

Bologna Process and Basic Nursing Education in 21 European Countries

L. Humar¹, J. Sansoni²

Key words: Nursing education, Bachelor's degree, Bologna Process, Europe

Parole chiave: Formazione infermieristica, Laurea Infermieristica, Bologna Process, Europa

Abstract

Background. *The Bologna Process and the Directives of the European Union have had a profound impact on nursing education in Europe. The aim of this study was to identify the similarities and differences within nursing education framework at entry level in 2014 in European countries.*

Methods. *A questionnaire was devised by the researchers and distributed via e-mail to the nursing associations/nursing regulatory bodies of 30 European countries. Data were collected from January to May 2014.*

Results. *Responses were received from 21 European Countries. Results indicated that while a completion of 12 years of general education was a requirement to access nursing education in almost all respondent countries, other admission requirements differed between countries. Nursing courses were offered mostly by Faculties of Nursing and Faculties of Health Sciences (in higher education Institutions) and lecturers and management staff were mainly nurses. The results indicated significant different educational requirements for nurse educators. A foreign language was mandatory in half of the respondent countries. Nursing profession was represented at government level in just over half of the respondent countries, often with a Directorate position.*

Conclusions. *The Bologna Process has helped harmonise initial nursing education in Europe but clear standards for nursing education need to be set up. Therefore, the research about the influence of the Bologna process on the development of the nursing profession should be further encouraged.*

Introduction

Europe would benefit from overcoming the remaining barriers represented by the too numerous existing diplomas, certificates and qualifications in Higher Education. Despite the existence of a large number of policies, there are obstacles for individuals to move across European countries, education

systems and from education to work. Europe needs better transparency and recognition of skills and qualifications (1). Furthermore there is an inherent difficulty in comparing different educational and cultural settings.

The Bologna Process introduced unifying elements shared by institutions in different European countries (2). The aim was to establish a homogeneous, transparent and

¹Sanatorio Triestino, Trieste, Italy

²Nursing Research Unit, Dept of Public Health and Infectious Disease, Sapienza University of Rome, Italy

efficient development of professionals within the higher education system, which can deal with the challenges in the labour market and the increasing globalisation (3) The Bologna Process, which was about to make European higher education more comparable, and the European Union Directive 2005/36/EC (4), had the intention to harmonize minimum educational requirements to facilitate the free movement of professionals (and clients) throughout Europe.

The Bologna Process has had a profound impact on nursing education in Europe. Historically, nursing schools did not exist within the European higher education network, and - until the recent past - there was no place for the schools of nursing (5), and nurses were educated and trained at vocational level (5, 6) and practiced for an extended period in history under the control and direction of physicians (7). Vocational and regional education with basic knowledge and skills necessary for nursing care is not sufficient for the independent and active role in practice of nursing (5, 8). Nursing care requires analytical, research-based thinking (5). The Bologna Process created a great opportunity for nursing education at Bachelor's level as entrance level (9), nourishing the practice settings with highly qualified nurses and contributing to the development of the scientific basis of knowledge of the discipline (10). In the majority of European countries initial nursing education has now been advanced to university (11). However, nursing academic education is developed differently across many European countries, probably due to historical and political influences (12). Findings of an observational study (13) in nine European countries showed that hospitals with more nurses with a Bachelor's degree had significantly lower mortality rates than hospitals with fewer nurses with the same degree. Moreover, the conclusion of an extensive study in the United States (14) was that recruitment of

Baccalaureat-prepared nurses in bedside care, as well as the investments in further education for nurses, may lead to substantial improvements in the quality of care (14). It is essential to invest in higher education for nursing. However, the amended EU Directive 2005/36/EC (4) seemed a step back in the efforts to achieve uniformity in nursing education by the approval of two pathways, vocational and academic.

