# Pielęgniarstwo w opiece długoterminowej Kwartalnik międzynarodowy

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# THE IMPORTANCE OF COMPETENCE IN THE PROFESSIONAL WORK OF NURSES

# Znaczenie kompetencji w pracy zawodowej pielęgniarek

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#### **Abstract (in Polish):**

Cel pracy: Celem pracy było określenie znaczenia kompetencji społecznych, osobistych i organizacyjnych w pracy zawodowej ankietowanych pielęgniarek.

Materiał i metody: Badania przeprowadzono w okresie od października 2022 r. do stycznia 2023 roku w grupie 150 respondentów pracujących w zawodzie pielęgniarki/pielęgniarzy na różnych stanowiskach pracy w szpitalu powiatowym w Polsce. Narzędziem badawczym był Kwestionariusz Samooceny Kompetentnego Działania (KSKD), który składał się trzech pytań dotyczących danych socjodemograficznych oraz z 90 stwierdzeń opisujących sposób, w jaki można zachowywać się w pracy. Analizę przeprowadzono z zastosowaniem testu Chi-kwadrat na niezależność zmiennych. Siłą związku określono przy pomocy współczynniki tj.: Phi oraz V Kramera. Wykorzystano statystyki opisowe (procent, średnia i odchylenie standardowe), statystyki analityczne (test Manna-Whitneya, test Kruskala-Wallisa oraz współczynnik korelacji Spearmana). Gdy zmienne miały charakter porządkowy

wykorzystano współczynniki: Tau-b Kendalla oraz Tau-c Kendalla. Weryfikacja hipotez statystycznych została przeprowadzona na poziomie istotności p≤0,05.

Wyniki: Płeć nie wpływa na ocenę posiadanych kompetencji w zakresie społecznym, ale ma wpływ na ocenę posiadanych kompetencji w zakresie adaptowania się do zmian. Starsze wiekiem pielęgniarki najwyżej oceniają posiadane kompetencje w zakresie dążenia do rezultatów i w kompetencjach planowania i organizowania. W zakresie radzenia sobie ze stresem badane pielęgniarki w wieku od 31 do 40 lat najwyżej oceniają swoje kompetencje.

Wnioski: Wyniki zaprezentowanych badań pozwalają przyjąć, że wykształcenie i rozwój zawodowy pielęgniarek odgrywa istotną rolę w ocenie pielęgniarskich kompetencji. Osiągnięcie wysokiego poziomu kompetencji wśród pielęgniarek ma pozytywny wpływ na jakość opieki w placówkach opieki zdrowotnej.

## **Abstract (in English):**

Aim: The aim of our study was to determine the importance of social, personal and organizational competences in the professional work of the surveyed nurses.

Material and methods: The research was conducted in the period from October 2022 to January 2023 to a group of 150 respondents working as a nurse/nurses at various job positions in a district hospital in Poland. The research tool was the Self-Assessment Questionnaire for Competent Action (KSKD), which consisted of three questions regarding sociodemographic data and 90 statements describing how to behave at work. The analysis was performed using the Chi-square test for independence of variables. The strength of the relationship was determined using the coefficients, i.e. Phi and Kramer's V. When the variables were ordinal, the following coefficients were used: Kendall's Tau-b and Kendall's Tau-c. The statistical hypotheses were verified at the significance level of  $p \le 0,05$ .

Results: Gender does not affect the assessment of one's social competence, but it does affect the assessment of one's competence in adapting to change. Older nurses rated their possessed competencies highest in striving for results and in planning and organizing. In the area of coping with stress, the nurses surveyed between the ages of 31 and 40 rate their competencies highest.

Conclusions: The results of the presented research allow us to assume that the education and professional development of nurses plays an important role in the assessment of nursing competence. Achieving a high level of competence among nurses has a positive impact on the quality of care in healthcare facilities.

**Keywords** (in Polish): pielęgniarstwo, pielęgniarka, kompetencje.

**Keywords** (in English): nursing, nurse, competencies.

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#### Introduction

The definition of competence is considered and presented from different angles and by different sciences by, among others, sociologists - they recognize that competence is closely related to society and career progression - or by lawyers, for whom competence is closely synonymous with qualifications confirmed by earned diplomas or certificates [1]. Competence is defined as "an experience of fitness, skill and intelligence in the performance of tasks, undisturbed by infantile inferiority to supposedly more competent people" [2,3].

Social competencies are behavioral in nature, they are complex skills and behaviors of a social nature that determine efficient behavior in social situations. From an early age, humans learn social skills from their surroundings from loved ones and during social, family and work experiences in interaction with others. This is the natural training of social skills. The formation of competence most often takes place with the help of trial and error and imitation of socially competent role models. Social skills are also formed during the implementation of nursing education programs [4].

There are factors that determine whether a person has chosen the right profession. These factors are called hard and soft interpersonal competencies. Professional skills and qualifications are referred to as hard competencies. On the other hand, the character traits possessed by a person and the skills one possesses to adapt to the community are called soft competencies. They can be divided into psychological ones relating to oneself: e.g. the ability to organize and plan one's own work or deal with stress, and social ones in relation to other people, i.e. establishing relationships, the ability to integrate into a group or lead a team [5, 6, 7].

