Factors influencing the use of different forms of complementary vocational training for the nursing profession - surveys

(Czynniki mające wpływ na korzystanie z różnych form uzupełniającego kształcenia zawodowego w zawodzie pielęgniarki – badania ankietowe)

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Abstract - Introduction. After Poland's entry into the European Union, post-graduate education in the profession of a nurse flourished. There was a need to adapt to European standards, and the constant dynamics of changes taking place in medicine - the introduction of modern technologies - still requires nurses to constantly develop their knowledge and skills. Continuous further training has become both a need and a necessity. A wide range of further training is now available.

The aim of the study. The aim of the research was to determine the role of selected factors influencing the use of various forms of complementary vocational training in the nurse profession.

Materials and methods. The study was conducted among 68 nurses working in the hospital in Plonsk. The method of diagnostic survey was applied with the use of the author's questionnaire.

Results. The respondents see the need for supplementary education in their profession and are willing to take advantage of specialist and qualification courses. The courses have both professional and personal benefits. Self-study is a necessary form of further education in a nurse's job, but also internal training is very popular among the most commonly chosen forms of learning.

Conclusions. Modern nurses are eager to improve their qualifications and competences based on their own professional and personal development. The most important benefits after the completion of training are considered by the respondents to be the improvement of qualifications and competences and their own ambitions. The factors that improve motivation to take up training are increased salaries, while demotivating high training costs. Nurses are mosing to participate in specialist and qualification courses, and specialisation is the one that in

creases professional confidence. Self-education is an important part of nurses' professional work.

Key words - nurse, postgraduate education, qualifications.

Streszczenie – Wstęp. Po wkroczeniu Polski do Unii Europejskiej nastąpił rozkwit kształcenia podyplomowego w zawodzie pielęgniarki. Zaistniała potrzeba dostosowania się do standardów europejskich, ponadto ciągła dynamika zmian zachodzących w medycynie - wprowadzanie nowoczesnych technologii, wciąż wymaga od pielęgniarek nieustannego rozwoju wiedzy i umiejętności. Ciągłe dokształcanie stało się zarówno potrzebą jak i koniecznością. Aktualnie dostępna jest szeroka oferta doskonalenia zawodowego.

Cel pracy. Celem badań było określenie roli wybranych czynników wpływających na korzystanie z różnych form uzupełniającego kształcenia zawodowego w zawodzie pielęgniarki.

Materiał i metody. Badania przeprowadzono wśród 68 pielęgniarek pracujących w płońskim szpitalu. Zastosowano metodę sondażu diagnostycznego z użyciem autorskiego kwestionariusza ankiety.

Wyniki. Badane osoby dostrzegają potrzebę kształcenia uzupełniajacego w zawodzie, chetnie korzystają z kursów specjalistycznych oraz kwalifikacyjnych. Z ukończonych kursów wynoszą korzyści zawodowe oraz osobiste. W pracy zawodowej pielęgniarki samokształcenie jest potrzebną formą dokształcania, ale również szkolenia wewnatrzoddziałowe cieszą się dużą popularnością wśród wybieranych najczęściej form nauki.

Wnioski. Współczesne pielęgniarki chętnie podnoszą kwalifikacje i kompetencje kierując się własnym rozwojem zawodowym i osobistym. Za najważniejsze korzyści po ukończenia szkoleń respondenci uważają podniesienie

kwalifikacji i kompetencji oraz własne ambicje. Czynnikami, które poprawiają motywację do podejmowania kształcenia są wzrost wynagrodzenia, natomiast demotywują wysokie koszty kształcenia. Pielęgniarki najchętniej uczestniczą w kursach specjalistycznych oraz kwalifikacyjnych, a specjalizacja najbardziej podnosi pewność zawodową. Samokształcenie stanowi ważny element w pracy zawodowej pielęgniarek.

Słowa kluczowe – pielęgniarka, kształcenie podyplomowe, kwalifikacje.

