# Professional competences in family nurse practitioners in North-Western Poland\*

# Wiedza pielęgniarek rodzinnych w Polsce północno-zachodniej w zakresie wybranych kompetencji zawodowych

Katarzyna Kęcka<sup>⊠</sup>

Pomorski Uniwersytet Medyczny w Szczecinie, Zakład Podstawowej Opieki Zdrowotnej, ul. Żołnierska 48, 71-210 Szczecin Pomeranian Medical University in Szczecin, Department of Primary Health Care ⊠ katarzyna.kecka@pum.edu.pl

#### **ABSTRACT**

Introduction: Professional nursing is increasingly often understood as accompanying and assisting people during health, disease and limited fitness. It is also shaping their self-care capabilities. The complexity of these tasks puts great responsibility on nurses, since they are those health care professionals who are in direct contact with patients' families and communities. Nurses' functions are exceptional because they involve the management and organization of holistic care in work with patients and their families (nursing and educational activities, cooperation with other members of a therapeutic team).

The purpose of this study was to analyze their level of knowledge concerning their tasks and professional competences in family nurse practitioners employed in primary health care centers.

Materials and methods: The research were carried out from February 2014 to the end of October 2015 in entities providing

nursing services in primary health care in north-western Poland. For the analysis 643 questionnaire surveys were accepted.

**Results**: Family nurse practitioners in north-western Poland show a satisfactory level of knowledge in the field of professional competence. Nurses have especially high levels of knowledge concerning patients' access to nursing services, information provided by primary care physicians as part of cooperation in the care of a patient, the nursing process method, and care of elderly and chronically ill individuals. The nurses had gaps in their knowledge of selected nursing services, such as bladder irrigation, transport, and rectal procedures. Alarmingly low levels of knowledge were observed with regard to professional competence in the care of patients with mental diseases.

**Keywords**: family nurse; professional competence; level of knowledge.

## **ABSTRAKT**

Wstęp: Pielęgnowanie zawodowe coraz częściej jest rozumiane jako kształtowanie umiejętności do sprawowania samoopieki oraz pomaganie i towarzyszenie człowiekowi w zdrowiu, chorobie, niepełnosprawności. Złożoność zadań nakłada na pielęgniarkę dużą odpowiedzialność z racji tego, że jest ona tym pracownikiem ochrony zdrowia, który bezpośrednio kontaktuje się z rodziną i społecznością, a nawiązane relacje zazwyczaj są długotrwałe. Wyjątkowość funkcji pielęgniarki polega na zarządzaniu i organizowaniu holistycznej opieki w pracy z pacjentem i rodziną: od działań pielęgnacyjnych i edukacyjnych począwszy, a skończywszy na działaniach podejmowanych z przedstawicielami innych profesji wchodzących w skład zespołu terapeutycznego. Celem niniejszej pracy była analiza stanu wiedzy w zakresie zadań i kompetencji zawodowych pielęgniarek rodzinnych pracujących w obszarze podstawowej opieki zdrowotnej.

**Materiały i metody**: Badania przeprowadzano od lutego 2014 do końca października 2015 roku w podmiotach świadczących usługi w zakresie pielęgniarstwa w rodzaju podstawowej opieki zdrowotnej na terenie województwa zachodniopomorskiego. Do analizy przyjęto 643 kwestionariusze ankiet.

Wyniki: Ogólny stan wiedzy pielęgniarek rodzinnych w Polsce północno-zachodniej w obszarze kompetencji zawodowych jest zadowalający. Szczególnie wysoki jest on w zakresie dostępności pacjentów do świadczeń pielęgniarskich, obszarów informacji udzielanych przez lekarza rodzinnego w ramach współpracy w opiece nad pacjentem, świadczenia usług metodą procesu pielęgnowania oraz opieki nad osobą starszą i przewlekle chorą. Deficyt wiedzy stwierdzono w przypadku wybranych świadczeń pielęgniarskich, takich jak: płukanie pęcherza moczowego, zlecanie transportu czy zabiegi doodbytnicze. Niepokojąco niski stan wiedzy zaobserwowano w zakresie kompetencji zawodowych wynikających z opieki nad osobą ze schorzeniami psychicznymi. Słowa kluczowe: pielęgniarka rodzinna; kompetencje zawodowe; stan wiedzy.

#### INTRODUCTION

Vocational nursing is more and more often understood as helping and accompanying a person during health, illness, disability, and in shaping the skills to exercise self-care. In the area of family nursing, it is necessary to take into consideration the

determinants of the patient's state of health and the community in which patient functions [1].