Competency is the application of knowledge, interpersonal, decision-making and psychomotor skills that are desired and expected in the nursing profession in the context of public health, social care and patient safety. Competency can also be defined as a formal set of skills, abilities or aptitudes of a professional nurse. Competency development is the method by which a nurse receives, maintains and improves her knowledge, skills and qualifications [8, 9, 10]. Nursing competence is a complex concept that is difficult to define and evaluate. Competencies emphasize the knowledge, skills and behaviors that are required for nurses to succeed in their careers [11].

In the literature, soft skills are also called interpersonal, social, psychosocial or transdisciplinary. These skills include dealing with difficult situations, self-presentation, assertiveness, working with or leading people. Most employers, when recruiting, pay attention to whether their future

employees possess qualities that are useful for the position. Hard competencies are also referred to as functional, specialized or technical skills. These competencies are the substantive knowledge and skills possessed that are necessary to perform the work of the position [12,13]. Social competence is defined as practical knowledge of something, proficiency in something, ability to do something, i.e. predisposition to easily master certain skills, acquire knowledge, learn. The field of social competence is closely related to the use of professional skills in a social environment [14]. In the nursing profession, social competence plays an important role due to the regulation of processes that involve self-creation. Thanks to them, it becomes possible to improve interpersonal relations, which is determined not only by efficient communication, but also by the process of getting to know other people or influencing them. The formation of social competence in the professional group of nurses begins already at the stage of studies [15]. The current system of higher education in Poland assumes a context of lifelong education in the area of recognition of knowledge, skills and social competence. The Regulation lists ten expected social competencies in the nursing profession and emphasizes that it is extremely important to combine "hard" elements, i.e. substantive in terms of knowledge and skills, with "soft" elements, i.e. interpersonal [16].

As studies indicate, nurses have ceased to be considered support staff and have become members of therapeutic teams. This is associated with an increase in the number of tasks they perform and the higher demands placed on them, i.e. new hard and soft competencies [17]. In the work of a nurse, it is also important to have adequate emotional competence. This is the ability to identify emotions, change them, and use them in communication with patients and colleagues [18].

Social competencies are important for medical personnel, it is thanks to them that a person is able to respond correctly in dealing with others in a confident and appropriate manner. They make it possible to meet both the needs of the nurse and the patients under their care at any given time. These skills consist of temperament, character and social integration. This type of personal competence contributes to strengthening relationships that affect well-being and self-creation. What interpersonal competencies a nurse should have also depends on their various social roles, e.g.: caring role or communication role [19,20].

Research on the catalog of relevant competencies of nurses has been conducted not only in Poland, but also in many countries around the world. One of the first studies was conducted by Yura and Walsh in 1967, which identified the following types of nurses' competencies: intellectual, interpersonal and technical skills. Norman, on the other hand, in 1985, divided nurses' qualifications into two groups of technical skills and clinical competencies, in which he listed knowledge, understanding, problem-solving skills and clinical attributes, among others [21]. Researchers list competencies that are expected to be important not only now, but also in the future, i.e.: emotional intelligence, processing large amounts of information, seeing tasks through to completion, concentrating and selecting information, adapting to new conditions, creativity, innovation, self-reliance, multitasking, awareness of one's strengths and weaknesses, handling surprising and difficult situations, coping with stress, work experience in the industry, building good relationships, teamwork, systematicity, turning ideas into action, and openness to the ideas and knowledge of others. Virtually all of these qualities should be possessed by nurses, and most of them were examined in this study [22,23,24]. Competence is the integration of knowledge, skills and attitudes. A nurse's competence also improves the quality of nursing care and reduces the incidence of nursing care omissions [25].

Andersson et al. believe that in order to maintain patient safety, reduce the risk of burnout and staff turnover, and contribute to work sustainability, strategies leading to the sharing of competencies among nurses as well as efforts to develop competencies are needed [26] and a systematic assessment of nurses' competencies and related factors is essential for improving the quality of nursing care [27]. **The aim of our study** was to determine the importance of social, personal and organizational competences in the professional work of the surveyed nurses.

Material and methods In the present study, a survey was conducted among nurses employed in various positions of one district hospital in Podkarpackie voivodeship, Poland. The authors of the study assumed to conduct a survey among a group of nurses employed at the same hospital and to provide subjective opinions on the competencies they possess that are relevant to their work at different career levels. The facility hosts clinical classes for nursing students. A diagnostic survey method was used. Questionnaires of 200 surveys were left in nursing rooms with a request for completion, out of which 164 were returned and 150 were qualified for final analysis due to missing responses. The authors assumed that the criterion for inclusion in the study was full-time employment in hospital wards and the profession of nursing. Although men make up a negligible portion of the nursing staff, it was decided not to exclude them from the study. The sample size was 41.4% of the nursing staff. The study included unit nurses (so-called practice nurses), coordinating nurses who constitute the auxiliary management staff, and ward nurses who organize the work of subordinate staff. The exclusion criterion was lack of consent to participate in the study. The study was conducted between October 2022 and January 2023. It was voluntary and anonymous. Nurses' participation in the study was voluntary and anonymous. Informed consent was obtained from all subjects. The study was conducted in accordance with the ethical standards set forth in the Declaration of Helsinki (64th WmA General Assembly, Fortaleza, Brazil, October 2013) and in accordance with Polish legal regulations. The study received consent from the Bioethics Committee of the State Academy of Applied Sciences in Przemyśl (KBPANS 8/2022).