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I. INTRODUCTION

The beginnings of nursing care date back to ancient times. The development of professional nursing worldwide dates back to 1860, when Florence

Nightingale established the first secular nursing school at St. Thomas Hospital in London. The role of nurses has also changed from a purely ancillary and caring function to a competent medical practitioner today. Shortly after Poland's entry into the European Union, supplementary education in the nursing profession flourished. There was a need to adapt to European standards, but also the constant dynamics of changes taking place in medicine - the introduction of modern technologies, still requires from nurses the

constant development of knowledge and skills. [1-4] The aim of the research was to determine, on the basis of surveys, a picture of involvement in various forms of complementary vocational training of contemporary Polish nurses, based on a selected group of respondents.

II. MATERIAL AND METHODS

Material

The research was carried out in a group of 68 nurses working in the paediatric, internal medicine, surgery and hospital emergency ward in the Marshall Józef Piłsudski Independent Public Health Care Unit in Płońsk. Gender The study was attended by 68 people, the vast majority (97.1%) of the surveyed people were women and 2.9% men. Age 29.4% of the respondents were aged 41-50, 25% each between 31-40 and 20-30, 17.6% between 51-60 (17.6%). Education 52.9% of the respondents had a bachelor's degree in nursing, 26.5% - secondary vocational education, 20.6% - higher education MSc in nursing. Seniority 27.9% of respondents work as a nurse for up to 5 years, 26.5% of respondents work as a nurse for 21-30 years. 22.1% of the respondents have worked for 6-10 years and 17.6% of the respondents work for over 30 years as a nurse. The least numerous group were nurses / nurses working 11-20 years - 5.9%.

Methods

A diagnostic survey was used in the research, the tool was a self-reported questionnaire, the questionnaire contained a label and 15 questions related to the subject of the work. The research was anonymous, and participation in it was voluntary. The research was conducted in the period from 2 November 2019 to 15 February 2020. In the research, the SPSS Statistics 21.0 package was used.

In the research, the SPSS Statistics 21.0 package was used. The results of the research were subjected to descriptive, graphic and statistical analysis. Statistical analysis was carried out using the Chi-square test and t-student test. The probability value p<0.05 was considered statistically significant.

III. RESULTS

Distribution of answers to individual survey questions

Question 1: Do you nowadays think that there is a need for further training as a nurse?

According to 97.1% of those surveyed today, there is a need for further training in the profession of nurse, while 2.9% disagree. The distribution of answers to the above question is presented in Table 1.

Table 1. Distribution of answers to the question: Do you think there is a need for further training in the nursing profession today?

Proposal for a reply	Timetable of responses	
	Number	%
Yes	66	97,1 ****
No	2	2,9 ****
Total	68	100

,,***" to ,,****" p<0,01

Question 2: Are you willing to undertake supplementary vocational training?

94.1% of the respondents indicated that they are willing to undertake additional vocational training, while 5.9% of the respondents are not interested in additional training. The distribution of answers is presented in Table 2.

Table 2. Distribution of the answer to the question: Are you willing to undertake supplementary vocational training?

Proposal for a reply	Timetable of responses	
	Number	%
Yes	64	94,1***
No	4	5,9****
Total	68	100

,,***" to ,,****" p<0,01

Question 3: What forms of supplementary training as a nurse have you completed so far? (list which)

Among the surveyed group, 32.7% of the respondents completed a specialist course, 31.4% mentioned a qualification course, and 19.5% of the respondents

completed a specialisation course. Only 4.4% of the respondents did not complete any supplementary training. The distribution of answers is presented in Table 3.

Table 3. Distribution of answers to the question: What forms of supplementary education in the profession of nurse have you completed so far?

Proposal for a	Timetable of responses	
reply	Number 1/	%
None	7	4,4***
Specialised train-		
ing, called speciali-	31	19,5****
sation		
Qualification	50	31,40****
course	30	31,40
Specialist course	52	32,7****
Further training	16	10.1*
course	10	10,1
Other		
Other	3	1,9***
Total	159	100

,,***" to ,,****" p<0,01

1/ there was a possibility of multiple responses

Question 4. Are you in the process of receiving any supplementary vocational training?

17.6% of those surveyed said that they received supplementary vocational training.

Table 4. Distribution of answers to the question: Are you in the process of receiving any supplementary vocational training?

Proposal for a	Timetable of responses	
reply	Number	%
Yes	12	17,6***
No	56	82,4****
Total	68	100

,,***" to ,,****" p<0,0

Question 5: Which of the training courses you have completed most strongly enhanced your position and professional security?