Due to the range of work, the family nurse has become more than just a person caring for the patient – the nurse actively participates in recognizing the health needs of the community, raising awareness and strengthening the responsibility

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of the patients for their own health [2]. The family nurse usually accomplishes tasks independently, although for the care of the patient (in a holistic approach), cooperating with other health care representatives or institutions, depending on the individual needs of the patient or the community in which the patient functions [3].

In the work, a family nurse realizes a number of tasks requiring many skills, experience and vast amount of knowledge. The complexity of the tasks impose a great responsibility, because the nurse is the health care worker who deals directly with the family and community, and the relationships established are usually long-lasting. The uniqueness of the nurse's function is to manage and organize holistic care in working with the patient and family, from care and education activities to activities undertaken with representatives of other professions who are part of the therapeutic team. The nurse's independence manifests itself through assessing the situation and needs of the family and initiating help; the activities are focused mainly on health promotion, prevention and care work. The nature and complexity of the tasks do not allow the nurse to perform all these activities for the patient, hence the highly important aspect of the work is to educate the patient and the family in the area of care and self-care. This entails certain expectations, as the nurse is perceived as an organizer, implementer and even leader in the care of the patient [4].

The aim of the study was to analyze the state of knowledge of tasks and professional competences among family nurses working in the field of primary health care. The implementation of the main objective was based on answers to the following research questions:

- what is the state of knowledge about the independence of family nurses in the context of services provided in primary care,
- what factors influence the state of knowledge of family nurses in terms of professional tasks and competences.

#### **MATERIALS AND METHODS**

The research was carried out from February 2014 to the end of October 2015 in all entities providing nursing services in the West Pomeranian Voivodeship covered by public health insurance. The criterion of inclusion in the research was the fact that the nurses had qualifications entitling them to work in the patient's place of residence and provide family nursing services.

Due to the complexity of the provision of family nursing services (not every nurse with the required qualifications works in the required area), information on the actual number of nurses was obtained during direct out-patient meetings with family nurses. Partial surveys were excluded from the analysis. Thus, of the 838 questionnaires distributed for analysis, 643 survey questionnaires filled out by nurses providing family nursing services were accepted.

The diagnostic survey was carried out using a questionnaire of our own design. The survey questionnaire was based on the

current legal status regulating the practice of the nursing profession, and formal requirements resulting from other regulations regarding the functioning of primary health care, in particular tasks and competences of nurses working in this area.

The study design did not require the opinion of the Bioethics Committee.

The results were analyzed using qualitative variables (absolute number and frequency), while in order to verify the significance of the dependence of responses to individual questions from independent variables,  $\chi^2$  test statistics were calculated. This test was chosen due to the nominal nature of measured variables, calculated at the statistical significance level, p=0.05.

#### **RESULTS**

When asked whether nursing is an autonomous profession, the majority of respondents (50.2%) assessed it as a partially dependent occupation, 15.7% assessed it as a fully independent occupation, while the remaining 34.1% of nurses surveyed assessed it as completely dependent. Next, it was analyzed whether the opinion on the independence of the profession depended on selected sociodemographic variables. There was no statistical significance in this area. Regardless of the place of residence ( $\chi^2$  = 11.318, p = 0.079), place of employment ( $\chi^2$  = 14.506, p = 0.151), education ( $\chi^2$  = 3.296, p = 0.771) and seniority ( $\chi^2$  = 3.315, p = 0.768) the nurses surveyed presented similar opinions on the independence of the nurse profession (Tab. 1).

Next, it was analyzed whether the opinion on the independence of the profession depended on selected sociodemographic variables. There was no statistical significance in this respect. The nurses surveyed regardless of their place of residence ( $\chi 2 = 3.784$ , p = 0.706), place of employment ( $\chi 2 = 3.472$ , p = 0.488), education ( $\chi 2 = 8.002$ , p = 0.238) and seniority ( $\chi 2 = 9.274$ , p = 0.159) they had comparable opinions on the implementation of the nursing process as one of the conditions for access to services (Tab. 2).

Another factor that determines the availability of services is the provision of medical orders – 97.8% of all nurses surveyed agreed to such a possibility.

When studying the variables, there was no statistically significant dependence on the place of employment ( $\chi^2$  = 10.945, p = 0.362) or seniority ( $\chi^2$  = 12.0808, p = 0.060). Statistically significant relations were found, however, in the case of the place of residence ( $\chi^2$  = 14.841, p = 0.022) and education ( $\chi^2$  = 18.073, p = 0.006) – Table 3.

