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Nurses in Poland – staffing and training system

Pielęgniarki w Polsce – stan kadrowy i system kształcenia

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Summary

Introduction. Nurses are the largest group of employees in health systems working directly with the patient. To a large extent, among others, on their number, distribution, skills and motivation depends the effectiveness and cost-efficiency of the healthcare system.

Aim. The aim of the study was to present the current state of nursing personnel and the system of their medical education in Poland.

Material and methods. The study was of descriptive character and was conducted using publicly available data and publications of the Central Statistical Office of Poland, Supreme Chamber of Control of Poland, Polish Chamber of Nurses and Midwives, Polish Ministry of Health and OECD.

Results. In Poland, the number of nurses is becoming less and less satisfactory in meeting the demand. This number in the coming years will keep decreasing, among others, due to the lack of generational replacement in the profession as well as emigration. At the same time, the training potential of the medical education system is not used to the fullest.

Conclusions. The deficit of nursing personnel is a problem both in Poland and globally. There is a continuous lack of systematic analyses of the demand for the representatives of this profession. It is necessary to develop an overall policy for the development of human resources in healthcare, including not only nurses but also doctors, public health workers as well as other professionals and specialists.

Streszczenie

Wstęp. Pielęgniarki to najliczniejsza grupa pracowników systemów zdrowia pracująca bezpośrednio z pacjentem. Od m.in. ich liczby, rozmieszczenia, kwalifikacji i motywacji w istotnym stopniu zależy skuteczność i efektywność kosztowa systemu ochrony zdrowia.

Cel pracy. Celem pracy było przedstawienie obecnego stanu kadrowego pielęgniarek oraz systemu ich kształcenia w Polsce.

Materiał i metody. Badanie miało charakter opisowy i zostało przeprowadzone w oparciu o ogólnie dostępne dane i opracowania GUS, NIK, OECD, NIPiP oraz MZ.

Wyniki. W Polsce liczba pielęgniarek w coraz mniejszym stopniu odpowiada zapotrzebowaniu. Liczba pielęgniarek w kolejnych latach będzie maleć m.in. w związku z brakiem zastępowalności pokoleniowej w tym zawodzie oraz emigracją. Jednocześnie możliwości dydaktyczne systemu kształcenia nie są w pełni wykorzystywane.

Wnioski. Deficyt kadr pielęgniarskich jest zarówno problemem polskim, jak i globalnym. W dalszym ciągu brakuje systematycznych analiz dotyczących zapotrzebowania na przedstawicieli tej profesji. Niezbędne jest opracowanie całościowej polityki rozwoju zasobów ludzkich w ochronie zdrowia obejmującej nie tylko pielęgniarki, ale też lekarzy i pracowników zdrowia publicznego oraz innych zawodów i specjalności.

INTRODUCTION

The profession of a nurse in Poland is a regulated profession. The nurse is a person with the qualifications required by law to practice as a nurse

and perform the profession, i.e. a supplier of health services, especially care, preventive, diagnostic, treatment, rehabilitation and health promotion services (1).

In Poland, as in most countries of the world, there is a shortage of nurses. Due to the increase in the health care needs of aging societies, the problems of the education system and the emigration of staff, the deficit has been steadily getting worse (2). As a result, access to health care, its range and quality deteriorate, which could have negative consequences for the health and economic activities of people. Ensuring adequate numbers of appropriately qualified and distributed nurses is now one of the most important challenges faced by the Polish health care system. There is a need for comprehensive measures, including, among others, areas of higher education and the organization and financing of health services.

AIM

The aim of the study was to analyze the status of nursing staff in Poland, with reference to, among others, their number, age and to compare their situation in Poland with the situation in other countries, as well as to analyze the education system in this profession in the years 2006-2015.

MATERIAL AND METHODS

Materials for the analysis included documents and data of the Supreme Chamber of Nurses and Midwives, the Ministry of Health (including the report on the state budget execution in terms of health), the Central Statistical Office and the OECD (Organization for Economic Co-operation and Development). A comprehensive analysis of the existing, public sources was conducted in the following areas: the number, education, gender and age of nurses; the number of nurses in relation to the population; migration of nurses and nursing training in 2006-2015.

RESULTS

The number, education, gender and age of nurses

According to the Supreme Chamber of Nurses and Midwives (NIPiP) (3) at the end of December 2015, the number of registered nurses in Poland amounted to 285 376, including 231 448 (81.1%) with secondary medical education, 36 863 (12.9%) graduates of the first degree studies, and 17 065 (6%) graduates of the second degree. The number of those registered as nurses in 2015 included the vast majority (98.1%) of women. The number of people registered as nurses do not coincide with the number of people actually doing the job. According to the Supreme Chamber of Nurses and Midwives, the number of nurses employed as their primary job was 221 172.

