



Implementation of Competence-Based Higher Nursing Education In Georgia

Nino Chikhladze

Associate Professor, Department of Public Health, Faculty of Medicine, Tbilisi State University

Kimberley Crawford

MSN, MPH, NP-C, RN School of Health sciences and Public Health, The University of Georgia

Nato Pitskhelauri

Postdoctoral Researcher, Department of Public Health, Faculty of Medicine, Tbilisi State University

Tamar Lobjanidze

Head of School of Health sciences and Public Health, The University of Georgia

Maia Gogashvili

Assistant Professor, Head of Nursing Department, The University of Georgia

ABSTRACT

Nurses are one of the basic units of the health care team and nursing influence on quality of service is extremely important. The country of Georgia inherited a Soviet method of healthcare where emphasis was placed on quantity and not quality or efficiency of health care. Georgia was left with too many physicians and not enough nurses and almost no means of improving the nursing profession. The framework Tempus Joint European Project in Georgia was initiated to implement a new paradigm of nursing education. In order to more effectively establish this in Georgia, nursing competencies must be evaluated by key stakeholders for level of importance for nursing education. Results will allow current and future nursing programs of Georgia to mould Georgian nurses to meet EU standards for higher education.

KEYWORDS : Higher Education for Nurses, Tuning Methodology, Benchmark Statement, Degree Profile, Competence Based Curriculum.

Introduction

Nurses are one of the basic units of the health care team. Nursing staff comprise the largest working group in any health service and one of the most trusted professions in the world. They have a large sphere of influence and are represented in all nations in the world. Nursing is a caring, holistic approach to the health of a patient. It is a discipline that takes into account that health is more than just absence of disease but includes a patient's physical, psychosocial, mental, spiritual and cultural health as well. In addition to the individual, the nursing profession encompasses the health and wellbeing of the family and community

Healthcare systems lacking adequate nursing staff, both in quantity and expertise, are limited in the level of quality of care they administer. Nursing influence on quality of service is extremely important. Through organizations such as International Council of Nursing (ICN) American Nurses Association (ANA) and National Database of Nurse Quality Indicators, (NDNQI) nurses are guided with safety and quality measurements such as monitoring frequency of central line infections and patient falls and implementing safety precautions and prevention. It is measurements like these that provide information for improvement in quality of care for the patient. A population's health depends on nursing knowledge, skills and professional collaboration with the patient and other healthcare providers to decrease prevalence of infection and increase incidences of healthy lifestyles.

The country of Georgia inherited the Soviet Union's Semashko method of health care. In this method, emphasis was placed on quantity and not quality or efficiency of health care. This left Georgia with a system of producing a higher than necessary number of physicians while nursing was viewed as an assistant to the doctor rather than a highly trained profession. The ratio of nurses to physicians in Georgia is 1:1.6, whereas the World Health Organization recommends a ratio of 4:1. Only in 2007 were nurses allowed to study at higher professional institutions, or universities, and in 2011 four universities were allowed to offer baccalaureate nursing programs. Currently only three BSN programs remain in Georgia with less than 100 students per year total and only one western trained nursing instructor in the entire country. Nursing education is conducted by physicians that have little

training in a nursing model and often conduct lectures from a physician perspective.

One of the strategic directions for improving the quality health care services in Georgia is implementation higher education for nurses. Without higher education, nurses are destined to remain a technical profession rather than having the autonomy, assessment skills and evidenced-based practice that has shown beneficial in the western world. The ICN recommends that a system of nursing education should ensure up-to-date literature and evidence-based practice to satisfy the needs of a changing healthcare environment. Nurses require upon graduation, skills that promote continuing education and lifelong learning, something that a technical program does not take into account. World Health Organization, WHO, recommends the development of science and education in nursing, with particular attention to be paid both to macro determinants and needs/demands of changing healthcare environment and services.

The World Health Organization's European education strategy for nurses and midwives uses the Bologna process with tuning methodology. The Bologna process was initiated in 2001 as a consistent and transferable educational system to be used throughout the European Union (EU) where education was guaranteed at a certain standard for all those who participated. The system also promoted mobility and collaboration for students and educators in order to strengthen their own education systems through common understanding with other education systems. Nursing was one of these initiatives and the first health care regulated group and practical discipline included in the Bologna Process. This system allows for nurses to move throughout the EU with ease and similar credentials to ensure quality in healthcare both in practice and higher education.