The Bologna process developed a number of tools to improve transparency and international exchange such as the European Credit Transfer and Accumulation System (ECTS) and the Diploma supplement. The ECTS was created to promote student mobility across universities and national borders, but there is still some hesitation in its adoption (15). The Diploma Supplement, developed in the 1990's, should improve international comparability and facilitate academic and professional recognition (9, 15), but there has been an insufficient adoption of it (15); Salminen et al (16) also found that there was no consensus on the level of education requirements for nurse educators across Europe. Furthermore, for nursing education research in Europe it would be also important to find a common ground in terminology and to have access to reliable informations on nursing education (13). It is clear, from the "European Higher Education Area (EHEA): Bologna Process – Implementation Report in 2015" (17), that there are still several gaps within the European Higher Education realities. Indeed, "although countries are moving in the same direction, they do so at widely varying pace" (17). The report clarifies that currently there is "no single model of first-cycle programmes in the EHEA" (17), and that other models dominate also in the second cycle, which may cause problems in the recognition of qualifications.

According to the literature review, there is lack of homogeneity in nursing education across Europe and an overall uncertainty on

what constitutes the right strategy to develop an efficient and effective nursing education model. In order to increase knowledge and information on the issue, this study was developed.

Aim

The aim of this study was to identify similarities and differences in the nursing education frameworks of European countries at this time.

Method

The sampling frame for this study included the 30 European countries: (27 member countries (in 2014) of the European Union; plus Iceland and Norway as members of the European Economic Area (EEA) and the European Free Trade Association (EFTA) and Switzerland as part of the EFTA. All countries are participating in the Bologna Process. Liechtenstein was not included because nursing education is not provided in this country.

Data were collected using a survey questionnaire in English, devised by the Authors and constructed through web surveys (<https://www.1ka.si/>). The questionnaire was multi-choice with 3 open-ended questions.

The items of the multi-choice questionnaire were divided into three sections: (1) admission requirements for entrance to initial nursing education, (2) organization of nursing higher education, and (3) major disciplines in nursing curricula and national directives.

The survey was distributed *via* e-mail to the nursing associations/regulatory bodies of the 30 European countries according to the European Federation of Nurses (EFN) official website. The survey was active on line for an established time.

The final number of the participants in the survey was 21/30 (70%).

The analysis of the questionnaires was conducted descriptively with a content analysis of the open-ended questions. Descriptive statistical procedures were used to analyse data.

Results

Twenty-one Countries responded, grouped as follow: 17 nursing associations (Austria, Belgium, Bulgaria, Cyprus, Denmark, Finland, France, Germany, Iceland, Italy, Lithuania, Malta, Norway, Poland, Romania, Slovenia, Switzerland), 2 nursing regulatory bodies (Portugal and Spain), 1 nursing union (Ireland) and 1 Society of nurses (Sweden).

Admission requirements for entering initial nursing education

The results showed that admission requirement for entrance to undergraduate nursing programme in most countries was the completion of 12 years of education. A selection exam was necessary in 13 countries, in 14 countries the grade-point average evaluation of previous education was also taken into account. A Health certification of a psychological and physical (psycho-physical) status was required in 8 countries (Table 1).

Organisation of initial nursing studies

Nursing courses in Higher Education Institutions were offered mostly by Faculties of Nursing and Faculties of Health Sciences, followed by Nursing Courses in the Faculties of Medicine.

Half of the respondent countries reported a scientific Master degree in nursing as a basic educational requirement to teach, at University level, a nursing programme to undergraduate students. However, there were a variety of answers from other respondents. In most countries, the main positions as higher education lecturers were occupied by