51.5% of respondents indicated that it was the completed specialisation that gave the strongest boost to their position and job security, 27.9% received a response with a qualification course, while 17.6% of respondents felt that it was the specialist course that strengthened their professional position the most. Only 2.9% responded with a second degree course. The

distribution of answers to this question is presented in Table 5 below.

Table 5: Distribution of answers to the question: Which of the training courses you have completed most strongly improved your position and professional security?

Proposal for a	Timetable of responses	
reply	Number	%
Specialisation	35	51,5****
Qualification course	19	27,9****
Specialist course	12	17,6***
Kurs dokszt- ałcający	0	0
Secondary educa- tion	2	2,9***
Total	68	100

,,***" to ,,****" p<0,01

Question 6: What have you benefited from the completion of your professional further training? (a few may be highlighted)

According to 37.1% of the respondents, the completed supplementary training has resulted in the improvement of competences and qualifications in professional work, 32.8% of the respondents indicated an answer about satisfaction and satisfaction, their own ambitions. 19.8% of the respondents expressed an opinion about establishing new contacts, while 8.6% of the survey participants gave a response with higher salaries and the remaining 1.7% of promotions at work. The distribution of respondents' answers is presented in Table 6 below.

Table 6. Distribution of the answer to the question: What have you benefited from the completion of the complementary professional training?

Proposal for a	Timetable	e of responses
reply	Number 2/	%
Satisfaction and satisfaction, own ambitions	38	32,8***
Improving compe- tences and qualifi- cations at work	43	37,1****
Higher salary	10	8,6*1
Establishing new contacts	23	19,8* 2
Promotion at work	2	1,7***
Total	116	100

^{,,1&}quot; to ,,2" p<0,05 ,,***" to ,,****" p<0,01

2/ there was a possibility of multiple responses

Question 7: Who inspired you to undertake supplementary training as a nurse?

86.8% of the respondents indicated that they had been educated on their own initiative, while 7.4% of the respondents were of the opinion that it was their colleagues who persuaded them to undertake the education. 5.9% received a response concerning education on the recommendation of the employer. The distribution of answers to the above question is presented in Table 7.

Table 7. Distribution of answers to the question: Who inspired you to take up supplementary training as a nurse?

Proposal for a	Timetable of responses	
reply	Number	%
My decision	59	86,8***
Employer	4	5,9***
Associates	5	7,4***
The family	0	0
Total	68	100

,,***" to ,,****" p<0,01

Question 8: Can you count on assistance (e.g. change of working time organisation, study grants) from your company/supervisor when undertaking supplementary vocational training?

44.1% of the respondents admit that by undertaking supplementary vocational training they can count on help from the company / supervisor, while 55.9% stated that they cannot count on such help. The distribution of answers to the above question is presented in Table 8.

Table 8. Distribution of answers to the question: Can you count on help (e.g. change of working time organisation, co-financing of learning) from your company / supervisor when undertaking supplementary vocational training?

Proposal for a reply	Timetable of responses	
	Number	%
Yes	30	44,1
No	38	55,9
Total	68	100

Question 9: Which of the following factors do you think could improve a nurse's motivation to undertake supplementary training?

The most answers to the above question were given by a factor - increase in salary after completing the course (28.4%), reimbursement of training costs gained 26.5%, 14.8% indicated obtaining training leave for the period of training, 14.2% indicated favor and assistance from the employer, 7.4% received an answer concerning understanding and assistance of family members. Partial elearning training received the least votes - 6.8%. The distribution of answers to the above question is presented in Table 9.

Table 9. Distribution of answers to the question: Which of the following factors do you think could improve a nurse's motivation to undertake supplementary education?

Proposal for a	Timetable of responses	
reply	Number 3/	%
Increase in salary upon completion of the course	46	28,4
Reimbursement of training costs (par- tial or total)	43	26,5
Obtaining training leave for the train- ing period	24	14,8
Favor and assis- tance from the employer	23	14,2
Partial e-learning training	11	6,8
Understanding and assistance of family members	12	7,4
Other	3	1,9
Total	162	100

^{3/} there was a possibility of multiple responses

Question 10. Which of the following vocational training methods do you prefer to use?