The analysis of the age structure of nurses in Poland presented in table 1 indicates a significant proportion of people in older age groups. The 50+ nurses accounted for almost half (49.31%), including 17.2% of this group, being 60+. Nurses aged to 31 accounted for only 5.5% of the whole group. A relatively small number of nurses in the younger age groups results in no replacement generation in this profession (3). According to the analysis of the Central Statistical Office,

Tab. 1. Age structure of nurses registered in the Central Register of Nurses and Midwives

Age in years	Number of nurses	%
21-25	4343	1.52
26-30	11 236	3.94
31-35	10 409	3.65
36-40	19 218	6.73
41-45	49 754	17.41
46-50	49 754	17.43
51-55	46 798	16.40
56-60	44 749	15.68
61-65	30 687	10.75
65+	18 501	6.48
Total	285 376	100.0

Source: Statistical information of the Supreme Chamber of Nurses and Midwives as of December 31, 2015

the situation steadily worsens (4). It is evidenced by the average age of this group which was 44.19 in 2008 and increased to 50.13 in 2015 (3).

The number of nurses in relation to the population

According to the OECD (5), the number of nurses per 1000 inhabitants was 5.3 in Poland in 2013 with the average for the 27 European countries at the level of 9.1. This figure was significantly lower than e.g. in Germany (13.0), the Czech Republic (8.0), Lithuania (7.6) and Hungary (6.4) (fig. 1). What is important – the number of nurses in relation to the population in Poland in the period between 2000 and 2013 grew by just 0.3 p.p., with average growth in the 34 OECD countries at the level of 1.3 p.p. (5).

There were significant differences in the number of nurses in relation to the population between regions. According to data from the Central Statistical Office in 2014 (6), the number of nurses and midwives (working) per 10 thousand of Polish residents amounted to 68. This number was the smallest in the Pomorskie Region (55 nurses and midwives per 10 thousand residents), Wielkopolskie Region (56) and Zachodniopomorskie Region (59), while it was the largest in: the Mazowieckie (76), Śląskie (74) and Świętokrzyskie (74) Regions.

Migration of nurses

The global shortage of nurses is conducive to migration of this group of staff from less developed countries to developed countries. According to the OECD data, the average share of nurses trained abroad in 23 Member States in 2013 was 5.9%, including e.g. Switzerland 18.7%, Great Britain 12.7%, Norway 8.8%, Germany 5.8% and Italy 5.1%. This phenomenon is recorded in Poland to a small extent. According to data the Supreme Chamber of Nurses and Midwives at the end of 2014, the number of registered nurses and midwives who are not Polish citizens was only 145 people (7).

