View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by RERO DOC Digital Library

DE GRUYTER doi 10.1515/ijnes-2013-0022 — International Journal of Nursing Education Scholarship 2014; 11(1): 63–73

Research Article

Alvisa Palese*, Adelaida Zabalegui, Arun K. Sigurdardottir, Michael Bergin, Beata Dobrowolska, Catherine Gasser, Majda Pajnkihar and Christine Jackson

Bologna Process, More or Less: Nursing Education in the European Economic Area: A Discussion Paper

Abstract: The Bologna Declaration and the subsequent processes is the single most important reform of higher education taking place in Europe in the last 30 years. Signed in 1999, it includes 46 European Union countries and aimed to create, a more coherent, compatible, comparable and competitive European Higher Education Area. The purpose of this paper is to discuss the Bologna Declaration achievements in nursing education at 2010 within eight countries that first signed the Declaration on 1999. Researchers primarily identified national laws, policy statements, guidelines and grey literature; then, a literature review on Bologna Declaration implementation in nursing was conducted on the Medline and CINAHL databases. Critical analyses of these documents were performed by expert nurse educators. Structural, organizational, functional and cultural obstacles are hindering full Bologna Process implementation in nursing education within European Economic Area. A call for action is offered in order to achieve a functionally unified system within nursing.

Keywords: Bologna Declaration, nurse education, European Union, European Economic Area, Nursing

***Corresponding author: Alvisa Palese,** Associate Professor in Nursing Science, University of Udine, Viale Ungheria 20, 33100 Udine, Italy, E-mail: alvisa.palese@uniud.it
Adelaida Zabalegui, Director of Nursing at Hospital Clinic of Barcelona, Spain, E-mail: AZABALEG@clinic.ub.es
Arun K. Sigurdardottir, Professor, Dean of School of Health Sciences, University of Akureyri, Iceland, E-mail: arun@unak.is
Michael Bergin, Lecturer in Nursing, Department of Nursing, School of Health Sciences, Waterford Institute of Technology, Ireland, E-mail: MBERGIN@wit.ie
Beata Dobrowolska, Teacher (adjunct), Medical University of Lublin, Faculty of Nursing and Health Science, Chair of Nursing Development, Lublin, Poland, E-mail: bb.dobrowolska@gmail.com
Catherine Gasser, Lecturer in Nursing, High School of Health Sciences, University of Applied Sciences Western Switzerland, Fribourg, Switzerland, E-mail: catherine.gasser@hefr.ch
Majda Pajnkihar, Associate Professor, Dean, Faculty of Health Sciences, University of Maribor, Slovenia, E-mail: majda.pajnkihar@um.si
Christine Jackson, Principal Research Fellow, Faculty of Health, Life and Social Sciences, University of Lincoln, UK, E-mail: cjackson@lincoln.ac.uk

The Bologna Declaration (European Ministers of Education, 1999) and its subsequent Process (Vassiliou, 2010) is the most important reform of higher education to take place in Europe in the last 30 years (Davies, 2008). The Bologna Declaration's main aim was to create, by October 2010, a more coherent, compatible, comparable and competitive European Higher Education Area (EHEA) (Hengen, 2010; Patricio & Harden, 2010; Davies, 2008). This aim was to be achieved by developing a common European framework of qualifications and cycles of study. In order to achieve this goal, six action lines were stated in the Bologna Declaration:

1. The adoption of a system of easily readable and comparable degrees for each discipline.
2. The adoption of a system essentially based on two cycles: undergraduate (Degree or Bachelor) and postgraduate (Master and Doctorate).
3. The establishment of a system of credits (European Credit Transfer System [ECTS]) based on student workload (ECTS User's Guide, 2009).
4. The adoption of a Diploma Supplement, as a system of standardized information that adds to the title, a detailed description of the nature, level, context and content of the education received.
5. The promotion of mobility of educators and students, and
6. The promotion of an education quality control system (European Ministers of Education, 1999).

A number of European countries accepted the Bologna Declaration invitation; initially 15 European Union (EU) members, three European Free Trade Association (EFTA) countries such as Iceland, Norway and Switzerland and 11 EU candidates' countries signed the Declaration. Currently, a total of 46 countries (Vassiliou, 2010), 27 of

which belong to the member states of the EU (Slantcheva-Durst, 2010), decided to commit themselves to achieving objectives set out in the Declaration. Including EU and EFTA Countries, the Bologna Declaration and the following Process affects education in the comprehensive area called European Economic Area (EEA). The EHEA was officially launched in Budapest/Vienna, 11–12th March 2010 (Vassiliou, 2010).

The Bologna Declaration has also impacted nursing education and will impact, in the long-term, on approximately six million nurses (European Parliament 2009–2014, 2010), more than 499,389.380 citizens (Population Projections, 2010) and millions of health-care workers and their education. Moreover, despite its importance, and with several strategies adopted at different levels of implementation (e.g. Leuven and Louvain-la-Neuve Communiqué, 2009; Copenhagen Declaration, 2002), the impact of the Bologna Declaration on nursing education has received little attention to date (Jackson et al., 2009; Spitzer & Perrenoud, 2006). Published studies assume a single country perspective (Ohlen, Furaker, Jakobsson, Bergh, & Hermansson, 2011; Betlehem, Kukla, Deutsch, Marton-Simora, & Nagy, 2009) or occasionally a multi-country perspective, from for example, the Scandinavian countries which are described by some to be politically, economically, historically and geographically closed (Raholm, Hedegaard, Lofmark, & Slettebo, 2010). However, some studies including non-European countries have reported some evidence of a global extension of the Bologna Declaration (Sanford, 2007; Thobaben, Roberts, French, & Tallberg, 2005) for example in Latin American countries (Bruner, 2009).