Tuning methodology is utilized to provide a framework in which to develop this education system. The Tuning approach consists of a methodology to design, develop, implement, and evaluate study programmes for each of the Bologna cycles. "Tuning" of the educational structures and programmes helps to develop a stronger foundation of diversity and autonomy within the profession. Tuning ensures certain international standards are met without requiring homogeneity

among universities. Five subjects of education qualifications were developed under this tuning principle: generic competencies, subject-specific competencies, a European Credit Transfer System (ECTS) where credits are linked to the same learning outcomes throughout the EU, rewriting the approaches to learning, teaching and assessment, and the role of quality enhancement in the educational process. Tuning Educational Structures in Europe is a university driven project, which aims to offer a universal approach to implement the Bologna Process at the level of higher education institutions and subject areas.

Furthermore, Tuning serves as a platform for developing reference points at subject area level. Under the Tempus Joint European Project, "Implementation of Tuning Approaches in Georgian Higher Education" was initiated to implement a new paradigm of nursing education and the elaboration of curricula for high nursing education by the faculty of Medicine at Ivane Javakishvili Tbilisi State University (TSU). In Georgia, Tempus projects were held in nine other subject areas in addition to nursing: business, chemistry, education, European studies, mathematics, physics, geography, history, and civil engineering.

A foundational part of the project was collecting information via survey regarding nursing competencies. The analysis of the results formed an elaborated reference point in nursing and curricula for higher nursing education. The aims of the survey were to initiate the discussion about the competencies of nurses and involve all stakeholders (students, academics, graduates and employers) in this process and collect data from stakeholders about their attitude toward the generic and subject specific competencies in nursing.

Methods

This survey was created in line with the European Tuning methodology, and with two parts, generic and specific competencies. It was designed originally in English and then translated into Georgian for survey applicants by members of the Georgian Tempus workgroup. The survey consisted of 31 generic competencies and 47 specific competencies. The subcategories of the specific competencies are professional values and role of the nurse, nursing practice and clinical decision making, knowledge and cognitive competencies, communication and interpersonal competencies, and leadership, management and team competencies. The survey required each competency to be rated in two different categories; level of importance and achievability. Level of importance addressed how relevant the participant felt each competency is to nursing in Georgia. Achievability showed to what degree the stakeholders felt that each competency could be attained through the current university settings. The question answers ranged from not important to most important on a 4-point Likert scale. Five competencies were selected as most and least important from this scale regardless of which category they represented. Statistical analysis was performed for the generic competencies at University of Deusto, Spain by representatives of the Tempus Project Coordinator University. Specific competencies were analysed by a member of the Georgian Tempus workgroup.

Four groups of stakeholders (academic staff, graduates, students and employers) participated in all subject areas of the survey. In addition the Tempus workgroup decided to interview the patient as the fifth stakeholder. However due to the small number of respondents in this group, statistical analysis was not performed. This data can be used as a guide for development of future surveys regarding expectations of nurses and the nursing profession by the general society. In the study, academic staff was from the Faculty of Medicine (Ivane Javakishvili Tbilisi State University) and Tbilisi State Medical University (TSMU). Employers from the different hospitals, clinics and medical centres in Tbilisi that had worked with TSU and TSMU were asked to participate. The graduates had a greater than six month's lapse of time after graduation from university. Students came from the professional nursing education from TSMU and patients came from an array of hospitals, clinics and medical centres in Tbilisi. Surveys were distributed to the participants via randomize selection process within the participating university systems and their affiliates.

The survey was conducted by members of the Georgian Tempus workgroup to groups of 30 participants. Prior to the start of the interview each participant was given the reason for the survey as well

as instructions on how to fill out the survey. Two hundred and forty respondents were enrolled in the study: 60 academic staff, 30 students, 60 graduates, 60 employers and 30 patients. Each participant filled out a generic and a specific competencies survey, totalling 480 surveys for the study.

Results

Generic Competencies. According to the participants, the most important competencies from the generic competencies on the list were 'ability to apply knowledge in practical situations', 'capacity to learn and stay up-to-date with learning', and 'ability to work autonomously'. The top three competencies were not in the same ranking order for each group of participants. Employers, graduates and students ranked 'determination and perseverance in the tasks given and responsibilities taken' fourth, while the academic staff ranked 'knowledge and understanding of the subject area and understanding of the profession' as the fourth. The competencies selected as least important were 'ability to communicate with non-experts of one's field' and 'ability to show awareness of equal opportunities and gender issues'. The correlation coefficient, greater than 0.8, indicates a high level of coincidence that their opinion among the four groups of respondents was similar. The correlation among employers and graduates (0.966) is also high and with comparably small divergence noticed between academic staff and the students. (see table № 1).