45.5% of the respondents were the most willing to take advantage of intra-branch training, 26.7% pointed to inhouse training, 11.9% gained answers about scientific conferences, and 10.9% of the votes were given to workshops. Respondents are least interested in participating in semi-

nars - only 2.0%. The distribution of answers to the above question is presented in Table 10.

Table 10. Distribution of answers to the question: Which of the following vocational training methods do you prefer to use?

Proposal for a	Timetable of responses	
reply	Number 4/	%
Intra-branch train- ing	46	45,5
Company training	27	26,7
Workshops	11	10,9
Seminars	2	2,0
Scientific conferences	12	11,9
Other	3	3,0
Total	101	100

^{4/} there was a possibility of multiple responses

Question 11. What is your main source of information on currently available forms of vocational training?

54.4% of the respondents indicated the Internet as the main source of information on the currently available forms of vocational education, 20.6% of the votes received a response concerning collaborators, while 19.1% were of the opinion that the source of knowledge was the SMK Education Monitoring System. The answer concerning the employer gained 5.9%. The distribution of answers to the above question is presented in Table 11.

Table 11 Distribution of answers to the question: What is your main source of currently available vocational training?

Proposal for a	Timetable of responses	
reply	Number	%
Internet	37	54,4**
Associates	14	20,6**
Employer	4	5,9*
Medical press	0	0
SMK Training Monitoring System	13	19,1**
Total	68	100

^{,,*&}quot; to ,,**" p<0,05

Question 12: You are most likely to benefit from your professional knowledge?

60.3% of respondents expressed the opinion that they are more willing to use self-education, while 39.7% of respondents indicated organised education. The distribution of answers to the above question is shown in Table 12.

Table 12. Distribution of answers to the question: When broadening your professional knowledge, you are most willing to use it?

Proposal for a	Timetable of responses	
reply	Number	%
Self-study	41	60,3*
Organised education (e.g. courses,	27	39,7**
training) Total	68	100

,,*" to ,,**" p<0,05

Question 13: Please indicate the percentage of self-education in your case that is important in supplementing professional knowledge?

29.4% of the respondents assessed the answer of about 70% concerning self-education in supplementing their professional knowledge. For 19.1% of the respondents, about 50%, 14.7% said that about 80%. The distribution of exact answers is presented in Table 13.

Table 13. Distribution of answers to the question: Please indicate the percentage of selfeducation in your case that is relevant for the completion of professional knowledge?

Proposal for a	Timetable of responses		
reply	Number	%	
It does not matter	0	0	
In about 10 %	3	4,4*	
In about ok 20%	4	5,9*	
In about 30%	2	2,9*	
In about 40%	4	5,9*	
In about 50%	13	19,1**	
In about 60%	4	5,9*	
In about 70%	20	29,4**	
In about 80%	10	14,7	
In about 90%	2	2,9*	
In about 100%	6	8,8*	
Total	68	100	

,,*" to ,,**" p<0,05

Question 14: How often do you use self-education in your work?

57.4% of respondents admitted that they use self-education at work on a permanent basis, while 42.6% indicated occasional use of self-education. The distribution of answers is shown in Table 14 below.

Table 14. Distribution of answers to the question: How often do you use self-education in your work?

Proposal for a	Timetable of responses		
reply	Number	%	
Permanently	29	42,6	
On occasion	39	57,4	
Total	68	100	

Question 15. What forms of self-education do you prefer to use?

Among the surveyed group, 61.8% are most likely to use professional literature related to nursing, 22.1% said they were looking for information on the Internet. 13.2% of the respondents indicated following legal regulations concerning their profession, 2.9% gave an opinion about active and passive participation in scientific conferences. The distribution of answers to the above question is presented in Table 15.

Table 15. Distribution of answers to the question: Which forms of self-education do you prefer to use?

Proposal for a	Timetable of responses		
reply	Number	%	
Professional litera-			
ture (mainly relat-	42	61,8**	
ed to nursing)			
Tracking the legal			
regulation of the	9	13,2*	
profession			
Active and passive			
participation in	2	2,9	
scientific confer-	2	2,9	
ences			
Searching for vari-			
ous information			
related to the pro-	15	22,1*	
fession on the In-			
ternet			
Other	0	0	
Total	68	100	

,,*" to ,,**" p<0,05

A picture of involvement in various forms of complementary vocational training of contemporary Polish nurses Further on, questions were selected which were statistically significant and often answered.