The family nurse is a specific member of the therapeutic team in the care of the patient in the place of residence. The variety of activities and problems in caring for the patient makes it representative of the health care system, which most often and the longest, and above all in a direct way contacts the patient, his family and the whole environment. Table 4 lists the most frequent reasons for contact between family nurses and families. As is clear from the data presented, nurses most often contacted the families of children under care for a chronically ill person (95.8%) and care for an elderly person (88.5%).

TABLE 1. Opinions about the profession of a nurse as an autonomous profession

Sociadomographic variables	Fully independen	t occupation	Partially depend	dent occupation	Completely dependent		
Sociodemographic variables	n	%	n	%	n	%	
	village	29	18.5	87	55.4	41	
	town <50 000	35	14.3	118	48.4	91	
Place of residence	town 50-100 000	13	17.6	28	37.8	33	
	city >100 000	25	14.9 90		53.6	53	
	Pearson's	test χ²	p = 0	).079	df	= 6	
	medical clinic	31	14.9	117	56.3	60	
	nursing practice	9	10.0	39	43.3	42	
	hospital	18	14.9	57	47.1	46	
Place of employment	individual nursing practice	32	19.4 79		47.9	54	
	group nursing practice	6	21.4	15	53.6	7	
	other	6	19.4	16	51.6	9	
	Pearson's	test χ²	p = 0	).151	df =	: 10	
	registered nurse	67	15.3	221	50.3	151	
	licensed nurse	23	15.9	73	50.3	49	
Education	master of nursing	12	20.7	29	50.0	17	
	other	0	0.0	0	0.0	1	
	Pearson's	test χ²	p = (	).771	df	= 6	
	<10 years	8	21.1	20	52.6	10	
	10-20 years	15	16.0	47	50.0	32	
Seniority	20-30 years	34	15.7	101	46.8	81	
	>30 years	45	15.3	155	52.5	95	
	Pearson's	test χ²	p = (	).768	df = 6		

Relatively the least contacts resulted from the care of a person with a psychiatric disorder (45.6%).

An important service in the care of a patient is urinary bladder rinsing. The claim that a nurse can independently and without a medical order perform a bladder irrigation, as many as 48.2% of family nurses surveyed did not agree with, which may indicate their lack of knowledge, and thus translate into decision-making and provision of services in the care

of the patient. Next, it was analyzed whether the above opinion depended on selected sociodemographic variables. The questioned nurses, regardless of their seniority ( $\chi^2 = 8.127$ , p = 0.775) and place of residence ( $\chi^2 = 15.811$ , p = 0.200), showed comparable opinions. In turn, a significant dependence on the place of employment was observed ( $\chi^2 = 41.839$ , p = 0.003) and education ( $\chi^2 = 24.486$ , p = 0.017) – Table 5.

TABLE 2. Evaluation of the frequency and dependence of opinions in the context of access to benefits conditioned by the implementation of the nursing process

	Sociodemographic	Yes	5	No	•	I don't know		
	variables	n	%	n	%	n	%	
		village	150	95.5	2	1.3	5	
		town <50 000	237	97.1	4	1.6	3	
	place of residence	town 50-100 000	70	94.6	1	1.4	3	
		city >100 000	161	95.8	4	2.4	3	
		Pearson's	test χ²	p = 0.	706	df = 6		
	place of employment	medical clinic	201	96.6	2	1.0	5	
		nursing practice	89	98.9	0	0.0	1	
		hospital	113	93.4	3	2.5	5	
Implementation of the nursing		individual nursing practice	157	95.2	5	3.0	3	
process in accordance		group nursing practice	28	100.0	0	0.0	0	
with the care plan		other	30	96.8	1	3.2	0	
		Pearson's	test χ²	p = 0.	488	df =	10	
		registered nurse	423	96.4	9	2.1	7	
		licensed nurse	141	97.2	1	0.7	3	
	education	master of nursing	53	91.4	1	1.7	4	
		other	1	100.0	0	0.0	0	
		Pearson's	s test χ²	p = 0.	238	df :	= 6	
		<10 years	35	92.1	1	2.6	2	
		10-20 years	90	95.7	1	1.1	3	
	seniority	20-30 years	203	94.0	6	2.8	7	
		>30 years	290	98.3	3	1.0	2	
		Pearson's	s test χ²	p = 0.	159	df =	= 6	

Another service relatively frequent performed in the residents' environment is rectal surgery, especially ingots supporting the defecation process. This benefit is relatively more often performed independently, without a medical order, by family nurses. With this opinion 47.1% of examined family nurses agreed. In the further analysis, variables were not found to be statistically significant ( $\chi^2$  test = 14.132, p = 0.292) depending on the length of service. These dependencies were also not demonstrated

in the case of place of residence ( $\chi^2$  = 18.04, p = 0.113) or education ( $\chi^2$  = 19.652, p = 0.074). This relationship was observed only in the case of the place of employment ( $\chi^2$  = 35.578, p = 0.017) – Table 6.