Table N1. Generic competences-correlation matrix

	Academic staff	Employers	Students	Graduate
Academic staff	1.000			
Employers	0.902	1.000		
Students	0.875	0.912	1.000	
Graduates	0.939	0.966	0.954	1.000

In all subject areas, competency achievements were scored less than competency importance. According to achievement level only 13 competencies in all four participant groups were evaluated higher than three on a 4-point Likert scale. Only two competencies from the highest importance competencies coincided with achievement competencies: 'knowledge and understanding of the subject area' and 'understanding of the profession and the ability to work autonomously'. In addition, only two of the bottom five least important competencies coincided as well: 'ability to communicate with non-experts of one's field' and 'ability to show awareness of equal opportunities and gender issues'.

'Capacity to work autonomously' is the only competency selected as important for professional activity and achievable during the education process by all four groups and overlapped in both categories. 'Ability to communicate with non-experts of one's field' and 'ability to show awareness of equal opportunities and gender issues' appear in both categories by all groups as being least important for professional activity and least achievable during the education process.

Nursing Specific Competences. Due to the European survey having 47 specific competences in nursing, ranking was done based on the ten most important and ten least important competencies from four groups of participants representing stakeholders. Variation of the ten most important competencies according to four groups of respondents covered 18 competencies (see table № 2).

Table N2 The most important competencies selected by groups of respondents

Respondents	Ranking									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Academic staff	14	15	17	4	16	21	6	18	22	9
Graduates	4	14	17	21	16	18	6	22	9	15
Students	4	29	7	28	30	40	14	19	21	1
Employers	4	16	14	21	18	6	15	17	22	42

Survey results showed that three specific competences are the most important for all four groups of participants. The competencies are number 4 'demonstrates awareness of the different roles, responsibilities and function of a nurse within the scope of professional practice and accountability', number 14 'demonstrates the ability to appropri-

ately use a range of nurse skills, medical devices and interventions/activities to provide optimum care, and number 21 'demonstrates current and relevant knowledge of the theories of nursing and nursing practice that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty'. The fourth competency is the first in ranking for employers, students and graduates. Three groups of participants (academic staff, graduates and employers) considered as the most important six competences: 6 'demonstrates the ability to accept responsibility for his/her own professional development and learning using evaluation as a way to reflect and improve upon his/her performance so as to enhance the quality of service delivery', 15 'using nursing skills, medical devices and interventions/activities to provide optimum care demonstrates the ability to maintain patient/client dignity, advocacy and confidentiality', 16 'using nursing skills, medical devices and interventions/activities to provide optimum care, demonstrates the ability to practice principles of health and safety', 17 'using nursing skills, medical devices and interventions/activities to provide optimum care, demonstrates the ability to safely administer medications and other therapies', 18 'using nursing skills, medical devices and interventions/activities to provide optimum care, demonstrates the ability to consider emotional, physical and personal care needs, including meeting the need for comfort, nutrition, and personal hygiene', and 22 'demonstrates current and relevant knowledge of the theories concerning the nature and challenge of professional practice that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty'. The ninth competency, 'demonstrates the ability to recognize and interpret signs of normal and changing health/ill health, distress or disability in the person', is the most important for academic staff and graduates. As for the fifth group of participants, the patients, their findings were not statistical ranked, but analysis of the surveys showed that the patients value similar competencies to the other groups, Those competencies are the 4th, 14th, 21, 9th, 16th, 32th and 31th competencies.

The ten least important competencies for the four groups of respondents cover 17 competencies (see table №3).