Table 1 - Admission requirements for entering initial nursing education

Respondent countries (n = 21)	General education in years	Grad-point average of previous education	Selection exam	Medical certification
Austria	10	*	no	no
Belgium	12	*	no	yes
Bulgaria	12	yes	yes	yes
Cyprus	12	yes	yes	yes
Denmark	12	yes	yes	no
Finland	12	no	yes	yes
France	12	no	yes	no
Germany	10	yes	*	yes
Iceland	>12	no	yes	no
Ireland	12	yes	yes	no
Italy	>12	yes	yes	no
Lithuania	12	yes	yes	yes
Malta	>12	*	no	yes
Norway	12	yes	yes	no
Poland	12	yes	no	no
Portugal	12	yes	no	no
Romania	12	yes	yes	yes
Slovenia	12	yes	no	no
Spain	12	yes	yes	no
Sweden	12	*	no	no
Switzerland	12	yes	yes	no

*missing value

nurses holding a scientific Master degree and/ or a PhD (mainly Nursing PhD). The main positions as management staff of nursing educational institutions, in the majority of Countries, were occupied by a qualified nurse (Table 2).

Participants in the survey were asked to indicate one or more important scientific areas in the curricula. Nursing science was selected as the most important scientific area also in a number of combinations with other scientific areas. In half of the countries the knowledge of a foreign language was mandatory and in all respondent countries a dissertation or final project was required. A Diploma Supplement was issued to graduates

at the end of the first cycle nursing study programme in 12 countries (Table 3).

National directives

A state-run legal license was required for practice in 16 countries. A nursing order or regulatory body and a national register are present in 15 countries. The nursing profession was represented by nurses at governmental/central level in 13 countries (Table 4).

Respondents had the possibility to express their belief regarding the improvement of the comparability of qualifications through the introduction of ECTS and the three-cycle degree structure of nursing study in Europe.

Table 2 - Organisation of initial nursing studies

Respondent countries (n=21)	Faculties/education institutions offering nursing courses	Basic educational requirement in order to teach in nursing study programmes	Required title for main position as lecturers in Nursing study programmes	Required level of education of management staff of nursing educational institutions
Austria	Faculty of Medicine, Faculty of Nursing, Nursing schools	Variable	Nurses with Master's degree	Qualified nurse
Belgium	Faculty of Nursing, Faculty of Health sciences	Master's degree in nursing	Nurses with Master's degree	Qualified nurse
Bulgaria	Faculty of Nursing	Master's degree in nursing	Nurses with Ph.D.	Nurses with Ph.D.
Cyprus	Faculty of Health Sciences	Ph.D. in nursing	Nurses with Ph.D.	Qualified nurse
Denmark	Faculty of Nursing	Master's degree in nursing, Master's degree in education	Nurses with Master's degree	Qualified nurse
Finland	Faculty of Nursing	Master's degree in nursing	Nurses with Ph.D.	Qualified nurse
France	Faculty of Medicine	Master's degree in nursing	Doctors of medicine	Qualified nurse
Germany	Nursing schools	Bachelor's degree in nursing	Bachelor's degree in nursing	Qualified nurse
Iceland	Faculty of Nursing	Ph.D. in nursing	Nurses with Master's degree	Nurses with Ph.D.
Ireland	Faculty of Nursing	Master's degree in education	Nurses with Master's degree	Qualified nurse
Italy	Faculty of Medicine	To be a nurse	Nurses with Master's degree	Variable
Lithuania	Faculty of Medicine, Faculty of Nursing, Faculty of Health Sciences	Master's degree in nursing	Nurses with Master's degree	Qualified nurse
Malta	Faculty of Health Sciences	Bachelor's degree in nursing	Nurses with Ph.D.	Qualified nurse
Norway	Faculty of Health Sciences	Master's degree in nursing	*	Qualified nurse
Poland	Faculty of Health Sciences	Master's degree in nursing	Nurses with Ph.D.	Qualified nurse
Portugal	Faculty of Nursing	Master's degree in nursing	Nurses with Ph.D.	Qualified nurse
Romania	Faculty of Medicine	Ph.D. in nursing	Doctors of medicine	Doctors of medicine
Slovenia	Faculty of Nursing, Faculty of Health Sciences	Master's degree in nursing	Nurses with Master's degree	Variable
Spain	Faculty of Health Sciences	Master's degree in nursing	Nurses with Master's degree	Qualified nurse
Sweden	Faculty of Nursing	Master's degree in nursing, Ph.D. in nursing	Nurses with Ph.D.	Nurses with Ph.D.
Switzerland	Specialized schools	Master's degree in nursing, Master's in education	Variable	Variable

