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NURSING EDUCATION: A COMPARATIVE ANALYSIS OF FIRST-DEGREE BACHELOR'S LEVEL STUDY PROGRAMS IN POLAND AND UKRAINE

Summary

High-quality nursing education is of critical importance for ensuring appropriate and accessible medical care that meets modern requirements and trends in the development of practical medicine. An important aspect of improving the quality of training of nurses is the optimization of educational programs, which have their own specific features and peculiarities due to historical and social factors.

The article presents a comparative analysis of the training of nurses at Uzhhorod National University (UzhNU, Ukraine) and the International Academy of Applied Sciences in Lomza (MANS w Łomży, Republic of Poland). The study was conducted by analyzing the official curricula of the specialty "Nursing", approved by the relevant educational institutions. The main criteria for comparison were the structural and logical matrix of disciplines, the volume of study hours and credits, the balance between theoretical and practical training, the duration of clinical practice, and the features of state certification. As a result of the study, the main differences and common features in the structure of educational programs, the volume of the training load, and approaches to the formation of professional competencies were identified. At MANS w Łomży, training lasts 7 semesters, and at UzhNU – 8 semesters. Also, the difference in the ratio of theory and practice in Ukraine and Poland was established. At MANS w Łomży, significant attention is paid to practical training, which lasts longer and is conducted

in a more integrated form; in Ukrainian programs, the theoretical component still prevails. At MANS w Łomży, more attention is paid to clinical situations, intensive care, emergency care, palliative medicine and industrial practice. At UzhNU, the emphasis is on the managerial component: management and leadership in nursing, social medicine and health economics.

A difference has been established in the form of assessing the results of the students' learning in mastering basic professional competencies, namely, at MANS w Łomży, training is completed with a practically-oriented examination and a diploma exam as well, during which diploma theses are defended, and at UzhNU with certification, which provides for the Unified State Comprehensive Exam (USCE), which includes issues of management and administration in the activities of a nurse, emergency pre-hospital care and pharmacotherapy. In Poland, nurses undergo a single certification system that allows them to work in different European Union countries; in Ukraine, certification is national in nature and requires additional procedures for employment in Europe. The Ukrainian program has a more flexible structure, providing for a larger number of elective subjects and allowing for an individual learning trajectory.
Keywords: nursing, unified state comprehensive exam, practice, diploma paper, certification, pedagogy, management and leadership

Introduction

Nurses are an integral part of the medical staff and are essential for the functioning of the healthcare system. They provide continuous patient care, maintain patient hygiene and comfort, monitor health status, and are the first to respond to changes in it [1].

As in most countries of the world, nurses in Ukraine constitute the largest professional group of healthcare workers: almost 190 thousand in state and municipal healthcare institutions, or 40% of all employees in these institutions [2]. At the same time, since 2010, there has been an alarming trend towards a decrease in the number of specialists in the profession. Thus, in the period 2010–2022, the number of nurses decreased by 40% with an overall population reduction of 10.5%. The COVID epidemic and war have become additional factors that have worsened the situation with the availability of nurses in the country [3]. The departure of Ukrainian specialists from the profession occurs against the background of a global shortage of nurses. Compared to the countries of the European Union (where Ukraine is moving), we are significantly lagging behind most of them [4], which, in addition, have trends towards an increase in the number of nurses, contrary to Ukrainian trends.

Critically important for ensuring high-quality and accessible medical care that meets modern requirements and trends in the development of practical medicine is equally solid education of nurses. Proper training of qualified specialists makes it possible not only to provide quality services, but also to effectively respond to new challenges and trends in the field of health care.

At the same time, today there are a number of systemic problems in nursing education, in particular: inconsistency of educational programs with modern requirements and technological trends, outdated teaching methodology, imbalance between theoretical and practical training, and lack of highly qualified educators and mentors. These shortcomings lead to the graduation of specialists who do not have a full set of necessary competencies to effectively carry out professional activities. According to the study "Assessment of the Educational Environment of Medical and Nursing Students in Ukraine" [5], the distribution of responses to the statement "I feel that I am receiving sufficient training for my future profession" was as follows: 42% of participants positively responded to the statements, 34% of future specialists chose the negative option, and 24% couldn't decide which option to choose. To solve the outlined problems and improve the quality of nursing education, changes are needed at all levels, for instance, from undergraduate to postgraduate training and continuous professional development.

Therefore, optimizing curricula is an important aspect of improving the quality of nursing training. Curriculums in different countries have specific unique characteristics, determined by historical and social factors. A comparative analysis of Ukrainian and EU programs will contribute to their improvement and the training of future specialists.

Purpose, subject and research methods

The main purpose of our research is to conduct a comparative analysis of the curricula for training nurses at Uzhhorod National University (UzhNU) and the International Academy of Applied Sciences in Łomża (MANS w Łomży), as well as to identify the main differences and common features in the structure of educational programs, the volume of the educational load, and approaches to the formation of professional competencies.

The study was conducted by analyzing the official curricula of the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions. The main comparison criteria were the structural and logical scheme of disciplines, the volume of study hours and credits, the balance

between theoretical and practical training, the duration of clinical practice, and the features of state certification.

