DEVELOPMENT OF ESTONIAN NURSING PROFESSION AND NURSES´ TRAINING: HISTORICAL, POLITICAL AND SOCIAL PERSPECTIVES

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Annotation

The purpose of the current article is to describe the development of nursing and nurses´ training in the context of social and political changes in Estonia. The historical overview of nursing development in Western Europe, Scandinavia and the Baltic States in general gives the contextual backround in which Estonian nursing started and progressed. Focus is on the development of nursing during the period of the restoration of independence, pointing out further development perspectives in nursing and training of nurses. Special attention has been paid on the last decade´s emigration of nurses from Estonia - a trend that is continually growing and that can cause problems for health care system.

The data used in this paper are based on reviewing and summarising relevant articles, books, and studies, which have been conducted in several European countries, and were inspired by the ideas of nursing education in specific countries which have historically influenced Estonia most. Based on historical research methods, this publication provides Estonian nurses with a documented history of their profession during a critical period of development. Historical research method was used to analyze written nursing history in Estonia. Research materials included documentary sources, old newspapers, books, and journals pertaining to nursing education and practice.

Estonian nursing and nursing education have got influences from all over Europe. While the development of European nursing education was interrupted for several decades by the World War II, the first nursing programmes in universities were opened in 1990s. The modern nursing education is mainly influenced by the Bologna process. Thanks to the Bologna process nursing education has been harmonized and Estonian nurses can work all over the Europe with this education. This has resulted in the increase of the professionally educated nurses internationally migrating to work in higher income countries. Nursing education as a whole is becoming more academic - the first Estonian nurses have already acquired PhD.

There have been published monographies about nursing and nursing education history in Estonia, but there is a lack of review articles about the history of nursing and nursing education in comparison to historical and modern European nursing education. The present article is trying to fill this gap.

Key words: *Estonia, nursing history, nursing education, professional development, nursing training, professional migration.*

Introduction

J. E. Asvall, WHO regional Director for Europe, has said: “Who is the most important resource for health that a European country has today? Countries would give different answers to this questions, but all of them would put the work of nurses very high on the list – and rightfully so! The sheer number of the profession is close to 5 million in the 50 countries of the WHO European region. They serve 850 million people, who live in an area bordered by Greenland in the west, the Mediterrean Sea in the South, and the Pacific shores of the Russian Federation in the east. Nurses are not a homogeneous group: large differences are found in the roles they play, the tasks they perform, the training they receive, the status they have in society and the remuneration they get for their work. Taken together, however, they comprise a formidable workforce that provides some of the most essential services to keep people healthy, to take care of the ill and the injured, and to nurse the frail and elderly throughout the Region“ (Asvall, 1997, p. xiii).

Development of Estonian nursing has been closely conneted to the changes in society, firstly influenced by European nursing. Virginia M. Dunbar, the administrator the American Red Cross Nursing Services, said in 1937th: „Nursing history in the world is the reflection of the history of different countries. Every country seems to illustrate the past or the future of some other country. Each country enlarges upon and acts out some step in the progress of another. As history help to explain the meaning of a single situation, so one country helps to explain

another. The length of training, the uniform, regulations regarding the wearing of the uniform, hours of duty, the distribution of instruction between doctor and nurse, the spirit of nursing on each of these points and on almost every possible detail the various countries give pictures of different stages, methods, and results. And so the various countries seem to appear not as separate countries, but as different stages and methods in the solution of a single problem that of nursing the people of the country" (Dunbar, 1937). As long as society is changing, and nurses are going to meet and adapt to societies needs, the education of nurses will also have to change continuously (Kyrkjebø et al, 2002).

According to Olga Odiņa: „The origins of (medical) nurse profession formed already in ancient past. Nurses' (medical) work originated alongside the traditional work of patient care and treatment. Since 1295, when one of the surnames of grey nurses (Menborha) was mentioned in Latvia, seven centuries have passed. Nowadays a nurse is a medical practitioner who has acquired an education which conforms tothe requirements specified in the Law on Regulated Professions and Recognition of Professional Qualifications" (Odiņa, 2013, p. 5).

