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Postgraduate Education of Neurological Nurses — Preliminary Reports

Kształcenie podyplomowe pielęgniarek neurologicznych — doniesienia wstępne

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Abstract

Introduction. Postgraduate education for nurses is an integral part of professional development. Currently, in accordance with the legislation in force in Poland, a neurological nurse may improve their profession as part of self-education or as part of organized forms and types of postgraduate education by undergoing various specialized training, acquiring professional skills in the narrower fields of nursing or providing specific health services.

Aim. The aim of the research was to analyse the postgraduate education of neurological nurses.

Material and Methods. The research was conducted on a group of 128 nurses employed in 9 neurological centres in the Kuyavian-Pomeranian Voivodeship (Bydgoszcz, Toruń, Włocławek, Grudziądz, Świecie, Lipno). Postgraduate education was assessed by means of a diagnostic survey using a questionnaire survey technique.

Results. It was shown that there are statistically significant differences between the age, experience and education of the respondents and the preferred form of education ($p < 0.05$) and awarding educational points for training ($p < 0.05$). It was also found that age and seniority in the neurology department differentiated the form of financing training ($p < 0.05$). Additionally, seniority is a factor that significantly differentiates the thematic specificity of the training ($p < 0.05$).

Conclusions. The most popular form of postgraduate education is specialization and a specialist course. An important form of training is also participation in a conference/symposium. The vast majority of respondents stated that their trainings are financed by their own/private funds. It was found that the respondents lacked knowledge about training specific to neurological nurses, with the simultaneous need for such training. Among the difficulties/problems related to professional development, the most frequently indicated were the lack of time for training and difficulties with its financing. Almost half of the respondents expect to receive education/credit points for education. (JNNS 2020;9(2):71–75)

Key Words: neurological nursing, postgraduate education, nurses

Streszczenie

Wstęp. Kształcenie podyplomowe pielęgniarek jest integralnym elementem doskonalenia zawodowego. Aktualnie zgodnie z obowiązującym w Polsce ustawodawstwem, pielęgniarka neurologiczna może doskonalić swoją profesję w ramach samokształcenia lub w ramach zorganizowanych form i rodzajów kształcenia podyplomowego poprzez odbywanie różnych szkoleń specjalistycznych, nabywania umiejętności zawodowych z zakresu węższych dziedzin pielęgniarstwa lub udzielania określonych świadczeń zdrowotnych.

Cel. Celem badań była analiza kształcenia podyplomowego pielęgniarek neurologicznych.

Materiał i metody. Badania przeprowadzono na grupie 128 pielęgniarek zatrudnionych w 9 ośrodkach neurologicznych na terenie województwa kujawsko-pomorskiego (Bydgoszcz, Toruń, Włocławek, Grudziądz, Świecie, Lipno). Za pomocą sondażu diagnostycznego, techniką ankietową z wykorzystaniem kwestionariusza ankiety dokonano oceny kształcenia podyplomowego.

Wyniki. Wykazano, że istnieją różnice istotne statystycznie pomiędzy wiekiem, stażem i wykształceniem badanych a preferowaną formę kształcenia ($p < 0.05$) i przyznawaniem punktów edukacyjnych za szkolenie ($p < 0.05$). Stwierdzono również, że wiek i staż na oddziale neurologii różnicuje formę finansowania szkolenia ($p < 0.05$). Dodatkowo staż pracy jest czynnikiem istotnie różnicującym specyfikę tematyczną szkolenia ($p < 0.05$).

Wnioski. Najbardziej popularną formą kształcenia podyplomowego jest specjalizacja oraz kurs specjalistyczny. Istotną formą dokształcania jest również udział w konferencji/symposium. Zdecydowana większość badanych stwierdziła, że ich szkolenia są finansowane przez środki własne/prywatne. Stwierdzono u badanych brak wiedzy na temat szkoleń specyficznych dla pielęgniarek neurologicznych z jednoczesnym zapotrzebowaniem na takie szkolenia. Wśród trudności/problemów związanych z doskonaleniem zawodowym, najczęściej wskazywano na brak czasu na szkolenie oraz trudności z jego finansowaniem. Prawie połowa przebadanych osób oczekuje na przyznawanie punktów edukacyjnych/kredytowych za kształcenie. (PNN 2020;9(2):71–75)

Słowa kluczowe: pielęgniarstwo neurologiczne, kształcenie podyplomowe, pielęgniarki

Introduction

Postgraduate education for nurses is an integral part of professional development. Currently, in accordance with the legislation in force in Poland [1–3], a neurological nurse can improve her/his profession as part of self-education or as part of organized forms and types of postgraduate education by undergoing various specialist training, acquiring professional skills in the narrower fields of nursing or providing specific health benefits.