One of the services for which the respondents were not sure when it comes to professional competence is the order for transporting the patient. Unfortunately, the vast majority (57.4%) of nurses disagreed with the claim that the nurse has the right to independently order patient transport, without

TABLE 3. Opinions regarding the availability of services conditioned by the execution of medical orders

	Sociodemographic	Ye	s	No		I don't know		
	variables	n	%	n	%	n	%	
		village	150	95.5	4	2.5	3	
		town <50 000	243	99.6	0	0.0	1	
	place of residence	town 50-100 000	71	95.9	0	0.0	3	
		city >100 000	165	98.2	1	0.6	2	
		Pearson's	s test χ²	p = 0.	022	df = 6		
		medical clinic	204	98.1	1	0.5	3	
		nursing practice	89	98.9	0	0.0	1	
	place of employment	hospital	114	94.2	3	2.5	4	
		individual nursing practice	163	98.8	1	0.6	1	
Execution of medical orders		group nursing practice	28	100.0	0	0.0	0	
		other	31	100.0	0	0.0	0	
		Pearson's	s test χ²	p = 0.	362	df =	: 10	
		registered nurse	435	99.1	2	0.5	2	
		licensed nurse	140	96.6	2	1.4	3	
	education	master of nursing	53	91.4	1	1.7	4	
		other	1	100.0	0	0.0	0	
		Pearson's	s test χ²	p = 0.	006	df	= 6	
		<10 years	36	94.7	0	0.0	2	
		10-20 years	92	97.9	0	0.0	2	
	seniority .	20-30 years	208	96.3	3	1.4	5	
		>30 years	293	99.3	2	0.7	0	
		Pearson's	s test χ²	p = 0.	060	df	= 6	

a medical order, while only 26.0% of the nurses confirmed the possibility of exercining this type of competence in practice. This statement was agreed to relatively often by the nurses living in cities 50–100 thousand residents (31.1%), the nurses employed in medical entities (30.3%), nurses with a master's degree in nursing (36.2%) and nurses with the least seniority (34.2%).

Next, it was analyzed whether that opinion on this competence depended on selected sociodemographic variables. It was found that there is a statistically significant dependence

on education ( $\chi^2$  = 26.919, p = 0.008). However, this significance was not demonstrated in the case of seniority ( $\chi^2$  = 6.036, p = 0.914), place of employment ( $\chi^2$  = 27.889, p = 0.112) or place of residence ( $\chi^2$  = 19.990, p = 0.067) – Table 7.

When undertaking care of the patient, the nurse should receive information from the doctor about the patient's health status, in order to assess their own activities and possible updating in the context of the changing situation of the patient.

Most of the respondents (89.7%) believed that the doctor should provide them with information about the patient's

TABLE 4. Evaluation of the frequency of opinions in the context of the reasons of contact between the family nurse and the patient

The most common reasons for	Y	es	No			
contacts	n	%	n	%		
The birth of a child and care for a newborn baby	345	53.6	298	46.4		
Care for a small child	431	67.0	212	33.0		
An elderly person care	569	88.5	74	11.5		
Care for a chronically ill person	616	95.8	27	4.2		
Care for a person with psychiatric disorders	293	45.6	350	54.4		
Help in situations of violence and harassment	335	52.1	308	47.9		
Care for a dying person	449	69.8	194	30.2		

state of health. At the same time, it was noted that a total of 7.8% of respondents did not consider this scope of information as a base in the context of patient care – this position was indicated most often by nurses employed under independent public health facilities (11.6%) and respondents working less than 10 years (10.5%).

While studying the variables, there was no statistically significant presence ( $\chi^2$  = 9.474, p = 0.662) depending on the place of residence in the case of respondents' answers to the question about the doctor's provision of information about the patient's state of health. These dependencies were also not shown for other variables: place of employment ( $\chi^2$  = 24.392, p = 0.228), education ( $\chi^2$  = 13.100, p = 0.362) or seniority ( $\chi^2$  = 13.538, p = 0.333) – Table 8.