Their characteristics are presented in Table 16.

Table 16. Characteristics of the questions which were statistically significantly answered frequently

Question	A statistically significant re- sponse is often given	р	
Do you think there is a need for further training as a nurse nowadays?	Yes	p<0,01	
Are you willing to undertake supplementary vocational training?	Yes	p<0,01	
What forms of supplementary train-	Specialist course	p<0,05	
ing in the profession of nurse have you completed so far? (list which)	Qualification course	p<0,05	
Are you in the middle of some kind of complementary vocational training?	Yes	p<0,01	
Which of the training courses you have completed most strongly enhanced your position and professional security?	Specialisation	p<0,01	
	Improving compe-		
What have you benefited from the	tences and quali-	p<0,01	
completion of your professional	fications at work		
follow-up training? (you can tick a	Satisfaction and		
few)	satisfaction, own ambitions	p<0,01	
Who inspired you to undertake supplementary training as a nurse?	My decision	p<0,01	
What is your main source of currently available vocational training?	Internet	p<0,05	
You are most likely to benefit from your professional knowledge	Self-study	p<0,05	
Please indicate the percentage of self- education in your case that is im- portant in supplementing your profes- sional knowledge	in about70%	p<0,05	
What forms of self-education do you prefer to use?	Professional liter- ature (mainly related to nursing)	p<0,05	

From the analysis, a picture emerges of involvement in various forms of complementary vocational training of contemporary Polish nurses. This is a person who sees the need for further training and is willing to undertake such training, which is most often expressed by a completed specialisation or qualification course. Completed further training as a nurse provides both professional (increasing competence and qualifications in the professional work) and personal benefits (personal satisfaction and satisfaction, fulfilment of one's own ambitions). As a rule, the pursuit of professional development is a nurse's own and personal decision. The main source of access to various forms of vocational training is the Internet. Throughout her career, a nurse is most willing to broaden her knowledge through self-education, thus supplementing about 70% of

her knowledge, using mainly professional literature (mainly related to nursing).

IV. DISCUSSION

The metamorphosis of the economy, the constant transformation of the healthcare system and the introduction of modern medical technologies have brought many changes to the professional lives of nurses. In the field of nursing education, as in the whole field of medical and health sciences, there is a need to adapt to European requirements. In connection with the implementation of the European Area of Higher Education project, an intensive procedure was initiated concerning the improvement of qualifications and competences in nursing.[5,6] Therefore, a wide range of various forms of supplementary professional education, both formal and formal, became available to nurses, as laid down in the Act on the Professions of Nurse and Midwife of 15 July 2011, include specialisation training, qualification courses, specialist courses, and further education courses. Apart from the formal ones, there are also informal trainings: internal trainings, company trainings, conferences, etc. And self-education called self-education. [6-8] The statement that Polish nurses take care of their own professional and personal development is true. Analysing the results of their own research, in which as many as 97% of the respondents stated that they see the need for constant updating of their knowledge to date and 94% of them are willing to undertake such training. Majchrowska and Bogusz [9] pay attention to the motivators of such actions. It is mainly the conviction about the necessity of updating the knowledge and the willingness to improve the qualifications and competences of nurses. The study carried out by Krupińska among 113 nurses from all over Poland in 2010, - 'Postgraduate education of nurses - need or duty'[10], the question concerning the motives for undertaking postgraduate education was answered most frequently (as much as 77%), followed by better care for patients, and in third place there was a chance to change jobs. It is worth looking at the research carried out in 2017 by Jagodzińska and Rezmerska[5], which indicated a completely different result. Well, the nurses who took part in the study - when taking up postgraduate education, they were mainly guided by their material status - higher salaries, more favourable employment, or working abroad the benefits of personal and professional development came last - which in my opinion is an unsatisfactory re-