#### **Instruments**

Data was collected using the unstandardized Competence Self-Assessment Questionnaire (KSKD), which consisted of 90 statements describing how one can behave at work. Five-point frequency scale was placed next to each statement, in which the amount of occurrence of a given situation had to be indicated. The respondent's task was to answer considering only personal behavior in work situations. The different levels of the scale meant: 1 - Never, 2 - Rarely, 3 - Sometimes, 4 - Often, 5 - Always. The statements were divided into two parts: the social area, which included 20 statements, and the personal and organizational area, which included 70 statements. For positive statements, scoring was according to the answers marked (1 point for "Never," 2 points for "Rarely," 3 points for "Sometimes," 4 points for "Often," and 5 points for "Always"). However, for negative statements, the scoring was reversed with the response scale (5 points for "Never," 4 points for "Rarely," 3 points for "Sometimes," 2 points for "Often," and 1 point for "Always"). The self-assessment score for each competency can be assigned to one of three categories: 1 the subject perceives distinct difficulties in his behavior in a given area; 2 the subject perceives both strengths and weaknesses in a given area in his behavior to a comparable degree; 3 the subject perceives mainly strengths in his behavior from a given area. As a result of the study of competencies by means of the questionnaire,

we obtained the so-called raw score. This is the sum of points resulting from the answers given. The score of the answers is read out with the help of a key, which contains information on the number of points assigned to a particular category. The answer key also contains information about which statements are assigned to each competency assessed [28,29]. In addition, respondents completed a questionnaire containing questions about sociodemographic data.

# Data analysis

Data analysis was carried out using descriptive statistics and statistical inference methods. The study group and the results obtained from the analysis of data derived from questionnaire responses were characterized using the following measures of location and dispersion: absolute number of responses given (n), structure index (%), arithmetic mean ( $\overline{\mathbf{x}}$ ), standard deviation (SD), median (Me), smallest value (Min) and largest value (Max). The analysis was performed using the Chisquare test for independence of variables. The strength of the relationship was determined using the coefficients viz: Phi and Kramer's V. Descriptive statistics (percentage, mean and standard deviation), analytical statistics (Mann-Whitney test, Kruskal-Wallis test and Spearman correlation coefficient) were used. When the variables were ordinal, coefficients were used: Kendall's Tau-b and Kendall's Tau-c. Verification of statistical hypotheses was carried out at the level of significance  $\alpha = 0.05$ . Statistical analysis was performed using IBM SPSS 25.0 package with the ExactTests module - exact tests.

#### Results

The questionnaire survey was conducted among 150 randomly selected nurses employed in various positions of one district hospital in Podkarpackie voivodeship, Poland. The characteristics of the surveyed group are shown **in Table 1.** 

Table 1. Characteristics of the study group of nurses.

			70 1	
Variable		Respondents n=150		
		n	%	
C	Female	134	89.3	
Sex	Male	16	10.7	
	20-30	51	34.0	
	31-40	44	29.3	
Age (years)	41-50	38	25.4	
	>51	17	11.3	
	Unit nurse	131	87.3	
Position	Ward nurse	11	7.3	
	Coordinating nurse	8	5.3	
	1-10	52	34.6	
T.1	11-20		32.0	
Job seniority (years)	21-30	38	25.4	
	>30	12	8.0	

Source: Own

An overall summary describing the behavior of the nurses surveyed in each area reports, among other things, the means, medians and standard deviations of each variable calculated using the key. Next to each variable name in parentheses is the range of scores that could be obtained. Since the range of scores for each variable varies, these scores cannot be compared with each other. The calculated values in the individual categories of "mainly difficulties, both pluses and minuses, mainly "strengths" are derived from the key on the unstandardized tool.

The first part of the questionnaire assessed competencies in the areas of communication, persuasion, and cooperation. A small group of men, accounting for 10.7% of the surveyed group, rated their competencies in the social area higher as well as in the personal and organizational areas. None of the respondents felt that they mainly had difficulties with communicating and persuading. An overwhelming 64.7% of respondents considered this competence as their strength, while only 35.3% claimed it was both their strong and weak side. More than half of the people 55.3% considered collaborating as their strength, while 42.7% said it was both an advantage and disadvantage. Only 2% of respondents said they mainly found it difficult to cooperate.

Within the second part of the questionnaire, i.e. the personal and organizational area, seven areas of competence were evaluated. The questionnaire included, as in the first part, two types of statements: positive and negative, with the same system of counting points. This part of the questionnaire consisted of 70 formulations. The first part of the questionnaire assessed competence in adapting to change. 65.3% of respondents considered adapting to change as both advantage and disadvantage, while 31.3% said this competence was mainly their strength. Only 3.3% of respondents said they mainly had difficulties adapting to change. More than half of the people, i.e. 54.7%, considered the competence of striving for results to be both a plus and a minus, while 45.3% said this competence was mainly their strength. No respondent felt that they mainly had difficulties in striving for results.

This was followed by an assessment of innovation competence. The majority of people, 86.7%, considered innovation to be both their advantage and disadvantage, while 11.3% said this competence was mainly their strength. Only 2.0% of respondents said they mainly had difficulties with innovation. Competence in analyzing situations and generating solutions was rated as the fourth. More than half of the respondents, i.e. 62.0%, considered analyzing situations and generating solutions as both a plus and a minus. On the other hand, 36.7% said it was mainly their strength. Only 1.3% of respondents said they mainly had difficulties analyzing situations and generating solutions.