Currently, in Poland and in Europe, there is no uniform, comprehensive system of professional development for neurological nurses [4,5]. This is, of course, related to the specificity of treatment and care activities in relation to neurological patients. The practice of the neurological nurse is becoming more and more specialized. It is influenced by the progress in the diagnosis and treatment of patients with diseases of the nervous system [6–8].

So far, few papers dealing with the subjects of education and professional development in the field of neurological nursing have been published, and in Europe only two [4,9], which are still not very representative in terms of drawing conclusions and recommendations for neuro-nursing practice. According to the authors of the research, this was influenced by several factors, including: a low response rate from various European countries, a high response rate from the United Kingdom, insufficiently developed research methodology (no electronic contact databases), and the problem of contact in English.

The aim of the research was to analyse the postgraduate education of neurological nurses.

Material and Methods

The research was conducted on a group of 128 nurses employed in 9 neurological centres in the Kuyavian-Pomeranian voivodeship (Bydgoszcz, Toruń, Włocławek, Grudziądz, Świecie, Lipno). Table 1 presents the precise sociodemographic characteristics. The postgraduate education was assessed by means of a diagnostic survey using a questionnaire in comparison with selected

sociodemographic variables of the studied group, such as age, seniority in the neurology department and education.

Table 1. Characteristics of the study group (N=128)

Variable	N	%
Gender		
Man	4	3.1
Woman	124	96.9
Age — X±SD (43.8±10.6)		
≤46 years	68	53.1
>46 years	60	46.9
Education		
Qualified nurse	54	42.2
Bachelor of nursing	41	32.0
Master of nursing	28	21.9
Other*	5	3.9
Specialization		
Yes	49	38.3
No	79	61.7
Internship in the department of neurology — X±SD (13.2±11.0)		
≤13years	78	61.0
>13 years	50	39.0
Place of research — neurology department/clinic		
University Hospital no. 1 in Bydgoszcz	26	20.3
University Hospital no. 2 in Bydgoszcz	20	15.6
10 th Military Clinical Hospital with Polyclinic in Bydgoszcz	21	16.4
Multidisciplinary City Hospital in Bydgoszcz	3	2.4
Specialist City Hospital in Toruń	10	7.8
Provincial Specialist Hospital in Włocławek	5	3.9
Regional Specialist Hospital in Grudziądz	23	18
New Hospital in Świecie	14	10.9
NZOZ Hospital Lipno	6	4.7

*e.g. nurse with a degree of medical/health sciences

Ethical Considerations

The research was approved by the Bioethics Committee of the Nicolaus Copernicus University in Toruń at the Collegium Medicum of Ludwik Rydygier in Bydgoszcz (PDB_WN746, PTPN_DN_2019, consent number — KB: 739/2017).

Data Analysis

Statistical analysis was performed with the use of Microsoft Excel and STATISTICA version 10.0. (CM UMK licence). The material was developed using elements of descriptive statistics. The Mann–Whitney (Z) and Kruskal–Wallis (H) tests were used to statistically compare the means of individual groups. Statistical hypotheses were verified at the significance level of $p < 0.05$.

Results

The analysis of Table 2 shows that the preferred form of training is specialization (79 answers — 61.7%). The second form of education is a specialist course (51 answers — 39.8%). The form of training which is the Congress/Symposium/Conference is also worth mentioning — such an answer was given by 28 people — 21.9%. The vast majority of postgraduate education was financed from own/private funds (120 responses — 93.8%). Thirty-nine people (30.5%) say that postgraduate education includes topics specific to neurological nursing. However, most do not know whether the training in the field of neuro-nursing is taking place. Furthermore, a detailed analysis of the topic indicated that there is a lack of specific topics in the area of care for neurological patients. The respondents pointed to the need to prepare training in the following areas: thrombectomy, thrombolytic treatment, innovations in neuro-nursing and patient care after stroke. The expected topics of training also included: interpersonal communication, issues in the field of psychotherapy and coping with pain. Among the difficulties/problems related to postgraduate education, the respondents indicated different answers. A definite difficulty — the obstacle is the lack of time for training (95 answers — 74.2%). Difficulties with financing training courses are also an important problem (88 answers — 68.8%). The respondents were also asked about their attitude towards awarding education/training credits. Almost half of the surveyed people (59 people — 46.1%) responded positively on this issue — answering Yes.