TABLE 5. Opinions in the field of making decisions about independent bladder irrigation

Service	Sociodemographic variables —		Definitely disagree		I don'i	I don't agree		I don't know		ree	Definitely agree		Pearson's
Service	Sociodeillog	Sociouemographic variables			n	%	n	%	n	%	n	%	test χ <sup>2</sup>
		village	18	11.5	8	30.6	16	10.2	57	36.3	18	11.5	p = 0.200 df = 12
	place of	town <50 000	24	9.8	99	40.6	23	9.4	78	32.0	20	8.2	
	residence	town 50-100 000	16	21.6	23	31.1	8	10.8	22	29.7	5	6.8	$\chi^2 = 15.811$
		city >100 000	22	13.1	60	35.7	16	9.5	47	28.0	23	13.7	-
		medical clinic	19	9.1	72	34.6	24	11.5	75	36.1	18	8.7	
	place of employment	nursing practice	21	23.3	26	28.9	6	6.7	30	33.3	7	7.8	- p = 0.003 - df = 20 χ <sup>2</sup> = 41.839 -
		hospital	14	11.6	49	40.5	13	10.7	34	28.1	11	9.1	
		individual nursing practice	17	10.3	58	35.2	10	6.1	53	32.1	27	16.4	
Rinsing the		group nursing practice	3	10.7	10	35.7	7	25.0	8	28.6	0	0.0	
bladder		other	6	19.4	15	48.4	3	9.7	4	12.9	3	9.7	
		registered nurse	53	12.1	173	39.4	43	9.8	130	29.6	40	9.1	
	education	licensed nurse	22	15.2	38	26.2	12	8.3	58	40.0	15	10.3	p = 0.017
	education	master of nursing	5	8.6	19	32.8	8	13.8	16	27.6	10	17.2	$- df = 12$ $\chi^2 = 24.486$
		other	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	
		<10 years	4	10.5	10	26.3	6	15.8	15	39.5	3	7.9	- p = 0.775 - df = 12 χ <sup>2</sup> = 8.127
	seniority	10-20 years	8	8.5	32	34.0	11	11.7	33	35.1	10	10.6	
	Semonty	20-30 years	24	11.1	81	37.5	20	9.3	69	31.9	22	10.2	
		>30 years	44	14.9	107	36.3	26	8.8	87	29.5	31	10.5	

TABLE 6. Opinions in the field of performing rectal procedures

Service	Sociodomor	Sociodemographic variables  –		Definitely disagree		I don't agree		I don't know		gree	Definitely agree		Pearson's
Service	Sociodeillog	grapilic variables	n	%	n	%	n	%	n	%	n	%	test χ²
		village	17	10.8	45	28.7	20	12.7	54	34.4	21	13.4	p = 0.113
	place of	town <50 000	13	5.3	84	34.4	33	13.5	88	36.1	26	10.7	
	residence	town 50-100 000	13	17.6	19	26.7	12	16.2	2	29.7	8	10.8	df = 12 $\chi^2 = 18.104$
		city >100 000	20	11.9	43	25.6	1	2.5	56	33.3	28	16.7	
		medical clinic	11	5.3	64	30.8	27	13.0	82	39.4	24	11.5	
	place of employment	nursing practice	16	17.8	25	27.8	9	10.0	31	34.4	9	10.0	- p = 0.017 - df = 20 χ <sup>2</sup> = 35.578 -
		hospital	16	13.2	33	27.3	24	19.8	36	29.8	12	9.9	
		individual nursing practice	13	7.9	51	30.9	18	10.9	51	30.9	32	19.4	
Rectal		group nursing practice	3	0.7	9	32.1	6	21.4	10	5.7	0	0.0	
surgery		other	4	12.9	9	29.0	2	6.5	0	32.3	6	19.4	
		registered nurse	43	9.8	140	31.9	59	3.4	151	34.4	46	10.5	
	education	licensed nurse	14	9.7	35	24.1	19	13.1	55	37.9	22	15.2	p = 0.074
	education	master of nursing	6	10.3	16	27.6	8	13.8	4	24.1	14	24.1	$- df = 12$ $\chi^2 = 19.652$
		other	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	
		<10 years	3	7.9	14	36.8	4	10.5	11	28.9	6	15.8	p = 0.292 - df = 12 χ² = 14.132
	seniority	10-20 years	4	4.3	25	26.6	14	14.9	36	38.3	15	16.0	
	Seillority	20-30 years	6	87.4	68	31.5	25	11.6	9	36.6	28	13.0	
		>30 years	40	13.6	84	28.5	43	14.6	94	31.9	34	11.5	

## **DISCUSSION**

According to the legal system in force in Poland, the family nurse is a Primary Health Care nurse [3]. According to the environmental approach, it is right to accept that the main goal of family nurse care is not a patient – a single unit, but the whole family together with the place of residence as a system of dependencies and factors affecting the patient's health. This approach is supported by WHO, which was presented in the Munich Declaration in 2000. The assumption that "health begins in the family" allows defining the place of family nursing in the health care system, and thus clearly shows that the family nurse through multi-directional action, especially in the field of health promotion and health education, affects the maintenance of the health of the community at a certain level, which depends on the nurses' knowledge and competence [5].