The main aim of this paper is to discuss the Bologna Declaration achievements in nursing education at 2010 within eight countries within the EHEA that first signed the Declaration on 1999.

Background

In nursing education, the Bologna Declaration was welcomed as a strategy (a) to facilitate the promotion of nursing transition from vocational training to higher education (Spitzer & Perrenoud, 2006), (b) to unify platforms of pre-registration programs across Europe (Davies, 2008) and (c) to offer different exchange opportunities for undergraduate and postgraduate students and nurse educators (Jackson et al., 2009; Davies, 2008). The effects of nursing education transition to higher education has been to better prepare nurses for their future roles including the preparation of nurses as intellectual professionals (Keogh, 1997), which in turn leads to a more effective and autonomous health-care professional (Aiken, Clarke, Cheung, Sloane, & Silber, 2003). In addition, according to Davies (2008), the Bologna Declaration offers real opportunities for nurses to establish closer links with their European colleagues across a spectrum of clinical practice, management, and academia in order to raise the profile of nursing as a graduate professional. These links could have a positive impact on migration, careers, nursing management policies and research opportunities within European members (Zabalegui et al., 2006).

Since its promulgation, a number of different strategies have been adopted at both individual country and EU level, government and professional level, in order to achieve the outcomes established by the Bologna Declaration.

At country level, new policies to change or create conditions for the new education framework (Palese, 2010; Betlehem et al., 2009) were determined by individual governments responsible for higher education systems, individual universities and professional associations and networks.

At European level, the European Commission funded the Tuning Project (2010). This project was conceived to promote the convergence of degrees based on equivalent but not necessarily the same model of education across European countries. Representatives from 14 countries participated in the Tuning Project which also involved non-EHEA countries and the European University Association. The name "*tuning*" was chosen to reflect the idea that universities do not look for uniformity of their degree programs or any sort of unified, prescribed, standardized European curricula. The protection of the rich diversity of European education has been paramount in the Tuning Project, and the project did not seek to restrict the independence of academic and subject specialists, or damage local and national academic authority (Zabalegui et al., 2006). To better understand and compare curricula primarily, information on the general competencies (Tuning Project, 2008), subject-specific competencies, the role of ECTS as an accumulation system and the role of learning, teaching, assessment and performance in relation to quality assurance and evaluation was collected and updated for each country. This information was then reflected upon and discussed by teams of experts who could provide understanding, context and conclusions. The project conclusion allowed universities to "tune" their curricula, without losing their autonomy and academic freedom (Gonzalez & Wagenaar, 2010). Case studies developed by the Tuning Project demonstrated how nursing programmes could be designed to accommodate the needs of several

stakeholder groups (students, employers, academic institutions, regulators and patients) under the Bologna Process are also available (Gobbi, 2009).

At a professional level, several international associations such as the European Federation of Nurse Educators (FINE), the European Federation of Nurses Associations, the International Nursing Council, the European Federation of Nursing Regulators, the Florence Nightingale Network for Nursing and Midwifery (2010) and the European Nurse Directors Association supported the Tuning Project, recognizing the value of the project for nursing education across the EU (Davies, 2008).

From a nurse educators' perspective, the European Federation of Nurse Educators (FINE), established in Belgium (1995), has created a forum for frontline teachers in Higher Nursing Education in Europe. FINE encourages exchange of information and experience, acquisition of knowledge on similarities and differences in the education programs, establishing contacts on specific themes in Nursing Education and on student–teacher exchange, and FINE influences policy making in Europe (FINE, European Federation of Nurse Educators, 2011). Efforts were realized also by the Thematic European Nursing Network established in 2002, within 69 institutions from 26 countries, which aimed to evaluate and compare current European nurse education and practices, thus leading to the development of greater understanding, common modules and courses, and increased professional mobility (Morrow, 2006).

Focusing on the second cycle of the Bologna Declaration at the Master and Doctorate level, efforts have also been made by the Work Group for European Nurse Researchers and the European Academy of Nursing Science to promote nursing research capacity within Europe and to promote knowledge, research and scholarly excellence in nursing science (Perälä & Pelkonen, 2004; Crow, 1998). The Academy links individual nurse scientists from University Departments of Nursing across Europe in which there are active Doctoral programs. It provides a forum for established and developing nurse researchers to meet, network and develop a European perspective to their work.

Methods

The research for this paper has been undertaken by the founding members of the Udine-C Group (Understanding Development Issues in Nurse Educator Career) established in Udine, Italy in 2007. The group (in 2007) had representatives from nursing faculty in eight countries (Iceland, Ireland, Italy, Poland, Slovenia, Spain, Switzerland and England). The group primarily identified national documents, laws, policy statements and guidelines as well as national grey literature relating to the Bologna Declaration and its implementation process. Critical analyses of these documents were performed by nurse educators working in each of the aforementioned countries which have signed the Bologna Declaration since its establishment (Table 1).