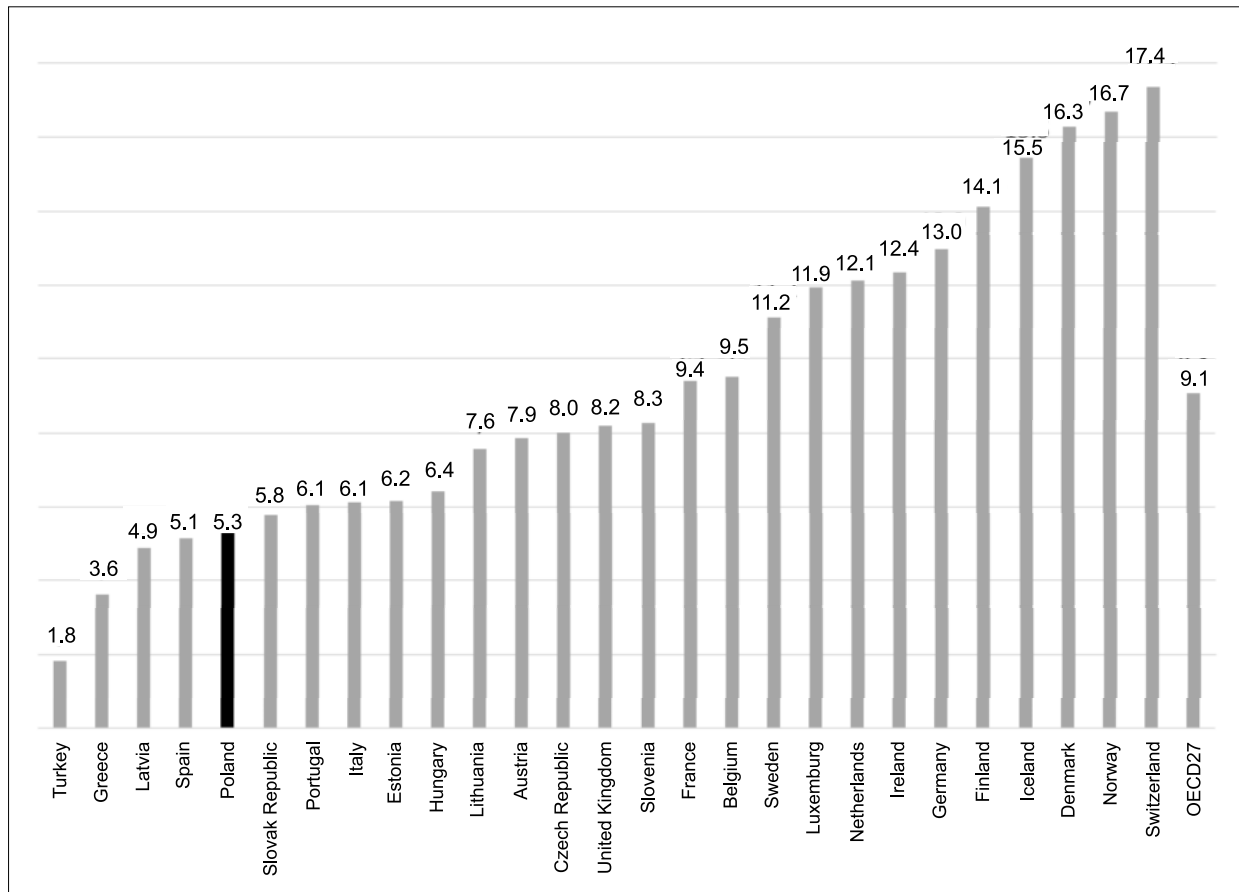


Fig. 1. Nurses per 1000 inhabitants in the 27 OECD countries in 2013. Source: on the basis of Health at a Glance 2015: OECD Indicators, OECD 2015 (5)

Polish nurses much more often emigrate. According to the data of the Supreme Chamber of Nurses and Midwives, 10 881 certificates were issued in 2004-2015 to nurses with the held professional qualifications that are required of nurses who wanted to work in the European Union (EU) (7). The number of issued certificates is not fully reflected in the number of people who have actually taken a job abroad. According to the Ministry of Health, from 2004 to November 2014, 3380 Polish nurses had their professional qualification recognized in other EU countries and, in the case of 931, the recognition procedure was in progress. Most Polish nurses and midwives worked in England – 1730 people, 1150 employees in Germany, 363 in Ireland, 162 people in Belgium (8). Wages were indicated among the factors affecting the migration of nurses. According to the OECD the relationship of wages of nurses working under a contract of employment and the average total remuneration in 2013 in Poland was 1 and differed from the average for the 24 OECD countries of 1.1. However, comparing the purchasing power parity, the value of the remuneration of nurses in Poland amounting to USD 24 thousand dollars per year was well below the OECD average of USD 45 thousand. The value of wages for nurses in Poland, although lower than in Germany (USD 48 thousand), Great Britain (USD 49 thousand) or Italy (USD 40 thousand) was similar to

the Czech Republic (USD 24 thousand), Slovakia (USD 21 thousand) and Hungary (USD 20 thousand) (5).

Training of nurses

Education in the professions of a nurse and a midwife is regulated under the provisions of the Law on Higher Education (9) and the Act on Professional Nursing and Midwifery (1). According to current rules, first degree courses in nursing cannot be conducted in the extramural form. Occupations of nurses and midwives are subject to the EU rules. According to them, training of nurses and midwives takes at least 3 years and includes 4600 hours of theoretical and clinical training, while theoretical training is to represent at least one-third, and the clinical at least half of the minimum duration of training (10).

In 2014, 70 universities, both public and non-public, were granted the powers to conduct undergraduate degree studies in nursing, including 11 medical universities. The powers to conduct second degree studies were granted to 34 universities, including 11 medical universities.

In the academic year 2014/2015 studies in the fields of nursing were taken up by a total of 6687 people (tab. 2) (11). The decrease in the number of bridging nursing and the first degree nursing graduates observed in 2006-2015 is the result of the depletion of

a temporary interest in such studies, associated with the Polish accession to the EU. The diploma issued to nurses graduating from secondary medical schools ceased to be then a sufficient proof of professional qualifications. Therefore, it was necessary for them to complete their education with the first degree and bridging studies.

The number of students and graduates of nursing does not translate directly into the number of practicing nurses in Poland. According to the data of the Supreme Chamber of Nurses and Midwives, nursing universities were left by 35 333 graduates of the first and second degree in 2006-2011. This number included only 11 489 people with the right to practice as a nurse, which accounted for only 25.1% of the limits set by the Minister of Health on vocational nurses. It is worth noting that limits of admissions to nursing studies were used in approx. 76% in the above-mentioned periods (7).