*missing value

Table 3 - Scientific areas, proficiency in a foreign languages, final project or thesis and the issuance of a Diploma Supplement

Countries (n=21)	Most important scientific areas	Study of a foreign language	Final project or thesis	Issuance of a Diploma Supplement
Austria	Nursing, social	No	*	no
Belgium	Nursing, medical, social	Yes	yes	*
Bulgaria	Nursing, medical	yes	yes	yes
Cyprus	Nursing, medical, social	yes	yes	no
Denmark	Nursing, medical, natural, social	no	yes	*
Finland	Nursing, medical, natural, social	yes	yes	yes
France	Nursing	yes	yes	yes
Germany	Nursing, medical, social	no	yes	no
Iceland	Nursing	*	yes	no
Ireland	Nursing	no	yes	no
Italy	Medical, Nursing,	yes	yes	no
Lithuania	Medical	yes	yes	yes
Malta	Nursing, medical	no	yes	yes
Norway	Nursing, medical, social	no	yes	yes
Poland	Nursing, medical, social	yes	yes	yes
Portugal	Nursing, social	no	yes	no
Romania	Nursing, medical, social	yes	yes	yes
Slovenia	Nursing	yes	yes	yes
Spain	Nursing, medical, social	no	yes	yes
Sweden	Nursing	yes	yes	yes
Switzerland	Nursing, medical, natural, social	no	yes	no

*missing value

Fifteen countries ((Belgium, Bulgaria, Switzerland, Cyprus, Denmark, Spain, France, Finland, Ireland, Lithuania, Norway, Malta, Poland, Portugal and Sweden) claimed that the Bologna Process had improved the comparability of qualifications of nurses by the introduction of the three-cycle structure of study in Europe. Austria, Germany, Italy, Romania and Slovenia disagreed, Iceland did not respond. Seventeen countries (Belgium, Bulgaria, Switzerland, Cyprus, Germany, Denmark, Spain, France, Finland, Ireland, Italy, Lithuania, Norway, Malta, Poland, Portugal and Sweden) responded that introducing the ECTS improved the comparability of qualifications of nurses. Austria and Slovenia disagreed with respect to the above.

In order to gain data, a literature search was conducted. The purpose of the literature review was to understand and describe the Bologna Process and its impact on nursing education, European legislative framework and the process of changes in European nursing education as well as the current state of initial nursing education in Europe.

Discussion

The study examined similarities and differences in nursing education in European countries. Results show that nursing education in Europe is struggling for harmonisation. These results are aligned with the European Higher Education Area in 2015 Report (17), which revealed a

Table 4 - National directives

Countries (n=21)	Requirement of a state-run legal licensure for practice	Existence of nursing order or regulatory body	Existence of a national register	Representation of nursing profession at government level
Austria	*	no	no	yes
Belgium	yes	yes	yes	yes
Bulgaria	no	yes	yes	no
Cyprus	yes	yes	yes	yes
Denmark	yes	yes	yes	yes
Finland	yes	no	yes	yes
France	yes	yes	yes	no
Germany	yes	no	no	yes
Iceland	*	*	*	*
Ireland	yes	yes	no	no
Italy	yes	yes	yes	no
Lithuania	yes	yes	yes	yes
Malta	yes	yes	yes	no
Norway	yes	no	yes	no
Poland	yes	yes	yes	yes
Portugal	yes	yes	yes	yes
Romania	yes	yes	yes	yes
Slovenia	yes	yes	yes	yes
Spain	no	yes	no	yes
Sweden	yes	yes	yes	yes
Switzerland	*	no	no	no

*missing value

generally confused European educational framework.