A literature review was conducted including Medline and CINAHL, searching documents published from 1999 to December 2011 relating to the Bologna Declaration and nursing education achievements. The following keywords were adopted: Bologna Process, Nursing education, European Countries, EEA, Implementation, Achievement,

Table 1 Countries involved

Country	Nurses available	Population	Signed by	on 1999
Iceland	3,000	300,000	Sigurdardottir G., Secretary General Ministry of Education, Science and Culture	as EFTA Country
Ireland	82,576	4,580,000	Dowling P., Principal Officer, Minister for Education and Science	as EU member
Italy	370,000	60,000,000	Zecchino O., Minister of University and Scientific And Technological Research	as EU member
Poland	268,015	38,100,000	Winkler W., Under Secretary of State of National Education	as EU candidate
Slovenia	5,000	2,000,000	Zgaga P., State Secretary for Higher Education	as EU candidate
Spain	321,000	47,500,000	Fernandez Diaz J.D., Secretary of State of Education, Universities, Research and Development	as EU member
Switzerland	330,000	7,800,000	Kleiber C., State Secretary for Science and Research	as EFTA Country
UK	700,000	61,800,000	Blackstone B.T., Minister of State for Education and Employment	as EU member

ECTS, Diploma Supplement, first cycle, second cycle, educator's mobility, student's mobility and quality control. All languages were included. A comprehensive of 59 documents/articles were analysed and discussed. Appropriate Council Directives (77/452/EEE; 77/453/EEC; 89/596/EEE) as well as the 10 Bologna Process lines (2011) were also evaluated. Deductive approaches to data analyses were completed by the nurse educator members of the Udine-C group with inductive themes emerging through their own institutional perspectives. Data were organized into themes and related concepts which in turn generated theoretical propositions relating to compliance with the Bologna principles. Data were integrated and themes agreed during international meetings (Waterford [Ireland, 2008] Barcelona [Spain, 2009] and Maribor [Slovenia, 2010]).

Findings

The Bologna Process implementation in the field of nursing is characterized by the following themes:

(1) There is an inconsistent picture relating to the implementation of the Bologna Declaration across nursing education.
(2) There are varying levels in nursing curriculum harmonization towards the Bologna Declaration lines.
(3) There are coexistences in the length of the cycle model adopted, from 3 to 4 years.
(4) There is variability in learning metrics and some hesitations in the ECTS adoption between counties.
(5) There is a lack of adoption of the Diploma Supplement.
(6) There are difficulties in establishing the second and third level programs in some countries.
(7) An innovative vision for nurse educator mobility is limited.
(8) A missed opportunity has emerged: there is no evidence of a pan-European quality control of nursing education.

Inconsistent picture in the implementation of the Bologna Declaration aims

According to Table 2, some countries have already developed and implemented the new degree structure and qualifications frameworks, ECTS, Diploma Supplement and quality assurance. However, after more than 10 years of the Bologna Process promulgation across the EEA, not all nurses are educated to degree level at the point of initial registration, and there are several ways to acquire registered nurse status. In addition, more inconsistency among countries has been introduced recently with the amendment of the European Directive 2005/36/EU, which maintains nursing education at vocational level with only 10 years of prior education.

The European Federation of Nurse Educators (FINE, 2013) and European Specialists Nurses Organization (2013) have expressed their profound concerns; while the nursing education in all developed countries is at the bachelor level, all European countries should move to this level according to the Bologna Process. This would suggest minimum admission requirements for nurses of 12 years of general education prior to starting nursing education.

The Bologna Process has benefited the EU through, for example, financial support (Brunner, 2009). Despite this support, Bologna Process compliance appears to be based on the voluntary cooperation of countries determining different levels of compliance. In terms of nurse education according to the Bologna Declaration consensus, a unified and transferable educational system has not been achieved.

The reasons of this inconsistent picture are multiple: differences in the number of nursing education systems (from two to five hundred across countries, as indicated in Table 2), differences in the complexity of these institutions (e.g. number of students) and differences in regulatory criteria both at national and at local levels may play a role (Raholm et al., 2010). In addition, economic restraints should be taken in consideration, because as expected by Bologna Declaration, educating nurses to the highest possible level should include active learning methods, students based approaches and the development of self-directed learning competencies, which may increase the costs of training (Mooney, 2009; West, 2009).

There are additional factors in determining this patchy picture. It can be argued that historically, university level nursing education exhibits such traits as diversification rather than homogenization and locally based curricula rather than international based curricula. These historical traits may affect the Bologna Declaration implementation (Brunner, 2009). There is also a need to take account of universities' readiness to accept branches of nursing education. The status of nurse educators has also changed in the last decade; their socialization into faculty might take several years to become established because of lack of nursing educator autonomy and power. Efforts to fully establish nursing education at university level according to international recommendations are not as effective as they could be (Palese, 2010).

Table 2 Bologna Declaration goal's achievements in nursing education.