Table N3 The least important competencies selected by groups of respondents

Group	Ranking									
	1	2	3	4	5	6	7	8	9	10
Academic staff	27	47	35	38	30	26	5	24	23	46
Graduates	5	27	47	23	31	38	30	11	26	46
Students	27	13	31	26	15	12	47	45	11	46
Employers	27	47	26	12	38	13	30	35	35	25

The survey results showed that the 26th 'demonstrates current and relevant knowledge of technology and health care informants that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty' and 27th 'demonstrates current and relevant knowledge of international and national policies that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty' competencies are the least important for all four groups. At the same time the 47th competency 'demonstrates an awareness of the principles of health/social care funding and uses resources effectively' is last on the list according to importance for academic staff, employers and students, and for graduates it is penultimate. The three groups of participants considered the six least important competencies as follows; 5 'demonstrates the ability to adjust their role to respond effectively to population/ patient needs', 27 'demonstrates current and relevant knowledge or international and national policies that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty', 30 'demonstrates current and relevant knowledge of the research process and current nursing research that can be appropriately applied to nursing actions to provide nursing care that is rigorous and evidenced based', 35 'demonstrates the ability to identify and manage challenging behaviour', 38 'demonstrates the ability to identify and use opportunities for health promotion and health education', 46 'within the clinical

context, demonstrates the ability to educate, facilitate, supervise and support nursing students and other health/social care students or workers'. For three groups of respondents (academic staff, students and employers) the least important was 'demonstrates current and relevant knowledge of international and national policies that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty' (46th). Graduates considered that it is least necessary for them demonstrate the ability to adjust their role to respond effectively to population/patient needs. Correlations of participants' opinions are very high between employers and academic staff (0.924) and employers and graduates (0.903). The least correlation was observed between students and academic staff (0.515) and students and graduates (0.518). (see table №4)

Table N4 Specific competences-correlation matrix

	Academic staff	Employers	Students	Graduates
Academic staff	1			
Employers	0,92428958	1		
Students	0,51494626	0,54442496	1	
Graduates	0,88389868	0,90281248	0,51806226	1

The results show that four groups of participants have chosen two competences from professional values and role group. No difference was observed among participants' consideration about importance of nursing responsibility, role and function awareness. Unlike other groups, students preferred professional, ethic and legal issues for professional activity based on the nursing survey results. General preference of academic staff, graduates and employers included nursing and developing of competences related to clinical decision making. Students equally have chosen competencies from nursing knowledge. Only the student group considers the most important skills for themselves are problem resolving, decision making and ability to apply in practice; and knowledge of research principles and ability to apply in practice. From academic staff and graduates data, there was no competency from the communication and interpersonal competencies or leadership, management and team competencies in the ten most important competencies. This is most like due to the belief that nurses are still a technical profession that needs to only respond to a doctor's order rather than be allowed autonomy and critical decision making. It is to be noted that almost all of the communication/interpersonal competencies and leadership/ management and team competencies are represented by these four stakeholders as the ten least important competencies for nurses in Georgia. Since all of these competencies have been acknowledge through the Bologna process as important to learning outcomes for nursing higher education, it will be interesting to see if other countries (post-Soviet and in the EU) received similar results.

Limitations

Though this was a simple questionnaire administration and analysis, there is possible bias based on limited diversity of survey population. All those surveyed were affiliated with one of two universities by payment. Either they were paying for or paid for an education or were employed by the university. Employers were from affiliated hospitals not owned by the universities but paid for by the universities to allow medical and nursing students to practice clinically at their hospital or clinic. In addition no graduate higher education nurses participated because there were none at the time of the survey. It will be important to re-administer these surveys to a wider and different audience and possibly private hospital and clinics that are not affiliate with these or other universities.

Since the collection of this data, through a United States government agency, there has been a month long continuing education course developed by western trained nursing faculty administered to over 10% of the current nursing workforce in Georgia.

Conclusion

On the basis of the analysis of the survey results members of the working group for nursing have developed a document with the results for nursing and was uploaded on the web page of the Centre of Educational Quality Enhancement and Ministry of Education in Georgia for future public discussion. The next steps were approval of this document as obligatory guidelines for nursing by the Ministry of Edu-

cation and Science, then once approved, this document would be utilized by all nursing universities as a minimal standard in nursing education. However, the document was not ratified, but higher education in nursing was included in the National Qualifications Framework, which was approved by a decree N120/N of the Minister of Education and Science of Georgia on December 10 of 2010.

The information gathered through this Tempus project has been applied to the program at the University of Georgia. In addition, TSU is using this data for draft curricula as a basis for new curricula in nursing, 'tuning' nursing education to EU standards. Program transformation of nurses' education is a complex strategy requiring government action as well as stakeholder education in order to provide new generation of well-skilled nurses prepared for independent professional activity for the benefit of population health in Georgia.

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