Next, competence in planning and organizing was assessed. Half of the respondents, i.e., 51.3%, considered competence in planning and organizing to be their strength, while 48.7% said it was both advantage and disadvantage. No respondent felt that they mainly had difficulties with planning and organizing. Half of the respondents, i.e. 50.7%, considered decision-making competence to be both a plus and a minus, while 49.3% said it was mainly their strength. No respondents felt that they mainly had difficulties with decision-making.

The last competency assessed was coping with stress. More than half of the respondents (57.3%) considered coping with stress as both advantage and disadvantage. On the other hand, for 38.7%, this competence is their mainly strong point. Only 4.0% of respondents mainly had difficulties in dealing with stress (Table 2).

Table 2. Competencies of the surveyed nurses in each area.

Type of competencies	Mean	Median	SD	Min.	Max.
Communicating and persuading	37.29	37.00	3.657	29	48
Cooperating	36.10	36.50	3.880	22	45
Adapting to change	27.19	27.00	4.138	17	36
Striving for results	35.45	35.00	5.118	27	48
Innovating	25.64	26.00	3.004	18	33
Analyzing situations and generating solutions	38.47	39.00	5.400	26	52
Planning and organizing	50.04	50.00	6.146	39	62
Making decisions	35.73	35.00	4.924	27	49
Dealing with stress	31.55	31.00	4.723	20	43

Source: Own

Nurses surveyed with more years of age are more likely than younger nurses to perceive mainly strengths in planning and organizing competencies. The correlation between variables based on Kendall's Tau-c coefficient can be considered in terms of statistical trend. Respondents between the ages of 31 and 40 are most likely to notice mainly strengths in the competency of coping with stress, while the youngest respondents and those over 40 years old both pluses and minuses (**Table 3**).

Table 3. Summary of competencies. Coping with stress vs. age of respondents.

Variable			Age (years)				T. 4.1
			20-30	31-40	41-50	>50	Total
Stress management (9-45)	Mainly difficulties  Both advantages and disadvantages	n	0	3	2	1	6
		%	0.0%	6.8%	5.3%	5.9%	4.0%
		n	38	16	21	11	86
		%	74.5%	36.4%	55.3%	64.7%	57.3%
	Mainly strengths	n	13	25	15	5	58
		%	25.5%	56.8%	39.5%	29.4%	38.7%
Total		n	51	44	38	17	150
		%	100.0%	100.0%	100.0%	100.0%	100.0%
Kendall's tau-c	0.036	0.064	0.561	0.575	0.599		
Coefficient	Value	Standard error	Approximate T	P	Monte Carlo p		
Cramer's V	0.230	15.827	6	0.015	0.012		
Coefficient	Value	Chi- square	Df	P	Monte Carlo p		_

Source: Own

Female nurses surveyed are better at assessing their competence in adapting to change. The relationship between the variables is statistically significant and characterized by the strength of the relationship at the level of Kramer's V=0.252. The relationship between the variables considered as non-monotonic is statistically significant and characterized by insignificant strength of the relationship. In the case of competence in communication and persuasion, coordinating nurses who are managers compared to unit nurses and ward nurses who are responsible for organizing the work of subordinate staff perceive mainly strengths. The relationship between the variables is slightly beyond the accepted level of significance. Coordinating nurses and ward nurses, compared to unit

nurses, rate innovation competence better. The test probability value "p" estimated by the classical asymptotic method showed that the relationship between the variables is statistically significant, but the more accurate result calculated by the Monte Carlo method informs that the relationship should be treated in the category of statistical tendency (**Table 4**).

Table 4. Innovation competency vs. position held.

Ty	ype of social competencies	Unit nurse	Coordinating nurse	Ward nurse	Total	
Innovativeness	Mainly difficulties	n	3	0	0	3
		%	2.3%	0.0%	0.0%	2.0%
	Both advantages and	n	117	5	8	130
	disadvantages	%	89.3%	62.5%	72.7%	86.7%
	Mainly strengths	n	11	3	3	17
		%	8.4%	37.5%	27.3%	11.3%
Total		n	131	8	11	150
		%	100.0%	100.0%	100.0%	100.0%
Cramer's V	0.179	9.622	4	0.047	0.062	
Coefficient	Value	Chi-square	Df	P	Monte Carlo p	

Source: Own

The test probability value "p" estimated by the classical asymptotic method showed that the relationship between the variables is statistically significant. Older respondents are more likely to perceive mainly strengths in the competence of striving for results. The correlation between variables based on Kendall's Tau-c coefficient can be considered in terms of statistical tendency.

# Discussion

In our study, we presented the importance of competencies in the professional work of surveyed group of nurses. In the results obtained, the vast majority of respondents, i.e. 64.7%, considered competence in communicating and persuading and collaborating as their strengths, while only 35.3% said it was both their advantage and disadvantage. The majority of respondents, 65.3%, considered adapting to change as both their advantage and disadvantage, while 31.3% said this competency was mainly their strength. Only 3.3% of respondents said they mainly had difficulties adapting to change. Similar results were obtained in other studies [30]. The importance of individual social competencies and communication and conflict resolution were identified by respondents as among the most important social competencies next to teamwork and patient orientation. Cooperation within the hospital was becoming a competency less important for nurses who were older and had less education. This competency was also not indicated by respondents as important in their work [31]. Studies by other authors show that there are groups of competencies that society ascribes or expects from the nursing profession [32] and claim that they depend on the skills needed to provide patient care [33].