	Iceland	Italy	Ireland	Poland	Slovenia	Spain	Switzerland	UK
Bologna Process implemented in nursing education (yes/no/partially; year)	Yes 2006	Yes 2001	Partially specific to each institute	Yes 2000	Yes 2008	Yes 2008	Partially 2006	Partially 2007
Number of educational years before entering the basic nursing program	14	13	12	12	13	12	12	12
Environment where the first level of nursing education is taking place	U	U	IT	U & HVS	U & NC	U	U & HVS	U
Nursing schools available in the Country (number)	2	220	13	11 Medical Universities & 59 HVS or not Medical Universities	3 U & 5 NC	106	21	500
Credits required (ECTS) for the pre-registration nursing program	240 ECTS	180 ECTS	240 ECTS	180 ECTS	180 ECTS	240 ECTS	180 ECTS	180 ECTS
Length of the nursing program (years)	4	3	4	3–3.5‡	3	4	4	3–4‡‡
Amount of clinical practice included in the nursing program (ECTS/hours)	45–55 ECTS	60 ECTS (1,800 hours)	50 credits	50% of the total hours	2,300 hours	90 ECTS	45 ECTS	50% of ECTS (2,300 hours)
Nursing education focus	General Nursing	General Nursing	5 pre-registration programmes§	General Nursing	General Nursing	General Nursing	General Nursing	4 pre-registration programmes§§
Title obtained upon graduation of nursing basic education	BSc in Nursing	BSc in Nursing	BSc in §	BSc in Nursing	Diploma in Nursing	Degree in Nursing	BSc in Nursing & Diploma in Nursing	BSc in §§
State licence exam before registration (yes/no)	No	Yes	No	No at national level	No	No	No	No
Supplement Diploma (yes/no/partially)	Yes for mobility	Yes at university level	Partially at local level	Yes at national level	Yes	Yes at university level	Yes for mobility	Partially
Credits required (ECTS) for Master's education	120 ECTS	120 ECTS	No standardized requirements	120 ECTS	120 ECTS	60–120 ECTS	90 ECTS	90 ECTS
Master program length (years)	2 years	2 years	No standardized requirements	2 years	2 years	1–2 year(s)	2 years	1–2 year(s)
Doctoral program for or in nursing available (yes/no)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Notes: § U = Universities; IT = Institutes of Technology; HVS = High Vocational Schools; NC = Nursing Colleges; ‡Higher Vocational Schools introduced 3.5 years; ‡‡ 3 years in England and 4 years in Scotland and Northern Ireland; §General Nursing, Psychiatric Nursing, Intellectual Disability Nursing, Midwifery Nursing and Children's and General Nursing (integrated programme); §§ Adult, child, mental health and learning disability.

Different levels in nursing curriculum harmonization

As reported in Table 2, important differences in nursing curriculum have emerged. The Bologna Declaration aims to harmonize higher education (Millberg, Berg, Lindstrom, Petzall, & Ohlen, 2011): European Higher Education Directives (e.g. Prague Communiqué 2001 [Vassiliou, 2010]) have driven this process (Snelgrove et al., 2009) but the process relies mainly on a bottom-up approach from universities and other interested groups (professional, academicians, students, nursing association and quality assurance agencies) (Oliver & Sanz, 2007). The Bologna Declaration implementation at country level appears to follow four different patterns: (1) some countries have harmonized the already established university education with the lines of the Bologna Declaration, (2) other countries have enhanced the nursing education, establishing it at the University level or Institute of Technology level, (3) other countries have harmonized curricula leaving nursing education out of the university sector, and (4) some countries have created a binary vocational-academic based nursing education inspired by the Bologna Declaration.

In this bottom-up process, different stakeholders and some regulatory bodies (both at Ministerial/National and at professional levels) have been involved to a varying degree (Oliver & Sanz, 2007). In some countries, national curriculum goal standards were established by the Minister and/or with the contributions of the professional bodies. Based on this, each university went on to develop their own curricula following the six lines set out in the Bologna Declaration (Zabalegui & Cabrera, 2009). In other countries, each university was encouraged to become autonomous through interpreting and building its own nursing curriculum, based on the local needs and health priorities, on the general principles of the Bologna Declaration and on the recommendation of the local board of nurses.

As Englund (2007) described, different levels of social involvement are determined by the tension between those believing that the university should primarily preserve the tradition and cultural heritage which subordinate the demand for social development, and those convinced that the university should look forward primarily to prepare for the future. Where the interested groups' involvement has been large, the social cohesion, the trans-national understanding and cooperation, which are also the philosophy embodied of Bologna Declaration, have been maximized (Oliver & Sanz, 2007).

Coexistences: three year first cycle model versus four year first cycle model

The length of the nursing education at first cycle varies from 3 to 4 years (Table 2).

There is a common idea that the Bologna Process has shortened the length of studies (Brunner, 2009) even though there is no formal indication in the Declaration (Zabalegui et al., 2006). Although, Slantcheva-Durst (2010) reported that the Bachelor–Master Bologna Process structure has separated what earlier had been a long first cycle in two shorter cycles by establishing a much shorter, new first cycle than most traditional European University systems had previously known.

The debate among university rectors, nursing leaders and professional nursing associations focuses on this initial proposed model 3-5-8 years of study: 3 years for the bachelor level (180 ECTS), plus 2 years (total 5 years) for Master level (60–120 ECTS) and plus 3 years (total 8 years) for Doctoral level (with at least 300 ECTS before entering) (Zabalegui et al., 2006). This model is generally preferred for nursing education, because it increases graduates' employability and reduces the costs of the programs. Moreover, several countries have adopted the 4-6-9 model (Table 2), introducing 4 years of basic nursing education (240 ECTS) which allows the Nursing faculties/schools to include more subjects into the basic curriculum. There is the possibility to offer more courses on scientific methods and nursing research, and students have more time to integrate all acquired knowledge under a more active learning experience based on critical thinking and team working. Taking the student perspective factors such as quality of life, learning outcomes achieved and ease movement among EU countries during undergraduate education vary across countries. In summary, the analysis identified differences among countries in terms of number of years and type of pre-university education requirements which in turn could also influence the nursing education outcomes. It is suggested that economic evaluation studies into the cost-effectiveness of different academic programs should be commissioned.

