with intellectual disabilities. Given the variation in the self-evaluation of competencies, we suggest developing personalised training programs that address individual differences in competencies. Some students may re-

quire more intensive or specialised training to feel competent in working with this patient group.

As students rate their competencies to be average, there is room for improvement. Educational institutions should aim to elevate these competencies from average to above average by enhancing curriculum content and practical training experiences. This is supported by a study emphasising that integrated training in public healthcare can effectively improve nursing students' confidence and competencies (Mendes Kiik et al., 2022).

These programs should be tailored to address these local differences, including specific legal and resource-based constraints, as well as cultural stereotypes. Specialised courses on intellectual disabilities have a positive effect on students' self-evaluations of their competencies, which underscores the importance of integrating such courses into nursing curricula to improve confidence and skills in this area. Bearing in mind the relationship between competencies and social distance, we also believe that training programs should emphasise the importance of social relationships and the recognition of patients' rights. Addressing these aspects can enhance students' overall competencies and foster a more inclusive and empathetic approach to patient care.

Effective competency development likely requires a multifaceted approach, integrating legal knowledge, relationship-building, and other factors. Correlation analysis suggests potential pathways for improving nursing students' competencies in caring for patients with intellectual disabilities. Training on legal status and relationship-building can complement each other in enhancing professional skills. Low correlation coefficients indicate the need for further research to identify additional influencing factors. The absence of training in Czech students highlights the need for consistent training opportunities across regions.

Conclusion

These findings emphasise the need for tailored training programs that address regional disparities in curricula and clinical exposure, ensuring nurses are well-prepared to care for patients with intellectual disabilities.

Limitations

The study is not without limitations. Due to its cross-sectional nature, it is impossible to determine the direction of the associations between the variables. A longitudinal study would be necessary to establish causality. Differences in educational backgrounds and social norms may have influenced the responses. Future research should explore these factors further, ensuring an open environment for honest student feedback.

Ethical aspects and conflict of interest

The authors have no conflict of interest to declare.

References

1. Aiken LR (2002). Attitudes and related psychosocial constructs: Theories, assessment, and research. Sage Publications, Inc. 144 p. DOI: 10.4135/9781452233659.
2. Ali A, Scior K, Ratti V, Strydom A, King M, Hassiotis A (2013). Discrimination and other barriers to accessing health care: Perspectives of patients with mild and moderate intellectual disability and their carers. Plos One 8(8): e70855. DOI: 10.1371/journal.pone.0070855.
3. Alshammari M, Doody O, Richardson I (2018). Barriers to the access and use of health information by individuals with intellectual and developmental disability IDD: A Review of the Literature. In: 2018 IEEE International Conference on Healthcare Informatics (ICHI), (pp. 294–298). DOI: 10.1109/ICHI.2018.00040.
4. Au KW, Man DW (2006). Attitudes toward people with disabilities: a comparison between health care professionals and students. Int J Rehabil Res 29(2): 155–160. DOI: 10.1097/01.mrr.0000210048.09668.ab.
5. Aydoğan C, Çetin H (2018). Social distance of undergraduate nursing students towards individuals with intellectual disability. Hitit University Journal of Social Sciences Institute 11(1): 665–682. DOI: 10.17218/hititsosbil.408463.
6. Bogardus ES (1959). Social Distance. Yellow Springs, Ohio: Antioch Press.
7. Carneiro L, Ćwirynkało K, Vaicekauskaite R, Dogan S, Kowalczyk O, Wells J (2023). The management of cancer and depression in people with intellectual disabilities. In: Carneiro L, Schuch F (Eds). Combining exercise and psychotherapy to treat mental health (pp. 22–62). Hershey: IGI Global. DOI: 10.4018/978-1-6684-6040-5.ch002.
8. Cooper SA, McLean G, Guthrie B, McConnachie A, Mercer S, Sullivan F, Morrison J (2015). Multiple physical and mental health comorbidity in adults with intellectual disabilities: Population-based cross-sectional analysis. BMC Fam Pract 16: 110. DOI: 10.1186/s12875-015-0329-3.
9. Dell-Armo K, Tassé MJ (2024). Diagnostic Overshadowing of Psychological Disorders in People With Intellectual Disability: A Systematic Review. Am J Intellect Dev Disabil 129(2): 116–134. DOI: 10.1352/1944-7558-129.2.116.
10. Demirören N, Su S, Basit G (2022). The effect of advocacy education of nursing students on attitudes towards disability: a quasi-experimental study. Int J Nurs Educ Scholarsh 19(1). DOI: 10.1515/ijnes-2021-0164.
11. Desroches M (2019). Nurses' attitudes, beliefs, and emotions toward caring for adults with intellectual disabilities: An integrative review. Nurs Forum 55(2): 211–222. DOI: 10.1111/nuf.12418.
12. Doody O, Hennessy T, Moloney M, Lyons R, Bright AM (2023). The value and contribution of intellectual disability nurses/nurses caring for people with intellectual disability in intellectual disability settings: A scoping review. J Clin Nurs 32(9–10): 1993–2040. DOI: 10.1111/jocn.16289.
13. Doody O, Meskell P, Murphy-Tighe S, Noonan M, Kingston L (2022). Fourth year intellectual disability student nurses' journey and future work intention: a qualitative study. BMC Nurs 21(1): 220. DOI: 10.1186/s12912-022-01007-9.
14. Edwards AP, Cron S, Shonk C (2022). Comparative effects of disability education on attitudes, knowledge and skills of baccalaureate nursing students. Nurse Educ Pract 61: 103330. DOI: 10.1016/j.nepr.2022.103330.
15. Fishbein M, Ajzen I (1972). Attitudes and Opinions. Annu Rev Psychol 23(1): 487–544. DOI: 10.1146/annurev.ps.23.020172.002415.
16. Gallagher-Ford L, Koshy Thomas B, Connor L, Sinnott LT, Melnyk BM (2020). The effects of an intensive evidence-based practice educational and skills building program on EBP competency and attributes. Worldviews Evid Based Nurs 17(1): 71–81. DOI: 10.1111/wvn.12397.
17. Gill F, Stenfert-Kroese B, Rose J (2002). General practitioners' attitudes to patients who have learning disabilities. Psychol Med 32(8): 1445–1455. DOI: 10.1017/S0033291702006608.
18. Girli A, Sarı HY, Kırkım G, Narin S (2016). University students' attitudes towards disability and their views on discrimination. Int J Dev Disabil 62(2): 98–107. DOI: 10.1179/2047387715Y.0000000008.
19. Hilalulla KB, Selvaraj P (2021). Attitude of student professionals towards persons with disabilities. Int J Soc Sci Manag 8(1): 306–311. DOI: 10.3126/ijssm.v8i1.34125.