The activities of a family nurse around the world are focused on the family, which is both the recipient and the factor shaping the level and scope of nursing services. Working with the patient's family increases the complexity of the tasks during care – the number of family members together with their burdens, needs and system of mutual relations does not allow for the development of a uniform competence model among family nurses [6].

Cooperation between the nurse and the doctor should be based on partnership. However, due to the variety of activities, the impact of multiple conditions and work in a multidisciplinary team, the family nurse must demonstrate a high degree of independence in the care. While professional functions can be divided into being dependent (as a therapeutic function), partially dependent (e.g. a rehabilitation function),

TABLE 7. Knowledge on the subject of self-directed transport of a sick person

Service	Sociodemographic variables		Definitely disagree		I don't agree		I don't know		l agree		Definitely agree		Pearson's
Service	Sociodeillog	Sociodemograpme variables			n	%	n	%	n	%	n	%	test χ²
		village	30	19.1	60	38.2	25	15.9	38	24.2	4	2.5	- p = 0.067 - df = 12
	place of	town <50 000	35	14.3	106	43.4	43	17.6	39	16.0	21	8.6	
	residence	town 50-100 000	13	17.6	23	31.1	15	20.3	19	25.7	4	5.4	$\chi^2 = 19.990$
		city >100 000	28	16.7	74	44.0	24	14.3	25	14.9	7	10.1	
		medical clinic	24	26.7	34	37.8	8	8.9	19	21.1	5	5.6	_
	place of employment	nursing practice	24	26.7	34	37.8	8	8.9	19	21.1	5	5.6	- p = 0.112 - df = 20 χ <sup>2</sup> = 27.889 -
		hospital	15	12.4	55	45.5	22	18.2	18	14.9	11	9.1	
		individual nursing practice	32	19.4	67	40.6	25	15.2	28	17.0	13	7.9	
Ordering transport		group nursing practice	4	14.3	11	39.3	8	28.6	5	17.9	0	0.0	
of a sick person		other	3	9.7	14	45.2	9	29.0	3	9.7	2	6.5	
		registered nurse	65	14.8	190	43.3	78	17.8	82	18.7	24	5.5	-
	education	licensed nurse	30	20.7	53	36.9	23	15.9	27	18.6	12	8.3	p = 0.008 df = 12
	education	master of nursing	11	19.0	20	34.5	6	10.3	12	20.7	9	15.5	$\chi^2 = 26.919$
		other	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	
		<10 years	5	13.2	13	34.2	7	18.4	10	26.3	3	7.9	p = 0.914 - df = 12 $\chi^2$ = 6.036
	eeniority	10-20 years	13	13.8	42	44.7	13	13.8	19	0.2	7	7.4	
	cemonty	20-30 years	34	15.7	92	46.2	39	18.1	34	15.7	17	7.9	
		>30 years	54	18.3	116	39.3	48	16.3	58	19.7	19	6.4	

or independent of the doctor for health, care or management functions, the dynamics of the nursing profession resulted in a departure from submission to the doctor to increasing professional independence [7]. Currently, nursing is an independent profession, hence, people performing this profession, especially in home environment care, should not be seen only through the prism of medical orders. Unfortunately, according to research, nurses relatively often show a low level of awareness about professional independence. According to research conducted in Łódź among 114 nurses, almost 50% of respondents do not know about the role of the nurse in patient care in the home environment, resulting in a lack of awareness of their own competence [8].

Subsequent research conducted on a group of 200 nurses working in open and closed health care, point to the fact that over 57% of respondents with higher education and almost

37% with secondary education believe that the nurse profession is partially independent [9].

Our own research, regardless of the sociodemographic variable, indicates that this sentence was shared by over 50% of family nurses surveyed.