In a descriptive-analytic study conducted in hospitals affiliated with the University of Medical Sciences in southeastern Iran, results showed that professional competence (mean  $\pm$  SD: 2.82  $\pm$  0.53, range: 1.56-4.00) and organizational commitment (mean  $\pm$  SD: 72.80  $\pm$  4.95, range: 58-81) of

nurses were at moderate levels. There was no statistically significant correlation between professional competence and organizational commitment ( $\rho = 0.02$ ; p = 0.74). There were significant differences in professional competence based on marital status (p = 0.03) and work experience (p < 0.001) [34].

In our own study, coordinating nurses and ward nurses rated innovation competence better than unit nurses. In contrast, studies by other authors show that nurses do not perceive themselves at work as innovative or quick to adapt to change. Completely different conclusions can be drawn from studies in which patients were asked for their opinion of nurses' work, as they determined their level of satisfaction with nursing care from the extent of their knowledge [35]. It was, in turn, the nurses surveyed in the present study who were 51.3% convinced that planning and organizing were their strengths.

Stress at nursing work is an issue that occurs very often and has various substrates, as indicated by nurses in a survey conducted in 2017 in Lubelskie voivodeship, Poland. At that time, respondents working in hospitals indicated that a stress factor was a bad atmosphere at work, mistakes made by others or conflicts occurring in the team. In addition, 41% of nurses indicated that stress affects their drive to solve a problem [36]. Leadership plays a key role in nursing practice, and nurse leadership is considered an important part of nursing activities that guide competence [37]. Some researchers of the topic of competence were of the opinion that it is the task of management to motivate teams of nurses to improve their professional competence understood as a combination of: knowledge, skills, values and also feelings [38]. Internationally, studies have shown that higher staffing, more nurses in general health care, is associated with higher quality of care, better patient outcomes and fewer adverse events [39]. An association between nurses' personality type and their preferred conflict management styles has also been shown, and it has been suggested to consider the relationship between personality traits and conflict management methods as a component of nurses' competence. In a cross-sectional study conducted in Taiwan, it was proven that greater competence at work is more likely to lead to affirmation and fulfillment, which increases intrinsic job satisfaction and thus positively influences the desire to stay in the profession [40]. The corresponding competence and performance of graduate nurses in expanded roles indicate their support for teams and the development of nursing care reinforces the overall perception of nursing as a profession and work during studies can affect nurses' performance, personality, knowledge, and career prospects [41].

62.0% of respondents in the self-study considered analyzing situations and generating solutions as both a plus and a minus. In contrast, 36.7% (55 respondents) said it was mainly their strength. The results of other studies have shown that the nurses surveyed did not differ in terms of social competence (t = 0.427; P = 0.670) and scale A (t = 1.244; P = 0.217). The data presented here show that the majority (about 75%) of the nurses surveyed have an average aptitude for both working with patients and coping with various social situations, including work situations. The reason for this result may be that social competence is determined, by innate factors and environmental influences [42]. The results of the professional competence score in the study by Fukada et al. showed that 58.3% of nurses had medium professional competence and 34.3% had high professional competence, which is comparable to their own results. The nurses' mean score of professional competence was at a moderate level ( $2.82\pm0.64$ , range: 1.56-4.00). The highest mean score was also associated with "legal/ethical practices" ( $3.13\pm0.60$ , range: 1.13-4.00), and the lowest mean score was associated with "research skills/creative thinking" ( $2.70\pm0.67$ , range: 0.88-4.00) [43]. A sense of low competence

can decrease job satisfaction and increase job withdrawal; it also affects the quality of care. On the contrary, a sense of competence can reduce burnout and increase self-confidence [44].

Nursing competence is the basic skill required to perform nursing duties. As a factor that has a significant impact on competence, the authors suggest taking into account personality in the nursing profession, education at the college level as well as postgraduate education [45, 46, 47]. Therefore, it is important to clearly define nursing competencies, to form the basis of the nursing curriculum. It is also important to identify the process of nursing competence development for continuing professional development after obtaining the license to practice. Other authors have suggested in their studies that working on soft skills during studies improves later contact with patients [48] and will improve the quality of nursing care and increase professional productivity [49]. For nurses, the continuing education mandated by the law on the profession [50] is being successfully implemented as required. However, although competencies are important for improving the quality of nursing, the concept of nursing competencies has not been fully developed. Hence the challenges of establishing the definition and structure of nursing competencies, the levels of competencies necessary for nursing staff and training methods. Therefore, further research is needed to establish a complete concept of nursing competencies.

#### Limitations

The sample size in this study was not large and the study group was asymmetrical due to the number of female and male nurses working in the profession. It is likely that the Competent Self-Assessment Questionnaire (KSKD) was used for the first time for assessment in this professional group. In addition, only a self-report approach was used to achieve measurements of nurses' levels of competence, which may have some limitations related to the relevance and reliability of the survey.

#### **Conclusions**

The survey conducted among the nursing staff of a hospital in Podkarpackie voivodeship in Poland provides knowledge about the importance of competencies in the professional work of nurses employed at the hospital in various positions. Nurses' competencies are becoming an important topic for discussion among nurse practitioners and researchers. Empirical evidence indicates that achieving a high level of competence among nurses has a positive impact on the quality of care in healthcare facilities, so it seems important to organize postgraduate training in areas that improve competence. Continuous assessment of nurses' competence is one of the most important goals that should be taken into account by all health care facilities. The results of the presented research allow us to assume that the education and professional development of nurses plays an important role in assessing nursing competence and evaluating the quality of nursing care. The competencies possessed will be important in creating new position - advanced practice nurse (APN). It is therefore necessary to continue research in this area.