Research results

The educational program of the specialty "Nursing" at Uzhhorod National University includes 7200 hours (240 credits), of which 6750 hours are allocated for theoretical classes, 390 hours for practical training, 45 hours for certification. The training lasts 8 semesters. It includes:

- general training cycle – 450 hours (professionally-oriented Ukrainian language, English, Latin, civic education, labor protection in gas industry), which is approximately 6.3% of total program volume;
- cycle of professional disciplines (37 subjects) (4500 hours – 62.5%);
- disciplines of free choice are (1800 hours – 25.0%);
- practice (405 hours – 5.6%);
- certification (45 hours – 0.6%).

At the International Academy of Applied Sciences in Łomża, the duration of study is 7 semesters and includes 4780 hours or 180 credits [6].

The distribution of hours is as follows:

Group A – fundamental sciences make up – 560 hours (11.7%)

Table 1. Subjects studied in group A at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

№	Subject	Hours		ECTS	
		Poland	Ukraine	Poland	Ukraine
1	Anatomy	75	180	3	6
2	Physiology	50	150	2	5
3	Pathology	75	180	3	6
4	Genetics	50	90	2	3
5	Biochemistry and Biophysics	50	180	2	6
6	Microbiology and Parasitology	75	90	3	3
7	Pharmacology	75	90	3	3
8	Radiology	50	0	2	0
9	Physical Education	60	0	0	0

Group B – social sciences and humanities with English – 420 hours (8.8%)

Table 2. Subjects studied in group B at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

№	Subject	Hours		ECTS	
		Poland	Ukraine	Poland	Ukraine
1	Psychology	75	90	3	3
2	Sociology	50	0	2	0
3	Pedagogy	50	0	2	0
4	Medical Law	50	90	2	3
5	Public Health	75	90	3	3
6	English	120	120	5	4

Group C – basic training, studying the basics of nursing – 600 hours (12.6%)

Table 3. Subjects studied in group C at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

№	Subject	Hours		ECTS	
		Poland	Ukraine	Poland	Ukraine
1	Physical Examination	50	90	2	3
2	Fundamentals of Nursing	200	200	6	7
3	Nursing Ethics	50	90	2	3
4	Health Promotion	50	90	2	3
5	Primary Care	75	90	3	3
6	Dietology	50	90	2	3
7	Organization of Nursing Work	50	90	2	3
8	Hospital Infections	25	120	1	4
9	Healthcare Information System	25	90	1	3
10	Optional electives: Sign Language or Collaboration in Healthcare Teams	25	90	1	3

Group D – specialized sciences in patient care – 900 hours (18.8%)

Table 4. Subjects studied in group D at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

№	Subject	Hours		ECTS	
		Poland	Ukraine	Poland	Ukraine
1	Internal Medicine and Internal Medicine Nursing	70	120	2	4
2	Pediatrics and Pediatric Nursing	70	150	2	5
3	Surgery and Surgical Nursing	70	120	2	4
4	Obstetrics, Gynecology and Obstetric-Gynecological Nursing	70	90	2	3
5	Psychiatry and Psychiatric Nursing	70	0	2	0
6	Anesthesiology and Intensive Care Nursing	70	90	2	3
7	Long-Term Care Nursing	60	0	2	0
8	Fundamentals of Rehabilitation	60	90	2	3
9	Neurology and Neurological Nursing	70	0	2	0
10	Geriatrics and Geriatric Nursing	70	70	2	2
11	Palliative Care	70	0	2	0
12	Fundamentals of Emergency Care	60	90	2	3
13	Scientific Research in Nursing	90	0	3	0
14	Thesis and Dissertation Seminar	0	0	7	0

Group E – industrial practice – 1100 hours (23.0%)

Table 5. Subjects studied in group E at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

№	Subject	Hours		ECTS	
		Poland	Ukraine	Poland	Ukraine
1	Anesthesiology and Intensive Care Nursing	80	0	3	0
2	Surgery and Surgical Care	120	90	4	3
3	Internal Medicine and Nursing	120	120	4	4
4	Geriatrics and Geriatric Nursing	80	80	3	3
5	Neurology and Neurological Nursing	80	0	3	0
6	Palliative Care	40	40	2	1
7	Pediatrics and Pediatric Care	160	120	6	4
8	First Aid	120	90	4	3
9	Fundamentals of Nursing	80	80	3	3
10	Obstetrics, Gynecology and Obstetrics and Gynecology Care	80	0	0	0
11	Health Promotion	20	0	1	0
12	Psychiatry and Nursing	80	0	3	0
13	Long-Term Care Nursing	40	0	2	0

Group F - professional practical disciplines – 1200 hours (25.1%)

Table 6. Subjects studied in group F at MANS w Łomży - UzhNU
Source: Author's own research based on the analysis of official curricula for the specialty "Nursing" at Uzhhorod National University and the International Academy of Applied Sciences in Lomza, approved by the relevant educational institutions.