There are some similarities. Results show that the admission requirement for nurse education in most respondent countries was a completion of minimum 12 years of general education. This homogeneity in educational requirements at second level should help reduce the educational disparity among nurses and other healthcare professionals, upgrade the skill level of the nurse workforce, and ensure EU citizens access to high quality and safe healthcare (18). Therefore, moving the education of general care nurses into higher

education is essential (18) to the evolution of the nursing profession (19). This is also important in relation to parity with other professionals in the multidisciplinary team and an important step in the evolution of the nursing profession (19). Also, according to our results, there was an uneven situation in terms of other requirements (grad-point average of previous education, selection exam, and medical certification) for entering initial nursing education.

Nursing courses found different solutions over time and our findings show that nursing education was offered mostly by Faculties

of Nursing Science and Faculties of Health Sciences, but also by other Faculties as Medicine. A concern and some reflections should be made in order to consider Nursing as an autonomous discipline instead a discipline within Medical Disciplines as, for instance, in Italy and France.

Significant differences were found in basic educational requirements for educators in nursing study programmes. Lack of uniformity might be a consequence of rather rapid changes in nursing education and different ways and times of implementation. As nurse educators have different levels of preparation, this may also indicate differences in nursing programmes and different learning pathways for future nurses. In three quarters of the respondent countries, the main positions as lecturers were held by nurses with a scientific Master's degree and a Ph.D, belonging to specific University Nursing Departments. In the light of above, nurses are holding the main positions as lecturers and managers of nursing institutions and consequently have the opportunity to contribute to the development and orientation of the nursing profession of the future. In this context, they carry an extraordinary responsibility. This is a relevant aspect which should be more extensively identified, to better frame the extent or the level of decision making power of nurses in association with their own educational development. Nurse educators are in the front line of educating the next generation of nurses and nurse educators must lead the way (5).

A strong scientific, evidence based knowledge, is critical for globalisation, because knowledge is power and nurses must lead their future in multiprofessional scenarios. An important content of the nurse education *curriculum* is also the study of a foreign language (mainly English) in order to be able to move throughout Europe and even outside; half of the respondent countries did not seriously include it in their

study curricula. According to Collins and Hewer (5), lack of proficiency in foreign languages represents a barrier to student and graduate mobility and to the achievement of a common ground in terminology and reliable information on nursing education (13).

In terms of mobility and free movement of professionals within Europe and also in terms of patients' rights to cross-border healthcare, it is necessary to have healthcare professionals who can speak at least one of the major European languages besides their mother language (usually English for non Anglophone Countries).

Members of the Bologna Process have agreed that graduates should receive a Diploma Supplement automatically. According to our findings, a Diploma Supplement was issued to graduates at the end of the first cycle of the nursing study programme only by 11 countries. As Diploma Supplement facilitates academic and professional recognition, the failure to adopt it may inhibit mobility of professionals at European and worldwide level.

Nursing associations and regulatory bodies from 15 countries confirmed that the Bologna Process improved the comparability of qualifications of nurses by the introduction of the three cycle structure of study in the European Union, instead some nursing bodies disagreed.

A question arises: has the future of academic education of nurses become uncertain again or would it diverge again? Global economic crisis has an impact also on education and health policies. Will employers try to cut health expenditure by employing less qualified staff? The investment in nursing education seems to be an extremely important but difficult step to achieve (20). Certainly, there is a growing concern about the limited resources for health care systems, but highly educated staff means significantly lower mortality in the hospitals (13) and substantial improvement in quality of care (14). A careful analysis of

real needs of healthcare systems should be taken into account in future development of educational reforms in nursing.