#### References

- 1. Ratajczak Z. Psychologia pracy i organizacji. Wydawnictwo Naukowe PWN, Warszawa 2021.
- 2. Dąbrowska-Chołostiakow KM, Kocbach T. Kontrola emocji oraz kompetencje społeczne pielęgniarek i pielęgniarzy pracujących w jednostkach opieki paliatywnej raport z badania przeprowadzonego wśród pracowników zatrudnionych na terenie województwa warmińskomazurskiego *Palliat Med Pract* 2018; 12, 2: 97–105
- 3. Aukrust CG, Kamalo PD, Prince RJ, Sundby J, Mula C, Manda-Taylor L. Improving competencies and skills across clinical contexts of care: a qualitative study on Malawian nurses' experiences in an institutional health and training programme. *Nurs Open.* 2021 Nov;8(6):3170-3180. doi: 10.1002/nop2.1030. Epub 2021 Aug 6. PMID: 34355870; PMCID: PMC8510767.
- 4. Chrzan-Rodak A, Ślusarska B Inteligencja emocjonalna i kompetencje społeczne założenia teoretyczne i znaczenie dla praktyki pielęgniarskiej. *Piel Pol.* 2019;1(71):80–85. DOI: http://dx.doi.org/10.20883/pielpol.2019.11
- 5. Gorustowicz M. Kompetencje miękkie, a wyzwania przedsiębiorstw *Akademia Zarządzania*, Grześ-Bukłaho J., Nr 3(3) Białystok 2019: 71-72.
- 6. Faraji A, Karimi M, Azizi SM, Janatolmakan M, Khatony A. Evaluation of clinical competence and its related factors among ICU nurses in Kermanshah-Iran: A cross-sectional study. *Int J Nurs Sci.* 2019 Sep 9;6(4):421-425. doi: 10.1016/j.ijnss.2019.09.007. PMID: 31728395; PMCID: PMC6838869.
- 7. López-Entrambasaguas OM, Martínez-Yebenes R, Calero-García MJ, Granero-Molina J, Martínez-Linares JM. Newly Qualified Nurses' Perception of Their Competency Achievement on Leaving University: A Qualitative Study. *Int J Environ Res Public Health*. 2019 Nov 4;16(21):4284. doi: 10.3390/ijerph16214284. PMID:
- 8. Nilsson J, Johansson E, Egmar ACh, Florin J, JLeksell J, Lepp M, Lindholm Ch, Nordström G, Theander K, Wilde-Larsson B, Carlsson M, Gardulf A. Development and validation of a new tool measuring nurses self-reported professional competence—The nurse professional competence (NPC) Scale, *Nurse Education Today*, 2014;34,4; 574-580,
- 9. Amsalu B, Fekadu T, Mengesha A, Bayana E. Clinical Practice Competence of Mettu University Nursing Students: A Cross-Sectional Study. *Adv Med Educ Pract.* 2020 Oct 23;11:791-798. doi: 10.2147/AMEP.S267398. PMID: 33122958; PMCID: PMC7590970.
- 10. Makie V, Jooste K, Mabuda TB, Bock T, Lourens GM, Van As M, Chipps J. Operational nurse managers' perceptions on the competence of community service nurses in public settings in the Western Cape. *Curationis*. 2021 Mar 31;44(1):e1-e9. doi: 10.4102/curationis.v44i1.2174. PMID: 33881337; PMCID: PMC8063567.
- 11. Fatkulina N, Suominen T, Razbadauskas A, Martinkenas A, Meretoja R, Leino-Kilpi H. Competence of Nurses and Factors Associated With It. *Medicina* (Kaunas, Lithuania). 2011 47. 230-7. 10.3390/medicina47040033.
- 12. Hailu M, Welday M, Haftu A, Tadesse D, Weldeamanel T, Amsalu B, Guta A, Kassie N, Sema A, Mohammed A, Abdurashid N, Solomon Y, Bati F, Girma M, Sintayehu Y, Belay Y, Amsalu S. Clinical Practice Competence and its Associated Factors Among Midwifery and Nursing Students at Dire Dawa Health Sciences Colleges, East Ethiopia, 2020. *Adv Med Educ Pract*. 2021 Dec 30;12:1539-1547. doi: 10.2147/AMEP.S347080. PMID: 35002353; PMCID: PMC8722533.