Based on the analysis conducted, we can state that there is a big difference in the ratio of theory and practice in Ukraine and Poland. Thus, at MANS w Łomży, practice is 1200 hours (25.1% of total educational load). In Ukraine, the amount of training time is greater than in Poland (7200 versus 4780), but the theoretical part prevails, since practice constitutes only 5.6% of the total number of training hours and consists of industrial practice in patient care (90 hours), industrial practice in the nursing process (135 hours) and pre-diploma practice (180 hours). The curricula differ in the structure of disciplines as well. In Ukraine, the emphasis is on the managerial component – management and leadership in nursing, social medicine and health economics. At MANS w Łomży, more attention is paid to work in specialized departments, clinical situations, emergency care, palliative medicine and the practical component. Optional elective courses in Ukraine make up 25% of all subjects, which is 60 credits, and in Poland – 25 hours, which is 1 credit respectively.

Analyzing the curriculum, it should be noted that in Ukraine there are several mandatory subjects that are not in the Polish curriculum. This is due to the need for future bachelors to acquire such competencies as: the ability to organize the provision of medical care according to the principle of family medicine; the ability to navigate in determining the group affiliation

of drugs, the features of their pharmacokinetics and pharmacodynamics; the ability to identify the relationship between clinical manifestations of diseases and the results of additional research methods; the ability to organize and provide emergency care for various acute conditions; the ability to organize and provide emergency care in emergency situations in peacetime and wartime; the ability to organize and manage the relevant structural unit (leadership and management). Such subjects are:

1. Occupational safety in the industry, life safety and civil protection;
2. Latin language and medical terminology;
3. Civic education;
4. Ukrainian language (for professional purposes);
5. Medical chemistry;
6. Medical biology;
7. Human growth and development;
8. Nursing theories and process;
9. Clinical pharmacology with toxicology;
10. Management and leadership in nursing;
11. Medical and pharmaceutical commodity science;
12. Social medicine and health economics.

In Poland, there are also a number of mandatory subjects that are not available in Ukraine. These are pedagogy, psychiatry and nursing, neurology and neurological nursing, scientific research in nursing, health promotion, nursing in long-term care, radiology, dietetics. For example, the subject of pedagogy, which is mandatory in the curriculum, contributes to the formation of pedagogical competence, helps to realize the importance of pedagogy in the professional activity of a nurse, to acquire skills for a deeper understanding of the educational component in nursing and self-reflection on the role of learning and education in the modern world.

Training at MANS w Łomży ends with a practical exam and a diploma exam. The diploma exam is preceded by writing a diploma thesis and its presentation and defense before a commission. In Ukraine, there is no diploma thesis writing. However, the assessment of the results of the student's learning in mastering basic professional competencies in the specialty 223 "Nursing" is completed by certification, which involves the Unified State Comprehensive Exam (USCE). The USCE consists of an integrated test exam – Krok B (Step B) – and a practically-oriented exam. The structure of the qualification exam in the specialty "Nursing" is as follows: Diagnostics, monitoring of human health and planning of nursing interventions in

the context of infectious safety – 34%; Management and administration in the activities of a nurse – 30%; Emergency pre-medical care for patients of different age groups – 30%; Pharmacotherapy – 6% [7]. The criterion for successfully passing the unified state qualifying exam and the value of the "passed" criterion is 42.0% of correct answers.

Thus, the study revealed significant differences in the curricula for training nurses in Ukraine and the European Union (using the example of the International Academy of Applied Sciences in Lomza, Poland, and Uzhhorod National University, Ukraine). A comparative analysis of the curricula of the two educational institutions revealed significant differences in approaches to training nurses. The Ukrainian program is oriented towards an even distribution of theoretical and practical classes with a focus on the management component, while the Polish model emphasizes practical training and professional communication. The results of the study can be used to improve curriculum and develop integrated educational programs that combine the best practices of both systems.

Conclusions

Modern higher education requires innovative changes, including nursing. Competency-based education aims to empower nurses. Nurses should not only fulfill doctor's prescriptions, but also actively participate and be involved in diagnostics, treatment, prescribing medications, writing prescriptions, being organizers and managers in the healthcare system and nursing services in particular. The professional development of nurses from the bachelor's degree is the basis for further professional development throughout life [8].

In Poland, significant attention is paid to practical training, which lasts longer and is conducted in a more integrated format; in Ukrainian programs, the theoretical component still prevails. The Ukrainian program has a more flexible structure, which provides for a larger number of elective subjects and allows the students to build an individual learning trajectory.

A difference has been established in the form of assessing the results of the student's learning in terms of mastering basic professional competencies, namely: at MANS in Łomży, training ends with a practical exam and defense of a thesis: at UzhNU the educational process is concluded with certification, which provides for the Unified State Comprehensive Exam, which includes issues of management and administration in nursing activities, emergency pre-medical care, and pharmacotherapy.

In Poland, nurses undergo a unified certification test that allows them to work in different European Union countries; in Ukraine, certification is national in nature and requires additional procedures for employment in Europe.

The comparative characterization of nursing education programs contributes to the integration of nursing education into the European educational space, the development of common approaches to a unified system of training nursing professionals to overcome educational and professional barriers and ensure quality nursing services.

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