The first part of the article gives an overview of the socio-political framework of the development of nursing in Europe and Russia to understand the context of the forming and development of Estonian nursing before the World War II and from there on.

The second part of the article gives an overview of the development of Estonian nursing and nursing education before the Estonian independence, during the Republic of Estonia, the period of Soviet occupation and after gaining independence again, focusing on the trends of health care policy, nursing practice and nursing education.

The third part gives an overviw of the migration of nurses and its possible influence on the Estonian healthcare.

Some historical lines of the development of nursing and nursing education in Europe

As Dingwall, Rafferty and Webster (1988) state „Since 1948, most of us have grown up with a pretty clear idea of what a hospital is, what a doctor is, what a nurse is, and so on. In our lifetime there has been a fair degree of consensus about what is and is not valid and reliable medical knowledge. If you looked at health care in 1800, you would find that none of these assumptions hold true. There was no generally accepted body of medical knowledge so that rival theories circulated freely and competitively. There was no legal definition of a doctor and few restrictions on the practice of healing. The Royal Colleges of Physicians and Surgeons and the Society of Apothecaries only served relatively well-off people living in or near major towns. Elsewhere, medical care was given by family members, especially women, using treatments handed down in the local community or taken from books of home remedies, or by anybody from the neighbourhood who could build up some reputation as a healer, a bonesetter, a herbalist, or a midwife" (Dingwall, Rafferty & Webster, 1988, p. 1).

In the early nineteenth century nursing was not an identifiable and self-conscious occupation. Anybody could freely describe themselves as „a nurse" and call what they did „nursing" (Dingwall, Rafferty & Webster, 1988, p. 4). All the same we can be say that nursing as a profession or occupation has existed throughout history, although it has evolved considerably over time. In the current healthcare system, nurses are one of the most trusted healthcare professionals with a significant role to play in patients´ treatment and care.

History of nursing stems from religion and military. These two separate fields are directly relevant to nursing and are responsible for its development as a full-fledge profession. Going back to the old times, it was religious practices that encouraged nuns and religious figures to tend to the sick, as it was considered a noble thing to do. The need to help the sick was particularly felt in times of conflict, with wounded soldiers and epidemics outbreaks. During that time, the priests and the nuns took care of them. Gradually, the need for experts in the field was felt and that is how the focus started shifting towards nursing as a proper line of work (Excite Education, 2018).

Throughout history, professionalization has played an important role in the development of the nursing profession. Professions have been defined as 'occupations which are knowledge-based and achieved after following years of higher education and/or vocational training' (Evetts 1999, p. 120). Evetts (1999) proposes a traditional view on professionalization, and argues that professionalization is a diverse process in which professional development takes its own course in different countries. Historically, professionalization in nursing education can be dividend into two epochs – the training epoch and the academic epoch (Råholm et al, 2010).

The documented history of nursing education dates back to the early 19th century.

In 1836, the German priest Theodor Fliedner (1800–1864) established the first Deaconess House in Kaisers verth (Germany) reviving the ancient deaconess activity as it was during the times of Apostles (care of the needy and the sick) and making this job a social one.

During the course of time, deaconess movement gained support not only in Germany but also elsewhere in Europe – in Denmark, Sweden, Norway, Switzerland, Slovakia and the territory of Latvia (Odiņa, 2013, p. 12).

Nursing education attained a formal status in the 1860's and that is where Florence Nightingale (1820-1910) comes in. Florence Nightingale devised a complete curriculum on nursing practices and for the first time nursing education was defined. She exerted the most dominant influence over European nursing history. Her educational and hospital plans were implemented in all European countries. When Nightingale organized nursing education in London from 1861 onwards, students came from all over the world to attend her school, and after completing their studies they returned to their home countries, mostly as managers and educators. Nursing education was, in its early phase, dominated by students working in the clinic to obtain their training, which was organized in accordance with an apprenticeship system (McMillan & Dwyer, 1989: Tallberg, 1994; Sarkio, 2007).