- 13. Springer A. Kompetencje i satysfakcja. Identyfikacja, ocena i znaczenie dopasowania. Wydawnictwo Difin, Warszawa 2018.
- 14. Serafin L, Strząska-Kliś Z, Kolbe G, Brzozowska P, Szwed I, Ostrowska A, Czarkowska-Pączek B. The relationship between perceived competence and self-esteem among novice nurses a cross-sectional study. *Ann Med.* 2022 Dec;54(1):484-494. doi: 10.1080/07853890.2022.2032820. PMID: 35132927; PMCID: PMC8843132.
- 15. Rabiasz R, Kachaniuk H. Skala pielęgniarskich kompetencji społecznych. *Pielęgniarstwo XXI wieku* Nr 1 (50)/2015;22-27.
- 16. Obwieszczenie Ministra Nauki i Szkolnictwa Wyższego z dnia 9 stycznia 2018 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia Ministra Nauki i Szkolnictwa Wyższego w sprawie standardów kształcenia dla kierunków studiów: lekarskiego, lekarsko-dentystycznego, farmacji, pielęgniarstwa i położnictwa. Dz.U. 2018 poz. 345
- 17. Chrzan-Rodak A, Ślusarska B. Inteligencja emocjonalna i kompetencje społeczne założenia teoretyczne i znaczenie dla praktyki pielęgniarskiej. *Piel. Pol.* 2019;1 (71) 80-85, DOI: https://doi.org/10.20883/pielpol.2019.11]
- 18. Sołomianko K., Dolińska C., Olejnik B., Snarska K. K. Czynniki wpływające na poziom satysfakcji z pracy. (w) Lankau A., Kondzior D., Krajewska-Kułak E. (red.) Sytuacje trudne w ochronie zdrowia Tom III, Wydawnictwo Duchno, Białystok 2018: 886.
- 19. Załuski M, Makara-Studziańska M. Kompetencje emocjonalne w pracy pielęgnacyjno-leczniczej. *Problemy Pielęgniarstwa* 2018; 26 (1): 58–63
- 20. Lukewich J, Allard M, Ashley L, Aubrey-Bassler K, Bryant-Lukosius D, Klassen T, Magee T, Martin-Misener R, Mathews M, Poitras ME, Roussel J, Ryan D, Schofield R, Tranmer J, Valaitis R, Wong ST. National Competencies for Registered Nurses in Primary Care: A Delphi Study. *West J Nurs Res.* 2020 Dec;42(12):1078-1087. doi: 10.1177/0193945920935590. Epub 2020 Jul 3. PMID: 32615873; PMCID: PMC7594255.
- 21. Niebrój L. Podstawy filozofii pielęgniarstwa, Wydawnictwo Śląska Akademia Medyczna, Katowice 2001.
- 22. van Woerkom M, Kroon B. The Effect of Strengths-Based Performance Appraisal on Perceived Supervisor Support and the Motivation to Improve Performance. *Front Psychol.* 2020 Jul 31;11:1883. doi: 10.3389/fpsyg.2020.01883. PMID: 32903861; PMCID: PMC7438919.
- 23. Emami Zeydi A, Ghazanfari MJ, Azizi E, Darvishi-Khezri H, Mortazavi H, Osuji J, Karkhah S. Clinical competence of Iranian nurses: A systematic review and meta-analysis. *J Educ Health Promot.* 2022 Mar 23;11:102. doi: 10.4103/jehp.jehp\_352\_21. PMID: 35573626; PMCID: PMC9093629.
- 24. Rahmah NM, Hariyati TS, Sahar J. Nurses' efforts to maintain competence: a qualitative study. *J Public Health Res.* 2021 Dec 1;11(2):2736. doi: 10.4081/jphr.2021.2736. PMID: 35244357; PMCID: PMC8941307.
- 25. Zhang Z, Luk W, Arthur D, Wong T. Nursing competencies: personal characteristics contributing to effective nursing performance. *J Adv Nurs.* 2001 Feb;33(4):467-74. doi: 10.1046/j.1365-2648.2001.01688.x. PMID: 11251734.