Variability in learning metrics and some hesitations in the ECTS adoption

There is variability in the amount of learning time expected of students in the eight countries (Table 2), and the adoption of the ECTS, which should express the metric of nursing education, appears problematic. The

ECTS is a student-centred system based on student workload required to achieve program objectives, preferably specified in terms of the learning outcomes and competencies. ECTS was introduced in 1989 as part of the Erasmus program (now part of Erasmus/Socrates program) which supports student and teachers mobility across Europe. ECTS is the only credit system which has been tested and used successfully in Europe (ECTS User's Guide, 2009). ECTS credits are numerical values (between 1 and 60) allocated to courses units to describe the student workload required to complete them. In ECTS, 60 credits represent the workload of a normal undergraduate academic year of study and normally 30 credits for a semester and 20 credits for a term. According to some authors (Martinez et al., 2006), ECTS improved academic performances and self-direct learning.

The introduction of the ECTS system in nursing education under Bologna Declaration had to take into account the previous European Directives which have stated that a minimum number of hours to become a nurse is 4,600 and at least 50% should be dedicated to clinical education. Despite the Directive's recommendations, a large variability in the amount of learning workload program for clinical practice from 45 to 90 ECTS has emerged, and this needs to be addressed in order to achieve homogeneity across countries (Raholm et al., 2010). However, there is also a need to discuss the appropriateness of measuring professional development in terms of hours or credits of student work instead of focusing on learning outcomes and competencies. The amount of time that a student needs to achieve and Master an objective or a skill could depend on the student's previous knowledge, competence, experience or the level of intellectual development.

A lack of adoption of the Diploma Supplement

The Diploma Supplement is approved mainly at national level (Table 2): approval at this level may be a barrier to the promotion of graduate mobility within the EEA labour market.

Moreover, in the spirit of Bologna Declaration, the Diploma Supplement is a document attached to a higher education diploma to improve international comparability and facilitate academic and professional recognition and qualification (Zabalegui et al., 2006). This innovation is an added value to academic transcripts. Employers could use this Diploma Supplement as an instrument to gather specific information about competencies acquired during the degree program. It could provide information regarding clinical practice activities, type of services visited or type of hospitals where students carry out clinical practice and thesis.

The complexity of professional profiles across the EEA is an additional challenge. Employers, universities or other agents need to understand the content of the level of education accomplished by the student, and several documents suggest the need of common nursing education standard (Baumann & Blythe, 2008). Patricio and Harden (2010) suggest that the disparity between countries in the adoption of the Diploma Supplement indicates a substantial failure in the connection between nursing education and the labour market.

Difficulties in establishing the second (Master degree) and third (Doctoral degree) levels

In some countries the second cycle (which is the Masters program under Bologna Declaration) is replaced with short specialist courses funded and organized through Departments of Health or universities. These courses do not have Master level recognition, although the educational objectives are often equivalent to professional Master programs (Table 2).

The Bologna Declaration in the specialist nursing programs has become a driver for moving from an elitist view of knowledge where just a few nurses have the opportunity to take a Master's degree (Millberg et al., 2011), towards the creation of a common framework, and opening the possibility for all nurses to advance their education. These programs should have a Master level academic accreditation, and it is desirable to have comparable programs among all EEA countries.

Despite its importance, there is little published on the prevalence of uptake on the second and third cycles. Higher level nursing education is influenced by national education systems, statutory and regulatory processes and also by the professionally oriented education developed by each country (Millberg et al., 2011). There is still a wide range of educational systems for postgraduate nursing programs such as specialist and advanced nurse practice programs and nurse practitioners.

The differences are also evident at the Doctoral level; some countries require pre-requisite courses and credits while others do not. Admissions criteria for Doctoral programs vary from country to country, with some but not all countries requiring at least 300 ECTS from previous university education and research publications.

An innovative vision on nurse mobility is limited

There is no evidence in the literature that the Bologna Process has had a positive impact on students and nurse educators' mobility across the EU (Jackson et al., 2009). Erasmus teacher mobility started in 1997/98: Erasmus enables today around 25,000 professors and lecturers per year to teach abroad, totalling 140,864 over the past 9 years (ERASMUS Mobility Creates Opportunities, 2008). Most of the exchanges are under the Erasmus/Socrates umbrella and is primarily for the students (Green, Johansson, Rosser, Tengnah, & Segrott, 2008). With its 1.7 million students so far supported and an annual exchange of around 170,000 students (ERASMUS Mobility Creates Opportunities, 2008), the Erasmus/Socrates program has assumed a key role in the Bologna Process. Mobility strategies include not only students and nurse educators but also the administrative staff who support and implement the structure of the nursing programs (Schorman, 2000). However, data on student nursing mobility are not available;

There is also a critical debate on mobility because of the requirement for additional economic support from the families over and above that provided by EU. Other factors negatively influence students and teacher mobility, not least the economic crisis within the EEA, and faculty staff shortages that will have a great impact in the near future. A more innovative is needed and Watt and colleagues (2002) and Scholes and Moore (2000) suggest that a single module is dedicated to students, demonstrating impact towards the development of a culturally competent health-care practitioner in preference to a period of placement abroad. Also developing international Masters online encourages a more cultural competence workforce (Brunner & Kada, 2010).