In 1862, international cooperation of different countries in rendering aid to the sick and the wounded was realised for the first time. In 1864, 16 European countries officially joined the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick. In accordance with the provisions of the Convention, medical aid had to be rendered irrespectively of the belligerent party of the army camp. Medical staff, equipment and medical institutions were to be untouchable (Berry, 1997, p. 8). In 1867, Geneva Convention was joined also by the Tsarist Russia. In that year, the Russian Society of Care about Wounded and Sick Soldiers was founded. In 1879, it got a new official name Russian Red Cross Society. The aim of the Russian Red Cross Society was to render aid to the military administration in nursing the wounded and sick soldiers during wartime providing medical and other help (Ringlee, 2016).

In the early 1900s, nursing education changed gradually from hospital-based training to educational programmes containing shorter theoretical periods of study (Råholm, M-B., et al, 2010). Academization of nursing education began in the United States in 1907 with establishment of the first nurse professorship (Adelaide Nutting) in the program for hospital economy at Teachers College, Columbia University, New York, and in 1910 at the University of Michigan when a 5-year program for basic nursing opened. Academic nursing education evolved in Europe quite late, mainly caused by two consequent World Wars that significantly restrained the development of nursing education in Europe (Clift, 1997).

Western Europe

Differences of political, social, and educational views and events in the context of the cultural and geographical settings of Europe and the USA influenced almost the century of delay of academic development in Germany, Austria and Switzerland as compared with the United States. Although the Establishment of nursing work in Germany was fostered at the Deaconess Institute at Kaiserswerth, founded in 1836 by Theodor Fliedner, a university program for nurse teachers was established in East Germany only in 1963 and 3-year basic nursing "trade" schools in West Germany 1965 (Clift, 1997). In Austria, nursing science courses were established in 1986 at the University of Graz as part of the 4-year program in education that leads to masters in philosophy (Mag. Phil.) degree. In Switzerland, the university faculties revised their curriculums not until 1992 to include nursing content based on new guidelines that reflect the nursing needs of the Swiss people (Clift, 1997).

Scandinavia

In Scandinavia, Florence Nightingale exerted the most dominant influence over nursing history. Her educational and hospital plans were implemented in all Scandinavian countries The first secular nursing education in Sweden, the Red Cross School of Nursing, was founded in 1867. The nursing education started in Uppsala 1881. In 1927, the Red Cross Nursing School was opened in Stockholm. Nursing education was, in its early phase, dominated by students working in the clinic to obtain their training, which was organized in accordance with an apprenticeship system (Råholm et al, 2010).

Professional education of nurses in Finland dates back as far as 1889. In 1966 the Finnish Nursing Research Institute was established. University education in Nursing Science started in 1979 at the University of Kuopio, with a Master's programme in nursing administration (Nursing and Caring Sciences Evaluation Report, 2003, p. 9). The development of research and education in the field was rapid and productive; for 2003 Nursing and Caring Sciences were established themselves among the other disciplines related to health research. Today five Finnish universities have departments of Nursing and Caring Sciences, more than 130 doctoral theses have been published and more than two thousand students have passed their Master's degree education (Nursing and Caring Sciences Evaluation Report, 2003, p. 9).

In 1863 the Danish Deaconess Foundation in Copenhagen was founded after the German Kaiserswerth model and the first systematic training for „the care of the sick“ started. 1899 The Danish Nurses' Organization was founded with the aim to improve the nursing education. In 1938 the School of Advanced Nursing Education at the University of Aarhus was affiliated, but the educational programs were not recognized as university studies and did not qualify for academic degrees (Stallknecht, 2012, p. 6-7).

Reforms in Denmark, Finland, Norway and Sweden in the late 20th century have changed nursing education from an apprenticeship system to a higher education system. This became reality in Denmark in 1990, in Finland in 1990, in Norway in 1983, and in Sweden in 1977. Subsequently, undergraduate nursing education was integrated into university colleges, universities of applied sciences and universities. Nursing research has been linked to other scientific disciplines. Opportunities for doctoral studies gave the nursing profession the chance to develop as an academic discipline and enhance professional autonomy (Råholm et al, 2010).