Postgraduate training of nurses is essential from the point of view of the development of human resources for the health system. The legal basis of this education is the Act on Professional Nursing and Midwifery which sets out the obligation of nurses to constantly update knowledge, indicates the rules for training, determines the types and definitions of post-graduate education (1). The largest group of nurses holding specialist titles in the end of 2015 includes experts in: conservative nursing (4089 people), surgery nursing (3943), anesthesia and intensive care (3328), pediatric nursing (2362) and operational nursing (2176) (3). Every

year, the budget provides for amounts of expenditure for financing post-graduate education of nurses, the average number of training places per year is over 5 thousand (tab. 3).

DISCUSSION

The number of nurses in Poland in relation to the number of inhabitants is the lowest in European countries, and forecasts indicate that the demand for nurses will increase in the coming years, deepening the current deficit (2). In addition, most of the countries, like Poland, have been struggling with the problem of uneven territorial distribution of nurses. These issues are important for the functioning of the health system. As research shows, the higher the number of nurses, the greater the efficiency of health services provided in hospitals, including, among others: lower incidence of adverse effects of treatment and reduced number of deaths among surgical patients (12). The importance of nurses also increases with the deepening of the deficit of doctors. Nurses are increasingly taking over part of the existing responsibilities of doctors, especially the care for patients with uncomplicated ailments and patients during routine appointments and prescriptions (13). Increasing the scope of competences of nurses is seen as a way to improve access to benefits, including reducing the times of waiting for health services.

In addition to the insufficient number of nurses, high fluctuation within this group of workers is a very important challenge faced by the developed countries. In Poland, the desire to move away from the nursing profes-

Tab. 2. Number of students and graduates of nursing in 2006-2015

Academic year	Nursing I degree				Nursing II degree				Bridge nursing			
	Stationary		Part-time		Stationary		Part-time		Stationary		Part-time	
	S	A	S	S	S	S	S	A	S	A	S	A
2006/2007	4722	992	2545	893	969	339	1667	358	-	-	2017	1206
2007/2008	4802	1214	834	829	1229	306	2261	591	-	-	2307	983
2008/2009	4370	1369	260	613	1559	504	2549	876	-	-	2081	765
2009/2010	3851	1206	320	98	1750	649	2522	999	-	-	1524	903
2010/2011	No data	1018	No data	8	No data	740	No data	890	No data	-	No data	1832
2011/2012	3891	1098	14	1	1967	689	2454	983	28	-	1220	1012
2012/2013	3776	1081	12	3	1862	753	2134	1053	34	-	947	816
2013/2014	3833	1132	16	71	1823	761	1427	805	21	21	636	487
2014/2015	3975	No data	23	No data	1850	No data	1010	No data	-	No data	209	No data

S – studying, A – graduates

Source: Reports on the state budget execution in the field of health

Tab. 3. Specialist trainings for nurses and midwives* pursued in 2006-2014

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Expenditure in thousand PLN	5216	6587	6895	No data	≈ 8000	7839	7365	6565	6433
Number of contracts	147	142	162	No data	162	153	149	135	135
Number of training places	4965	3800	5425	No data	5458	5397	5525	4847	5527

Source: Reports on the state budget execution in the field of health

*The vast majority of specialist training applies to nurses

sion is correlated, among others, with: the possibility of a new job, mental malaise (low self-connection with the profession and the institution, low job satisfaction, burnout), physical malaise (low assessment of own health, pain in the neck and the lumbosacral area), features related to the work of nursing (lack of a sense of purpose and meaning of their own work, negative interpersonal relations) (14, 15). Further studies confirm the importance of the three groups of factors i.e. demographic, work-related and personal (16). Fluctuation may, however, be effectively limited, and there is no shortage of good practices in this area (17, 18).

The number of schools teaching for the profession of a nurse and the possibility of recruiting students do not constitute a barrier to access the profession in Poland. It seems that financial factors in the health care system (relatively low wages, as compared with the scope of duties), as well as the extremely burdensome nature of the work, influence the perception of the nursing profession as unattractive and therefore not conducive to be taken up.

CONCLUSIONS

The analysis of data on the status of personnel and training of nurses in Poland indicates a number of problems that contribute to shortages within this group of workers. The deficit stems, among others, from the lack of adequate measures in the field of training, including the lack of visible efforts to motivate training in the fields of nursing, adverse changes in the age structure of this professional group and emigration. In this situation, it is necessary to take up actions implemented by public authorities, including a thorough analysis of the demand for nurses. Subsequently, it is worthwhile to develop a comprehensive policy of education, motivation and development of this group of workers. The issue of ensuring an adequate number of suitably skilled medical personnel is essential not only to ensure population's access to health care services, but to the overall functioning of a healthy and prosperous society (19).

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