A missed opportunity: there is no evidence of a pan-European nursing education quality control

The quality control systems used by universities to monitor their nursing programs appear to have no unified pan-European context (Table 2; Dalponte et al., 2007). Some systems are focused on the structure of the curricula (e.g. number of ECTS) others on several factors such as structure, educator qualifications and methods of delivery. Because of the lack of common framework, no data on international cooperative quality control initiatives is available: this lack of pan-European focus on quality is a missed opportunity under the Bologna Declaration. However, the Council of Europe has produced recommendations for improving higher education quality and governance. What universities offer in terms of preparation for the labour market, preparation for life as active citizens in a democratic society, personal development and development of a broad, advanced knowledge, differ within countries, and this difference offers opportunity for further exploration (Higher Education Governance between Democratic Culture & Academic Aspiration and Market Forces, 2005).

Implication for nursing: a call for action

The Bologna Process has been and is still considered a great silent reform: it is seen as a voluntary process that is evolving and respectful of national differences. The establishment of the EHEA (Vassiliou, 2010) launched in October 2010, reflects general educational systems and in its early deliberations was not designed utilizing the expertise of nursing advisors. Different timescales in nursing education reform have emerged; after more than 10 years, the Bologna Declaration has not determined a set of unified and transferable educational indicators capable of improving convergence of nursing qualifications, standards, credit hours and mobility within nursing and nurse education. Because professional recognition is related to improved comparability of the qualifications, lack of full and consistent implementation of Bologna Declaration has resulted in failure in title recognition between countries, where professional recognition can take over 2 or 3 years (DG Internal Market and Services, 2011). Based on what has emerged, it is logical to ask whether the Bologna Declaration is really viable in nursing, as structural, organizational, functional and cultural obstacles (Ohlen et al., 2011) seem to have a negative impact on full Bologna Declaration implementation across nursing education.

Achieving common standards on education is crucial in regulated professions such as nursing, in which lives depend on the possession of specific competences (Baumann & Blythe, 2008). Common standards also facilitate nursing mobility between countries (World Health Organization and Sigma Theta Tau Honour Society of Nursing, 2007).

A new call for action for each line established in the Bologna Declaration is essential in order to achieve a

functionally unified Nursing European Higher Education Area:

- There is a need to define a common educational standard for entry-level registered nurses not only within EEA Countries involved in the Bologna Declaration but also in the globalized world.
- Nursing is a well-established scientific discipline with the right to be included in the higher education in its first cycle: there is a need to achieve this goal as soon as possible in all EEA countries. This is also the right of citizens according to the better patient's outcomes documented by nurses with academic education (Aiken et al., 2003). More nurses with MSc and PhD degrees is a desirable aim, and the harmonization of the second and the third cycles is needed. There are a wide range of systems for postgraduate nursing programs such as specializations, advanced nurse practice programs and nurse practitioners. These programs should have the academic Master level accreditation for creating a pre-condition for the real advancement of nursing. European countries with a long-standing tradition in Master and Doctoral nursing education should guide the development of the second cycles. In this process, there is a need to involve interested groups (professional, academicians, students, nursing association and quality assurance agencies). This would encourage a social aspect according to the philosophy embodied in Bologna Declaration which based on cohesiveness and trans-national understanding and cooperation.
- There is a need to build a collaborative and international perspective within those responsible to develop nursing curricula. A balance is needed which respects the local traditions with a new curricula perspective oriented towards a European dimension based on a recognizable system of credits. Within the ongoing process of revisions, there is also a need to up-to-date European Directive for first cycle and registration/license focusing these on ECTS, learning outcomes and Diploma Supplement rather than hours or proportions.
- Cooperative efforts by international and national bodies, both at professional, academic level and at labour level, focusing on Diploma Supplement contents will assist decision makers both at national and at University levels to harmonize nursing education towards agreed common competencies and learning outcomes.
- There is a need for inter-university and inter-European students and teacher/professor mobility, which includes aims such as cooperation in nursing education and research at different levels (first and second cycles).
- Improving our shared understanding of quality control systems in place in each country is a priority, supported by pan-European nursing education quality control framework.

Limitations

Bologna Process implementation has been analysed in the context of nursing academic education, among eight countries only and the analysis relates to literature up to 2011.

It is important that any further analysis begins to look at accession counties now entering the EEA, and there has to be further considerations made to take account of the current financial situation that many EEA countries now find themselves in. Vocational education and related literature as well as any analysis in the field of other health-care disciplines were not conducted. Also, the revision of the literature was extended only until 2011, according to the research aim that was to discuss the Bologna Declaration achievements in nursing education at 2010.

Conclusions

The Bologna Declaration serves both as a comparative device for assessing national educational systems and as an overarching driver for change. Bologna itself evokes the ancient university, its traditions symbolize centuries of evolving university development and now, this important name is driving contemporary European universities to understand their own nationalistic traditions as well as the possibilities as part of a successful future within an international market.

The Bologna Process has so far been all too silent reform in nursing education. Structural, organizational, functional and cultural obstacles are hindering full Bologna Process implementation in nursing education. These obstacles need to be addressed in the next decade in order to achieve a functionally unified "Nursing European Higher Education Area". Efforts are not only necessary but urgent to align nursing education to the demands of nursing globalization.

Within nursing, further development of the Bologna Process is only possible through strong international cooperation within all aspects of nursing education.

Increased collaboration in nursing education in Europe will generate more opportunities for pan-European impact and understanding of all cycles across Europe. This collaboration will generate a more global nursing knowledge and practice, sensitive to cultural and organizational diversity among European citizens.

Acknowledgments: UDINE-C group thanks Professor Tony Butterworth for his valuable contribution and advice.