This shift implied greater economic, administrative and professional independency for the nursing profession. The guiding principles of higher education require that nursing education should be based on scientific and practical knowledge, and thus should provide students with the necessary knowledge for working in the profession and being well-prepared for tomorrow's labour market (Karseth, 2004).

Russia

Nursing in Russia during the Tsarist era had no structure and little formal organisation. The typical nurses of the nineteenth century were 'Sisters of Mercy', working within the communities of the Orthodox Church and semireligious societies, which were formed to provide a military nursing service (Murray, 2004). The Sister of Mercy became a heroic figure during the Crimean War, prahised by the authorities and public alike (Curtiss, 1966). Unfortunately the experience of the Crimean War did not stimulate the foundation of an organised nursing service. There was no transfer of this body of nursing knowledge or experience to the wider rural or civilian population. The majority of Russia's population received inadequate medical and little nursing care (Myrray, 2004).

The Red Cross nursing society was established in 1867. The Red Cross opened more hospitals and clinics with the aim of providing free or at least, cheaper medicine to the population. It developed new training courses. The revolution in February of 1917 was the beginning of the end for the Tsarist Sister of Mercy. Many sisters joined the White Army medical units A few joined Red Army medical units and worked alongside the 'red sisters' (Myrray, 2004).

Because the soviet medical care needed a qualified personnel, new schools were opened initially in medical departments of the Russian Red Cross, which had been transferred to the commissariat; the first one opened in Moscow in 1920. By 1922, there were 31 schools of this type in the territory of the Soviet Union. The teaching programme was initially based on that of the Tsarist nursing communities. Nursing education was continually reviewed throughoutthe next decade, with further Commissariat legislative changes in 1929, 1936 and 1939. Unfortunately, co-ordinated and standardised course throughout the Soviet Union was not attained. It has been suggested that a standardised curriculum was achieved only in 1982 (Murray, 2004).

To know more, what happened with the Soviet nursing between 1940-1991 please read the section Nursing and training of nurses during the period of Soviet regime.

After the governmental change in 1991, with the end of the Soviet Union and beginning of the Russian Federation, the health care system lost much of its financial support (Goodyear, 2012). As described by Anita Rosebourgh (1997): „Russian nurses are state employees with government-set salaries. A typical nurse works long hours for low wages, under the direct supervision of a physician. A hospital nurse's duties include making daily rounds to check on patients and rooms, passing medications, taking vital signs, ensuring that special treatments are completed. There are 434 traditional nursing schools in Russia providing nursing education. Nursing education can begin any time between the ages of 14 to 18, and graduation from high school is not a prerequisite for entering nursing“.

In 2012, there was 452 nursing schools and 47 medical universities with 37 departments of higher nursing education (Goodyear, 2012).

Baltic countries

From the late 18th century until 1918, Lithuania was part of the Russian Empire. Nurses'training programs in Lithuania had been instituted in Vilnius, Lithuania, in 1895 and in Kaunas, Lithuania, in 1897. However, the true beginning of Lithuanian nurses' education came

with the independence. After World War I, Lithuanians became independent from Tzarist Russia. Lithuanian nurses were also free to develop their profession, including the establishment of nurses'training and standards for practice. The first training courses were 4 months to 1 year long, but by 1923, nurses' training had been increased to two years. Although medical education was established at the university level in 1922, nursing education remained taught in medical schools until 1990 (Karosas & Riklikienė, 2011).