- 26. Andersson H, Lindholm M, Pettersson M, Jonasson LL. Nurses' competencies in home healthcare: an interview study. *BMC Nurs*. 2017 Nov 17;16:65. doi: 10.1186/s12912-017-0264-9. PMID: 29176934; PMCID: PMC5693583.
- 27. Heydari, A., Kareshki, H., & Armat, M. R. Is Nurses' Professional Competence Related to Their Personality and Emotional Intelligence? A Cross-Sectional Study. *Journal of caring sciences*, 5(2), 2016;121–132. https://doi.org/10.15171/jcs.2016.013
- 28. Jurek P. Diagnoza kompetencji pracowników. Modele kompetencji uniwersalnych, menedżerskich i handlowych. *Wydawnictwo Uniwersytetu Gdańskiego*, Gdańsk 2019
- 29. Jurek P. Metody pomiaru kompetencji zawodowych. Zeszyt informacyjno-metodyczny doradcy zawodowego Nr 54 Ministerstwo Pracy i Polityki Społecznej,
- 30. Warszawa 2012 http://eurodoradztwo.praca.gov.pl/publikacje/54.pdf (access as of January 2022).
- 31. Smarżewska D. Znaczenie kompetencji społecznych w zawodzie pielęgniarki wyniki badań własnych, *Academy of Management* 3(2)/2019.
- 32. Kwiatkowski S. M. (red. nauk.) Kompetencje przyszłości, Wydawnictwo Fundacja Rozwoju Systemu Edukacji, Warszawa 2018.
- 33. Rodríguez-Pérez, M.; Mena-Navarro, F.; Domínguez-Pichardo, A.; Teresa-Morales, C. Current Social Perception of and Value Attached to Nursing Professionals' Competences: An Integrative Review. *Int. J. Environ. Res. Public Health* 2022, 19, 1817. https://doi.org/10.3390/ jjerph19031817
- 34. Nabizadeh-Gharghozar Z, Alavi NM, Ajorpaz NM. Clinical competence in nursing: A hybrid concept analysis. *Nurse Educ Today.* 2021 Feb;97:104728. doi: 10.1016/j.nedt.2020.104728. Epub 2020 Dec 16. PMID: 33348301.
- 35. Karami A, Farokhzadian J, Foroughameri G. Nurses' professional competency and organizational commitment: Is it important for human resource management? *PLoS One.* 2017 Nov 8;12(11):e0187863. doi: 10.1371/journal.pone.0187863. PMID: 29117271; PMCID: PMC5678726.
- 36. Michalik J. (red.) Stres zawodowy pielęgniarek zatrudnionych w placówkach opieki medycznej na terenie województwa lubelskiego, Lublin 2017.
- 37. Makie V, Jooste K, Mabuda TB, Bock T, Lourens GM, Van As M, Chipps J. Operational nurse managers' perceptions on the competence of community service nurses in public settings in the Western Cape. *Curationis*. 2021 Mar 31;44(1):e1-e9. doi: 10.4102/curationis.v44i1.2174. PMID: 33881337; PMCID: PMC8063567.
- 38. Kuo CP, Hsieh PL, Chen HM, Yang SY, Hsiao YL, Wang SL. Community Health Nursing Competency and Psychological and Organizational Empowerment of Public Health Nurses: A Cross-Sectional Survey. *Healthcare* (Basel). 2021 Aug 4;9(8):993. doi: 10.3390/healthcare9080993. PMID: 34442131; PMCID: PMC8392611.
- 39. Whitworth BS. Is there a relationship between personality type and preferred conflict-handling styles? An exploratory study of registered nurses in southern Mississippi. *J Nurs Manag.* 2008 Nov;16(8):921-32. doi: 10.1111/j.1365-2834.2008.00918.x. PMID: 19094104.
- 40. Chang YC, Yeh TF, Lai IJ, Yang CC. Job Competency and Intention to Stay among Nursing Assistants: The Mediating Effects of Intrinsic and Extrinsic Job Satisfaction. Int *J Environ Res Public Health*. 2021 Jun 14;18(12):6436. doi: 10.3390/ijerph18126436. PMID: 34198623; PMCID: PMC8296268.

- 41. Basinska K, Wellens NIH, Simon M, Zeller A, Kressig RW, Zúñiga F. Registered nurses in expanded roles improve care in nursing homes: Swiss perspective based on the modified Delphi method. *J Adv Nurs*. 2021 Feb;77(2):742-754. doi: 10.1111/jan.14644. Epub 2020 Nov 22. PMID: 33222269; PMCID: PMC7894469
- 42. Manoochehri H, Imani E, Atashzadeh-Shoorideh F, Alavi-Majd A. Competence of novice nurses: role of clinical work during studying. *J Med Life*. 2015;8(Spec Iss 4):32-38. PMID: 28316703; PMCID: PMC5319286.
- 43. Gadecka W, Piskorz-Ogórek K, Regin KJ. Social competence of mental health nurses. *Polish Annals of Medicine*. 2015;22(2):105-109. doi:10.1016/j.poamed.2015.03.014.
- 44. Fukada M. Nursing Competency: Definition, Structure and Development. *Yonago Acta Med.* 2018;61(1):1-7. Published 2018 Mar 28. doi:10.33160/yam.2018.03.001
- 45. Afshar M, Sadeghi-Gandomani H, Masoudi Alavi N. A study on improving nursing clinical competencies in a surgical department: A participatory action research. Nurs Open. 2020 Mar 24;7(4):1052-1059. doi: 10.1002/nop2.485. PMID: 32587724; PMCID: PMC7308675.
- 46. Naami A, Behzadi E, Parisa H, Charkhabi M. A study on the personality aspects of adaptive performance among governmental hospitals nurses: a conceptual model. *Procedia Soc Behav Sci.* 2014;159(1):359–64. doi: 10.1016/j.sbspro.2014.12.388.
- 47. Cabrera E, Zabalegui A. Nurses workforce and competencies. A challenge for health systems more than ever. *Nurse Educ Pract.* 2020 Oct;48:102858. doi: 10.1016/j.nepr.2020.102858. Epub 2020 Aug 24. PMID: 32890935; PMCID: PMC7443620.
- 48. Yaqoob Mohammed Al Jabri F, Kvist T, Azimirad M, Turunen H. A systematic review ofhealthcare professionals' core competency instruments. *NursHealth Sci.* 2021;23:87–102.https://doi.org/10.1111/nhs.12804102YAQOOB MOHAMMED AL JABRIET AL.
- 49. Sancho-Cantus D, Cubero-Plazas L, Botella Navas M, Castellano-Rioja E, Cañabate Ros M. Importance of Soft Skills in Health Sciences Students and Their Repercussion after the COVID-19 Epidemic: Scoping Review. *Int J Environ Res Public Health*. 2023 Mar 10;20(6):4901. doi: 10.3390/ijerph20064901. PMID: 36981814; PMCID: PMC10049660.
- 50. Widad A, Abdellah G. Strategies Used to Teach Soft Skills in Undergraduate Nursing Education: A Scoping Review. *J Prof Nurs.* 2022 Sep-Oct;42:209-218. doi: 10.1016/j.profnurs.2022.07.010. Epub 2022 Jul 26. PMID: 36150863.
- 51. Law of July 15, 2011 on the professions of nurse and midwife. Journal of Laws. 2011 No. 174 item 1039 as amended. Poland.