sult. [5,10] The results of our own research have shown that the most numerous percentage of nurses are more willing to participate in self-education than in organised training, which was also confirmed by the 2011 survey of the Statistical Office. The use of this form has many advantages, mainly concerning time, place and possibility of choosing the subject matter. It can therefore be admitted that self-education has a key role in nursing education. [11] Among the forms of organised education, specialist courses are the most popular, similar results were obtained by Matczak, Szczeszek, Stanek and Wilczak in their research, which may prove that a course of this type lasts quite shortly, but what is interesting is that there is a certain dependence on specialist training the respondents of both studies unanimously stated that specialisation is the most reliable and professional position, and due to the costs of education and long duration it is chosen less frequently. [12] Our own research has shown that high education costs are a significant constraint on the completion of qualifications. The same barrier was encountered by Kelan et al in their study "Barriers to accessing professional skius improvement training for nurses", although they also noted an obstacle to the distance between the place of the course and the place of residence and a problem in the organisation of working time - 12-hour work, night work and weekend work. [13] Among the informal training courses, the participants are eager to take advantage of the intra-unit training. This can be explained by the fact that they can be imposed by the employer or by the fact that during this training, knowledge about the specifics of the job is provided.

V.CONCLUSIONS

- Modern Polish nurses are eager to improve their qualifications and competences, taking care of their professional and personal development.
- The most important benefits resulting from the completion of training are considered by the respondents to be the improvement of their competences and qualifications and their own ambitions.
- A factor that improves motivation to take up postgraduate education is the expected increase in salary, but is demotivated by the high cost of education.
- Nurses are most willing to participate in specialist and qualification courses due to their short dura-

- tion, however, according to the respondents, they have been most thoroughly trained in nursing specialisation.
- Self-education is a constant element of nurses' professional work, respondents use mainly content devoted to the professional problem of nurses on the Internet.

VI. REFERENCES

- [1] Lynn McDonald. Florence Nightingale: Collected Works of Florence Nightingale. Waterloo Canada; Wilfrid Laurier Univ Press, 2009.
- [2] Gill CJ, Gill G C. Nightingale in Scutari: Her Legacy Reexamined. Clin Infect Dis 2005; 40: 1799–1805.
- [3] Wrońska I.: Determinanty rozwoju pielęgniarstwa, W: Podstawy pielęgniarstwa. Ślusarska B, Zarzycka D, Zahradniczek K. (red.). Lublin, Wyd. Czelej 2013: 96-105
- [4] Leszczyńska M. Zanim pielęgnowanie stało się zawodem. Mag Pielęg Poł 2018; 6: 6-7.
- [5]Jagodzińska A, Rezmerska L. Czynniki wpływające na podnoszenie poziomu kwalifikacji zawodowych pielęgniarek w ramach kształcenia podyplomowego. Innowacje Pielęg Nauk Zdr 2017; 4: 44-60
- [6] Wardak K, Nagórska M. Kształcenie podyplomowe pielęgniarek i położnych. Zesz Nau Uniw Rzesz 2018; 2:95-104.
- [7] Ustawa z dnia 15 lipca 2011 r. O zawodach pielęgniarki i położnej. Dz. U. 2011r., nr 174, poz. 1039.
- [8] Pawlik D. Podnoszenie kwalifikacji zawodowych przez pielęgniarki i położne. W: Kształcenie zawodowe i ustawiczne a potrzeba rynku. Wołosiuk B, Nowak M. (red.) Biała Podlaska; Wyd. PSWJPII 2012.
- [9] Majchrowska A, Bogusz R. Oczekiwanie pielęgniarek wobec kształcenia podyplomowego. Pielęg XXI w 2012; 3(40): 75-79.
- [10] Krupińska E. Kształcenie podyplomowe pielęgniarek potrzeba czy obowiązek. Piel Zdr Publ 2011; 1, 4: 321-326.
- [11] Rasińska R, Nowakowska I, Bańkowska A. Proces kształcenia pielęgniarek i położnych w świetle wybranych danych statystycznych. Pielęg Pol 2017; 2(64): 334-337.
- [12] Matczak K, Szczeszek K, Stanek A, Wilczak M. Znaczenie kształcenia ustawicznego w opinii czynnego zawodowo personelu pielęgniarskiego. Pol Prz Nauk Zdr 2016; 1(46), 24-28.
- [13] Kielan A, Panczyk M, Iwanow L et al. Barriers to accessing professional skills improvement training for nurses. Pielęg Pol 2018; 4 (70): 353-357.