Table 2. Postgraduate education

Variable	N	%
Preferred types/forms of education*		
Specialization	79	61.7
Specialist course	51	39.8
Qualification course	27	21.1
Training course	17	13.3
Congress/Symposium/Conference	28	21.9
Financing postgraduate education		
Employer/Workplace	4	3.1
Professional organizations	4	3.1
Own/private funds	120	93.8
Training specific for neurological nurses		
Yes	39	30.5
No	30	23.4
I don't know	59	46.1
Difficulties/problems related to postgraduate education*		
Lack of interesting subject of training	5	3.9
Difficulties with financing training	88	68.8
No time for training	95	74.2
Training adds nothing to daily practice	14	10.9
Other (no salary increase after completing the course)	2	1.6
Awarding education/credit points for education		
Yes	59	46.1
No	39	30.5
I don't know	30	23.4

*possibility of several variants of answers

The conducted statistical analyses between the variables showed that there are statistically significant differences between the age, experience and education of the respondents and the issues related to postgraduate education (Table 3). It has been shown that age significantly differentiates the form (< 0.001) and financing of education (< 0.001) and the awarding of educational points for training (< 0.01) — which means that people up to 46 years of age prefer specialization as the expected form of education, financing from own resources and expect the award of educational/credit points for education. It has also been shown that work experience in the neurology department is a factor that significantly differentiates the form (< 0.001), financing (< 0.001), the thematic specificity of training (< 0.01) and the awarding of educational/credit points for education (< 0.01). This means that people with less than 13 years of experience in the neurology department prefer specialization and conferences as various forms of training

with private financing. They also indicate the lack of specific training in the field of neuro-nursing and accept the awarding of education/credit points for education. The respondents' education also differentiated the form of education (<0.0001) and awarding educational points for training (<0.0001) — which means that people with higher education (bachelor's, master's) consider specialization and conferences to be the preferred forms of training and expect to award education/credit points for education.

Table 3. Analysis of sociodemographic variables and postgraduate education

	Age*	Work experience*	Education**
Preferred types/forms of education	<0.001	<0.001	<0.0001
Financing of postgraduate education	<0.001	<0.001	>0.05
Training specific for neurological nurses	>0.05	<0.01	>0.05
Difficulties/problems related to postgraduate education	>0.05	>0.05	>0.05
Awarding education/credit points for education	<0.01	<0.01	<0.0001

*Mann–Whitney U test, **Kruskal–Wallis test

Discussion

The aim of the research was the ocean of postgraduate education of neurological nurses in correlation with sociodemographic variables of the studied group, such as age, seniority and education.

The first study, published in 2001, on the professional development of neurosurgical nurses, was conducted on a population of 27 neurosurgical nurses, and the obtained results and conclusions were a reference point for the implementation of nursing care standards in neurosurgery divisions [10]. Another research published in 2012 presented the assumptions of the specialist training system for nurses in Poland in relation to neurological nursing [11].

The conducted research has shown that people aged up to 46 years of age prefer specialization as the expected form of education, finance training from their own resources and expect the awarding of educational/credit points for education. On the other hand, the research by Kobos et al. [12] showed that a significant problem

affecting nearly 74% of nurses is the lack of financial support from the employer and the employer's low interest is increasing the qualifications of employees (62% of responses).

Work experience in the neurology department is also a factor that significantly differentiates the form, financing, thematic specificity of training and the awarding of educational/credit points for education. This means that people with less than 13 years of experience in the neurology department prefer specialization and conferences as various forms of training with private financing. They also indicate the lack of specific training in the field of neuro-nursing and accept the award of educational/credit points for the education. On the other hand, the studies conducted by Jagodzińska et al. [13] showed that there are no statistically significant correlations between the factors influencing the improvement of the level of postgraduate education of nurses and professional experience. At each stage of work, the factors that prevail are higher remuneration, more favourable employment conditions and possible employment abroad. However, it should be noted that these factors are dominant among nurses with a shorter career record than among nurses with a long career.

Own research also showed that education significantly influences the choice of the type/form of postgraduate education. People with higher education (BA, MA) preferred specialization and training in the form of congresses and conferences. They also spoke positively about awarding education/credit points for education. Undoubtedly, the acquisition of new qualifications goes hand in hand with new competences, which significantly affect better care and nursing. Research by Blegen et al. [14] show that raising the level of education by healthcare professionals lowers the mortality rate in many aspects of practice.

Conclusions

The most popular form of postgraduate education is specialization and a specialist course. An important form of training is also participation in a conference/symposium. The vast majority of respondents stated that their trainings are financed by their own/private funds. The study participants lacked knowledge about training specific to neurological nurses, with the simultaneous need for such training. Among the difficulties/problems related to professional development, the most frequently indicated were the lack of time for training and difficulties with its financing. Almost half of the respondents expect to receive education/credit points for education.

Implications for Nursing Practice

The conducted research shows a large differentiation in the area of pre- and post-graduate education, as well as the lack of a coherent career path for neurological nurses.

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