Work in the field of family nursing consists primarily of identifying the conditions and needs of the patient. Regardless of the country where the family/community nurse is functioning, this is the starting point for working with the patient. Planning and implementation of nursing care focused on the family requires a comprehensive approach taking into account the complexity of family and environmental problems, as well as deficits in the family and resources that this family has [10]. It is emphasized that the practice includes assessment of various aspects of health, including individual and social factors determining the patient's situation [11]. This is related to the

TABLE 8. Evaluation of the frequency and dependence of opinions on the doctor's provision of health information

Type of	Sociodemographic variables —		Definitely disagree		I don'	I don't agree		I don't know		I agree		nitely ree	_ Pearson's
information	Sociodeillog	occionemograpine variables			n	%	n	%	n	%	n	%	test χ²
		village	12	7.6	1	0.6	4	2.5	65	41.4	75	47.8	
	place of	town <50 000	20	8.2	3	1.2	4	1.6	86	35.2	131	53.7	p = 0.662
	residence	town 50-100 000	1	1.4	0	0.0	3	4.1	27	36.5	43	58.1	$df = 12  \chi^2 = 9.474$
		city >100 000	12	7.1	1	0.6	5	3.0	67	39.9	83	49.4	
		medical clinic	13	6.3	1	0.5	3	1.4	80	38.5	111	53.4	
	place of employment	nursing practice	9	10.0	0	0.0	2	2.2	29	32.2	50	55.6	- p = 0.228 - df = 20 χ <sup>2</sup> = 24.329 -
		hospital	11	9.1	3	2.5	4	3.3	48	39.7	55	45.5	
		individual nursing practice	9	5.5	0	0.0	6	3.6	57	34.5	93	56.4	
Information		group nursing practice	1	3.6	1	3.6	0	0.0	15	53.6	11	39.3	
on health		other	2	6.5	0	0.0	1	3.2	16	51.6	12	38.7	
		registered nurse	31	7.1	3	0.7	14	3.2	178	40.5	213	48.5	p = 0.362 - df = 12 χ² = 13.100
	education	licensed nurse	10	6.9	1	0.7	0	0.0	53	36.6	81	55.9	
	education	master of nursing	4	6.9	1	1.7	2	3.4	14	24.1	37	63.8	
		other	0	0.0	0	0.0	0	0.0	0	0.0	1	100	
		<10 years	3	7.9	1	2.6	1	2.6	7	18.4	26	68.4	p = 0.331 - df = 12 χ² = 13.538
	seniority	10-20 years	6	6.4	1	1.1	0	0.0	40	42.6	47	30.0	
	semority	20-30 years	19	8.8	1	0.5	7	3.2	83	38.4	106	49.1	
		>30 years	17	5.8	2	0.7	8	2.2	115	39	153	51.9	

fact that the problems experienced by families affect the health problems and their risk of occurrence, for example, they have a potential impact on the health aspect of the family. Relatively often, holistic family problems are the result of individual health problems of the individual family members, who interact with family activity, resources and priorities that are guided by household members [6].

Our own research indicates that over 90% of the nurses have knowledge in recognizing conditions and needs, irrespective of the place of employment, residence or level of education, however, a significant dependence on job seniority was evident (p = 0.029,  $\chi^2$  = 9.042).

Implementation of the nursing process in the patient's environment is also a kind of manifestation of the patient's and his family's or nursing person's availability to nursing services. Over 96% of the surveyed family nurses agree with this opinion,

regardless of the level of education, seniority, form of employment or place of residence.

Another of the tasks of the family nurse is independent provision of specific services related to prevention, diagnosis, treatment and rehabilitation, as well as medical rescue operations, which is extremely important especially when in the environment of the patient's residence the nurses depend only on themselves and their own skills and professional experience. Family nurses working in other health care systems in other countries must also be independent. In Slovenia, for example, a family nurse provides services over a wide spectrum of care: health of society and individuals, care for a newborn and a woman after delivery at home, and provision of chronically ill patients at home. It is often even stressed that nurses are the only health professionals working with families in their homes and in the local community [12].

In a Japanese study, the crucial role of family nurses cooperating with residents and local government officials in the care of elderly chronically ill and terminally ill, disabled patients and those in need of medical care was also emphasized [13].

In South Korea, in turn, the environmental nurse carries out tasks in the care of the family directly at home, provides advice and instruction, also deals with care for illnesses, care for the elderly, vaccinations and also health care for students in schools [4].

Thus, the work of the family nurse also involves the execution of medical orders, both in the diagnosis process (health measurements, blood collection for diagnostic tests), treatment (for example, the delivery of medicines) and rehabilitation [14].