Conflict of interest: None for any author.
Funding: None.

References

Aiken, L. H., Clarke, S. P., Cheung, R. B., Sloane, D. M., & Silber, J. H. (2003). Educational levels of hospital nurses and surgical patient mortality. *Journal of the American Medical Association*, *290*, 1617–1623.

Baumann, A., & Blythe, J. (2008). Globalization of Higher Education in Nursing. *OJIN: The Online Journal of Issues in Nursing*, *13*(4), 1–8.

Betlehem, J., Kukla, A., Deutsch, K., Marton-Simora, J., & Nagy, G. (2009). The changing face of European healthcare education: the Hungarian experience. *Nurse Education Today*, *29*, 240–245.

Brunner, J. J. (2009). The Bologna process from a Latin American perspective. *Journal of Studies in International Education*, *23*, 417–438.

Brunner, E., & Kada, O. (2010). Professionalisation of gerontological nursing – The development of an international online gerontological Master degree programme. *Nurse Education Today*, *30*, 779–783.

Copenhagen Declaration. (2002). *Declaration of the European Ministers of Vocational Education and Training, and the European Commission convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training*. Retrieved from http://europa.eu/legislation_summaries/education_training_youth/vocational_-training/ef0018_en.htm

Council Directive, 77/452/EEC. (1977). *Concerning the mutual recognition of diplomas, certificates and other evidence of the formal qualifications of nurses responsible for general care, including measures to facilitate the effective exercise of this right of establishment and freedom to provide services*. EU Parliament and Council, Brussels, Belgium.

Council Directive, 77/453/EEC. (1977). *Concerning the coordination of provisions lay down by Law, Regulation or Administrative Action in respect of the activities of nurses responsible for general care*. EU Parliament and Council, Brussels, Belgium.

Council Directive, 89/595/EEC. (1989). *Amending Directive 77/452/EEC concerning the mutual recognition of diplomas, certificates and other evidence of the formal qualifications of nurses responsible for general care, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services, and amending Directive 77/453/EEC concerning the coordination of provisions laid down by law, regulation or administrative action in respect of the activities of nurses responsible for general care*. EU Parliament and Council, Brussels, Belgium.

Crow, R. (1998). Aims of the European Academy of Nursing Science. Retrieved from www.european-academy-of-nursing-science.com

Dalponte, A., Palese, A., Bernardi, P., Biasi, A., Brugnolli, A., Carli, E., … Valoppi, G. (2007). Variabilità e tendenze dei piani di studi dei Corsi di Laurea in Infermieristica. *Quaderni di Medicina e Chirurgia*, *39*, 1635–1644.

Davies, R. (2008). The Bologna process: The quite revolution in higher education. *Nurse Education Today*, *28*, 935–942.

DG Internal Market and Services. (2011). *Revised Final Report – Study evaluating the Professional Qualifications Directive against recent educational reforms in EU Member States*. A report submitted by GHK in association with Danish Technological Institute (DTI), London, UK.

EC Commission Regulation. (2011). *Regulation amending Annexes II and V to Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications*. Office for Official Publications of the European Communities, Luxemburg.

ECTS User's Guide. (2009). *Office for Official Publications of the European Communities*. Office for Official Publications of the European Communities, Luxemburg.

Englund, T. (2007). *Undervisningen som meningserbjudande*. In: Uljens M. Didaktik Studentlitteratur, Lund.

ERASMUS Mobility Creates Opportunities. (2008). *European success stories*. Office for Official Publications of the European Communities, Luxemburg.

European Ministers of Education. (1999). *Bologna Declaration*. Retrieved from http//eceuropa.eu/education/policies/educ/bologna/bologna.pdf.

European Parliament 2009–2014. (2010). *Written Declaration on the EU Workforce for Health*. Brussels, Belgium.

European Specialists Nurses Organization. (2013). *Concern about the process taking place towards the acceptance of the amendments Directives 2005/36/EU*, Netherlands, 14 January 2013.

Fine. (2013). *Response to the GREEN PAPER Modernising the Professional Qualifications Directive*. Retrieved from http://www.fine-Europe.eu/Directive/FINE_Response_Green_Paper_PQF.pdf

FINE, European Federation of Nurse Educators. (2011). *Plan d'action 2011–2013*. Retrieved from www.fine-europe.eu/

Gobbi, M. (2009). C5.1-4 Nursing and Bologna: implications for a regulated profession. In E. Froment, J. Kohler, L. Purser, L. Wilson, H. Davies, & G. Schurings (Eds.), *EUA Bologna handbook: Making Bologna work*. Berlin: European University Association.

Gonzalez, J., & Wagenaar, R. (2010). *Introduction to Third Cycle (Doctoral) Studies as part of the Tuning "Process"*. Retrieved from http://tuning.unideusto.org/tuningeu/index.php?option=content&task=view&id=216&Itemid=240

Green, B. F., Johansson, I., Rosser, M., Tengnah, I., & Segrott, J. (2008). Studying abroad: A multiple case study of nursing student's international experience. *Nurse Education Today*, *28*, 982–993.

Hengen, P. (2010). The "Bologna Process" in European higher education: Impact of bachelor's and Master's degrees on German medical education. *Teaching & Learning Medicine*, *22*, 142–147.