20. Huskin PR, Reiser-Robbins C, Kwon S (2018). Attitudes of Undergraduate Students Toward Persons With Disabilities: Exploring Effects of Contact Experience on Social Distance Across Ten Disability Types. Rehabil Couns Bull 62(1): 53–63. DOI: 10.1177/0034355217727600.
21. Maltais J, Morin D, Tassé MJ (2020). Healthcare services utilization among people with intellectual disability and comparison with the general population. J Appl Res Intellect Disab 33(3): 552–564. DOI: 10.1111/jar.12698.
22. Marody M (1976). Sens teoretyczny a sens empiryczny pojęcia postawy: analiza metodologiczna zasad doboru wskaźników w badaniach nad postawami. [The Theoretical Sense and the Empirical Sense of the Concept of Attitudes: A Methodological Analysis of the Principles for Selecting Indicators in Attitude Research]. Państwowe Wydawnictwo Naukowe, 224 p.
23. McBride O, Heslop P, Glover G, Taggart T, Hanna-Trainor L, Shevlin M, Murphy J (2021). Prevalence estimation of intellectual disability using national administrative and household survey data: the importance of survey question specificity. Int J Popul Data Sci 6(1): 1342. DOI: 10.23889/ijpds.v6i1.1342.
24. Mendes Kiik S, Nuwa MS, Betan Y, Riti IF (2022). Improving nursing student self-confidence and competence through integrated public health care training. Kontakt 24(1): 43–47. DOI: 10.32725/kont.2022.003.
25. Michael J, Richardson A (2008). Healthcare for All: The Independent Inquiry into Access to Healthcare for People with Learning Disabilities. Tizard Learn Disab Rev 13(4): 28–34. DOI: 10.1108/13595474200800036.
26. Pelleboer-Gunnink HA, Van Oorsouw WMWJ, Van Weeghel J, Embregts PJCM (2017). Mainstream health professionals' stigmatising attitudes towards people with intellectual disabilities: a systematic review. J Intellect Disabil Res 61(5): 411–434. DOI: 10.1111/jir.12353.
27. Polikandrioti M, Govina O, Vasilopoulos G, Adamakidou T, Plakas S, Kalemikerakis I, et al. (2020). Nursing students' attitudes towards people with disabilities. Int J Caring Sci 13(1): 480–488.
28. Rozani V, Zur-Peled S, Aharon AA (2024). Caring for people with intellectual disabilities: Insights from a cross-sectional study among nursing students. Nurse Educ Today 138: 106187. DOI: 10.1016/j.nedt.2024.106187.
29. Sahin OO, Onan N, Sen GK (2020). Stigma tendencies of nursing students towards children with disabilities: A cross-sectional study. Int J Caring Sci 13(3): 1563.
30. Sari HY, Çitak EA, Uysal N, Yılmaz E (2016). Attitudes of nursing students towards people with disabilities. Learning Disability Practice 19(1): 27–30. DOI: 10.7748/ldp.19.1.27.s22.
31. Saunders H, Gallagher-Ford L, Kvist T, Vehviläinen-Julkunen K (2019). Practicing healthcare professionals' evidence-based practice competencies: an overview of systematic reviews. Worldviews Evid Based Nurs 16(3): 176–185. DOI: 10.1111/wvn.12363.
32. Smith SA (2012). Nurse competence: A concept analysis. Int J Nurs Knowl 23(3): 172–182. DOI: 10.1111/j.2047-3095.2012.01225.x.
33. Temane A, Simelane L, Poggenpoel M, Myburgh CPH (2016). Lived experiences of student nurses caring for intellectually disabled people in a public psychiatric institution. Curationis 39(1): 1601. DOI: 10.4102/curationis.v39i1.1601.
34. ten Klooster PM, Dannenberg JW, Taal E, Burger G, Rasker JJ (2009). Attitudes towards people with physical or intellectual disabilities: nursing students and non-nursing peers. J Adv Nurs 65(12): 2562–2573. DOI: 10.1111/j.1365-2648.2009.05146.x.
35. Trollor JN, Eagleson C, Turner B, Salomon C, Cashin A, Iacono T, et al. (2018). Intellectual disability content within pre-registration nursing curriculum: How is it taught? Nurse Educ Today 69: 48–52. DOI: 10.1016/j.nedt.2018.07.002.
36. United Nations (2006). Convention on the Rights of Persons with Disabilities. Treaty Series, 2515, 3.