Research carried out in north-east Poland clearly indicates that nursing visits were mainly related to the supply of injections and dressing changes, which is associated with the implementation of medical orders. Only the following visits concerned advice or diagnostic services [15].

In our own research, 85.2% of the surveyed nurses answered "yes" to medical orders as the type of services provided, irrespective of sociodemographic variables. In addition, the implementation of medical orders is a form of accessibility for patients and their environment for health services.

Nearly 100% of the nurses surveyed agreed. At the same time, a statistically significant dependence on the place of residence was confirmed (p = 0.022,  $\chi^2$  = 14.841) and also to the level of education (p = 0.006,  $\chi^2$  = 18.073).

When performing care of the patient, especially when recognizing a new environment and family, the nurse should receive information from the doctor about the patient's health status and medical diagnosis, in order to assess their own actions and their possible updating in the context of the changing patient's situation. The impact on the action and type of nursing intervention also requires knowledge about the proposed diagnostic methods, so that the nurse will be able to efficiently guide the patient in the health care system. The provision of comprehensive nursing services is also based on a coherent and reliable communication of information between the doctor and the nurse regarding the proposed methods of treatment, which is extremely important in the case of a compliant health situation, such as multi-roboticity. The scope of information provided to the nurse by the doctor should refer to the proposed rehabilitation methods so that the nurse can prepare the patient and the family for efficient organization of activities in care, whether preparing the place of residence of the patient or in the context of transport to the place of rehabilitation services [16].

The range of information provided by the doctor has largely been agreed by family nurses (over 80%) regardless of sociodemographic variables.

Considering the most frequent cause of contact with dependents or their families – taking care of a chronically ill person, nurses must demonstrate great up to date knowledge in the field of care due to the variety of diseases that affect patients. Szlenk-Czyczerska and Kędra indicate the essence of a good diagnosis of the patient's situation, which translates

into a nursing diagnosis that reflects the patient's condition. In their opinion, a reliable and accurately formulated diagnosis determines the actions directed at proper care of the patient [17].

Care for the elderly is a huge challenge for the entire health care system, due to the aging of the population and the difficulties resulting from the so-called multi-cavity and different specifics of the course of many diseases in old age. The multitude of diseases and deteriorating functionalities of the elderly increase the need for care and medical services [18].

Doroszkiewicz and Bień indicate the special role of the family nurse in the care of the elderly in the context of therapeutic and diagnostic services [18]. In turn, Zaczyk et al. indicate, as in the case of caring for chronically ill persons, that the nurse acts as a guide to the health care system and a link between individual members of the therapeutic team. They particularly improve their role in the field of providing information and emotional support, unfortunately they also note that nursing care for seniors is relatively frequent in prescriptions and treatment [19].

Pluta et al. point out that not all older patients have access to geriatric care, hence many of them use family nurse services. Hence their role is to prepare the patient for self-care and family members to care for the patient [20]. In caring for a person with a mental illness (45.6%), a statistically significant dependence on the level of education was found ( $\chi^2$  = 15.907, p = 0.001) and also with seniority ( $\chi^2$  = 10.607, p = 0.014).

Relationships with a patient with mental disorders can be extremely difficult. Patient care should focus primarily on providing care, monitoring progress in therapy, educating caregivers in the area of communication skills, supplying medications, stimulating positive behavior patterns, and above all, providing emotional and informational support [21].

An important aspect of working with the family is the aforementioned availability of services. Availability depends on the information obtained during a visit to the patient's home during which the 1st interview and observation of the environment, the nurse assesses any care problems. When drawing up the notes, it is important to describe the family characteristics using a genogram, or a graphical record of family characteristics, covering at least 3 generations, which will allow recording information about possible family diseases. The genogram allows saving information about diseases occurring in individual family members, the family structure and ties between individual members [2].

The results of our own research show that knowledge in this field is available to 94.4% of the nurses surveyed. There was also a statistically significant dependence on the place of employment (p = 0.043,  $\chi^2$  = 18.773).

# **CONCLUSIONS**

1. The general state of knowledge of family nurses in northwestern Poland in the area of professional competence is satisfactory.

- 2. The state of knowledge is particularly high in terms of the availability of nursing services to patients, information provided by the family doctor as part of the cooperation in patient care, provision of services through the nursing process, and care for the elderly and chronically ill patients.
- 3. A knowledge deficit was found in the case of selected nursing services, such as urinary bladder washing, ordering transport and rectal remedies.
- 4. An alarmingly low level of knowledge was observed in the field of professional competences in caring for a person with mental health problems.

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