Higher Education Governance between Democratic Culture, Academic Aspiration and Market Forces. (2005). Retrieved from http://www.coe.int/t/dg4/highereducaton/governance/GOV_recomandations_EN.pdf

Jackson, C., Bell, L., Zabalegui, A., Palese, A., Sigurdardottir, A. K., & Owen, S. (2009). A review of nurse educator career pathways: A European perspective. *Journal of Research in Nursing*, *14*, 111–122.

Keogh, J. (1997). Professionalization in nursing: Development difficulties and solutions. *Journal of Advanced Nursing*, *25*, 302–308.

Leuven and Louvain-la-Neuve. (2009). *Communiqué of the Conference of European Ministers Responsible for Higher Education*. Retrieved from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/leuven_louvain-la-neuve_communiqu%C3%A9_april_2009.pdf

Martinez, D. E., Ramos, A. H., Conde, C. J., Diaz, G. P., Perez, M., Ramoz, O. C. (2006). Study of the introduction of the European Credit transfer System (ECTS) in paediatrics and modification of the teaching methodology. *Annals of Paediatrics*, *65*, 415–427.

Millberg, L. G., Berg, L., Lindstrom, I., Petzall, K., & Ohlen, J. (2011). Tensions related to implementation of postgraduate degree projects in specialist nursing education. *Nurse Education Today*, *31*, 283–288.

Mooney, H. (2009). Five funding options for student nurses. *Nursing Times*, *14*, 105.

Morrow, C. (2006). Guest editorial. Developing nurse education and practice across the European Union. *Journal of Research in Nursing*, *11*, 289–291.

Ohlen, J., Furaker, C., Jakobsson, E., Bergh, I., & Hermansson, E. (2011). Impact of Bologna process in Bachelor nursing Programs: the Swedish case. *Nurse Education Today*, *31*, 122–128.

Oliver, R., & Sanz, M. (2007). The Bologna process and health science education: Times are challenging. *Medical Education*, *41*, 309–317.

Palese, A. (2010). Ten years after the Bologna Declaration: reflections for the third reform of nursing education in Italy. *Assistenza Infermieristica e Ricerca*, *4*, 162–165.

Patricio, M., & Harden, R. M. (2010). The Bologna process – A global vision for the future of medical Education. *Medical Teacher*, *32*, 305–315.

Perälä, M., & Pelkonen, M. (2004). Networking for the advancement of nursing research in Europe for twenty-five years. *International Journal of Nursing Practice*, *10*, 54–55.

Population Projections. (2010). *European commission*. Retrieved from http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/main_tables

Raholm, M. B., Hedegaard, B. L., Lofmark, A., & Slettebo, A. (2010). Nursing education in Denmark, Finland, Norway and Sweden – From Bachelor's Degree to PhD. *Journal of Advanced Nursing*, *66*, 2126–2137.

Sanford, K. D. (2007). European Union sets standards for nursing education; Croatia faces daunting task. *Nurse Leader*, *5*, 20–21.

Scholes, J., & Moore, D. (2000). Clinical exchange: One model to achieve culturally sensitive care. *Nursing Inquiry*, *7*, 61–71.

Schorman, D. (2000). *How is internationalization implemented? A framework for organizational practice department of teacher education*. Boca Raton, FL: Florida Atlantic University.

Slantcheva-Durst, S. (2010). Chapter 1: Redefining short cycle higher education across Europe: The challenges of Bologna. *Community College Review*, *38*, 111–132.

Snelgrove, H., Familiari, G., Gallo, P., Gaudio, E., Lenzi, A., Ziparo, V., & Frati, L. (2009). The challenge reform: 10 years of curriculum changes in Italian Medical Schools. *Medical Teacher*, *31*, 1047–1055.

Spitzer, A., & Perrenoud, B. (2006). Reforms in nursing education across Western Europe. *Journal of Nursing Profession*, *22*, 150–161.

The 10 Bologna Process Action Lines. (2011). Retrieved from http://www.europeunit.ac.uk/sites/europe_unit2/bologna_process/10_bologna_process_action_lines.cfm

Thobaben, M., Roberts, D., French, S. E., & Tallberg, M. (2005). Exploring nurse education in Canada, Finland and the United States. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, *20*, 119–133.

Tuning Project. (2008). *References point for the design and delivery of degree programmes in Nursing*. Retrieved from http://www.unideusto.org/tuningeu/subject-areas/nursing.html

Tuning Project. (2010). *Educational structures in Europe*. Retrieved from http//tuning.unideusto.org/tuningeu

Vassiliou, A. (2010). *Focus on Higher education in Europe the impact of Bologna Process*. Education, Audiovisual and Culture Executive Agency, Brussels, Belgium.

Watt, S., Law, K., Ots, U., & Waago, K. (2002). Reflections across Boundaries: The European nursing module. *Journal of Transcultural Nursing*, *13*, 318–324.

West, E. (2009). Said another way. The real cost of higher education. *Nursing Forum*, *44*, 68–69.

World Health Organization and Sigma Theta Tau Honor Society of Nursing. (2007). *Developing* global standards for initial nursing and midwifery education. Interim report of the proceedings. Retrieved from www.nursingsociety.org/aboutus/Documents/WHO_interim_report.pdf

Zabalegui, A., & Cabrera, E. (2009). New nursing education structure in Spain. *Nurse Education Today*, *19*, 500–504.

Zabalegui, A., Macia, L., Márquez, J., Ricomái, R., Nuin, C., Mariscall, I., … Moncho, J. (2006). Changes in nursing education in the European Union. *Journal of Nursing Scholarship*, *38*, 114–118.