There are inconsistencies within the EU and European Union legislation; there is the need to set out a clear framework to assist European countries in harmonising the outcomes, taking into account different cultures, healthcare needs, economic situation and migration (16). An effective workforce is a knowledgeable workforce that has a wider impact on society and health social determinants (19, 21, 22) therefore, a common platform of performance is needed, leading towards a new model of higher education and new global standards. European governments and universities have to work together to construct an Europe of knowledge (2) and build trust in each other's educational systems. There is a strong need of a clear analysis of European setting, to build a clear framework of a nursing curriculum for a common labour market and equal patient treatment, though considering different cultures, healthcare problems and economic situations of the continent.

Conclusions

Nursing education has been transformed in Europe over the last few decades and the transformation is still on the go. The Bologna Process has had a profound impact on transfer and recognition of all higher education in Europe including nursing education. According to the results of our study we emphasise the importance of the clear framework of a nursing curriculum, setting the initial nursing education at university level, the use of common terminology between European nursing educational systems, the agreement on minimum educational requirements for nursing educators and active involvement of nurses at government level nationally and internationally.

The results of this study show that

inconsistencies in nursing education still exist even though the Bologna process has undoubtedly helped. As reported in the 2015 EHEA Report (17), there is a need for further efforts by nurses at policy level to have agreement on requirements and standards for nursing education and educators across Europe, so that the movement of students and professionals can be encouraged and enhanced. More research is needed to examine this issue in further detail.

More research is needed to better frame the contents of Bologna Process within nursing education taking into account differences and peculiarities of European countries.

Limitations

A limitation of this research might be that the comprehensibility of the answers to our questions may have been influenced by different culture, poor English command and lack of consistency in terminology in nursing studies across Europe.

These limitations could be overcome through more structured and empirical oriented future research, including collaborative research between educational institutions and professionals from different European countries where the survey could be translated into the country language.

As data were gathered during 2014, the situation in nursing education in many countries may have changed due to continuous changes in across Europe.

Riassunto

Bologna Process e formazione infermieristica di base in 21 Paesi europei

Premessa. Il *Bologna Process*, e le conseguenti direttive europee, hanno avuto un profondo impatto sulla formazione infermieristica in Europa.

Scopo. Lo studio ha inteso evidenziare concordanze

e differenze nella formazione infermieristica in 21 Paesi europei, dopo l'applicazione della Dichiarazione di Bologna.

Metodo. È stato utilizzato un disegno osservazionale. È stato prodotto ad hoc un questionario e distribuito via e-mail alle istituzioni (Associazioni/Ordini) infermieristiche di 30 paesi europei. I dati sono stati raccolti da gennaio a maggio 2014.

Risultati. Hanno aderito allo studio 21 paesi europei. È interessante osservare che, mentre nella grande maggioranza dei Paesi la legislazione richiede il completamento di 12 anni di istruzione generale prima dell'iscrizione al Corso per Infermiere, gli altri requisiti di ammissione differiscono notevolmente. I corsi di infermieristica sono offerti, quasi nella totalità dei casi, da Facoltà di Scienze Infermieristiche o da Facoltà di Scienze della Salute (nelle Università). I responsabili dei Corsi così, come i docenti, sono rappresentati principalmente da infermieri. Per gli Infermieri docenti sono richiesti specifici requisiti. Lo studio di una lingua straniera è obbligatorio in metà dei paesi rispondenti. In poco più della metà dei Paesi aderenti allo studio la professione infermieristica è rappresentata, a livello ministeriale, con un ruolo di direzione.

Discussione e conclusioni. Il processo di Bologna, soprattutto all'inizio, ha contribuito ad armonizzare la formazione infermieristica in Europa, ma sono necessarie norme chiare per una migliore armonizzazione. Sono necessari ulteriori studi per stabilire se questi cambiamenti abbiano influito sui saperi e sullo sviluppo della professione infermieristica in Europa.

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Corresponding Author: Julita Sansoni, Nursing Research Unit, Department of Public Health and Infectious Diseases, Sapienza University of Rome, Italy, and Faculty of Health Sciences, University of Primorska, Izola, Slovenia
e-mail: julita.sansoni@uniroma1.it