In Latvia, in 1793, in Krāslava's vicinity of the monastery, a girls' school was organised, where nurse training and education was started. Later, in 1866, the first deaconess house in the Baltic was founded in Riga – Mary's Deaconess House. In 1879 by law of the Military Council and basing on the Statute of the Russian Red Cross Society, large attention was paid to nurse education. Studies were held in military hospitals in Riga and in Daugavpils. After the First World War, the USA government structures had a large impact on the introduction of medical reforms in Latvia and in the development of the Latvian Red Cross. In order to extend medical activity, the necessity arose for well-prepared charity nurses. In 1920s and 1930s, many charity nursing school were founded under the wing of the Latvian Red Cross (Odina, 2013, pp. 10-23). In Latvia, the Nurses Association first proposed higher education for nurses in 1989.

European nursing education has been significantly influenced by European cooperation and the Bologna process. The Bologna Process is an intergovernmental cooperation of 48 European countries in the field of higher education. It guides the collective effort of public authorities, universities, teachers, and students, together with stakeholder associations, employers, quality assurance agencies, international organisations, and institutions, including the European Commission, on how to improve the internationalisation of higher education (http://ec.europa.eu/education/policy/higher-education/bologna-process_en). A lot of effort has been made by the member states to open nursing curricula by higher education institutions; and to create harmonised, comparable and high quality curricula. In 2014 there were 47 states in the European higher education area, of which nursing education is provided in 45 states (not in Lichtenstein and Vatikan). 82% of member states offered nursing programmes at BA or equivalent level. Nursing education at the level of Master´ s or Doctoral degree is available in 60% of member states. In 27% of member states it is still not possible to acquire Master´s degree in nursing. Master´s degree is the highest possible degree in nursing only in 6 countries of 45. These numbers and procents show that most of the countries offering Master´s programmes also provide possibilities for doctoral studies (Lahtinen 2014). On the basis of the Bologna Process, nursing education is now regulated by Higher Education Acts in all countries (Råholm et al, 2010).

Nursing in Estonia. Beginning of nursing care in Estonia

Continuity and klowledge of our roots has always been valued in the Estonian culture. Development of nursing has been influenced by social, historical-cultural, political and ethnic factors.

The history of nursing profession in Estonia goes back to 1700s, when deaconesses took care of weak and sick. Orders of nuns and munks were devoted to taking care of sick at that time. After incorporation of Estonia into Russia the first marine hospital was opened in Tallinn in 1715 (Juske, 2016). The first nurses came to work to Estonia in 1724, following the order of Peter the Great, and started work at the same hospital (Sooväli, 1998). Development of nursing was supported by opening of hospitals in Põltsamaa (1766), Pärnu (1801) and Tartu University Clinic (1804). At that time there was a huge shortage of midwives, nurses and feldshers.

Although the first midwifery school was opened by Tartu University Midwifery Clinic already in 1811, professional nursing training was started only at the second half of 19th century, when doctor Shnelle form Paide started preparation of nurses-wounddressers-putters of cups (Onoper, 2008, pp. 281-282)

In 1867 the Tallinn House of Deaconesses was opened that served as a nursing home and nursing school. The first Estonian sisters of charity came from that school. Some of the graduates found work at the same hospital, some were sent to other counties (Sooväli, 1998).

In 1872 the Estonian Ladies Committee of the Russian Society of Care about Wounded and Sick Soldiers was founded with the aim to make preparations for providing medical care in war conditions and prepare Sisters of Charity. According to the recommendation of the committee the school of nursemaids was opened by Tartu Wound Clinic. (Kõrran, 2008, pp. 13, 46).

In 1880s the first time attention was paid to the work conditions of nurses. In 1893 preparation of feldschers to work with doctors in St. Petersburg was started. A year later, in 1894, a private nursing school was opened by Mellin´s clinic in Tartu. Nurses were called deaconesses and teaching was conducted in German language. In 1912 the first Estonian girls were acceped to the course. In 1925 Mellin's clinic gained the status of a state school. Pupils

were called deaconesses and teaching was conducted in German language (Onoper, 2008, 285-315).

During the World War I the profession of a sister of charity became very popular among young women. Women wanted to contribute eqcually with men and feel themseleves needed during the war; and the numbers of applicants to become a sister of charity drastically increased (Halastaja õde, 1914).

Nursing and training of nurses during the period of the Republic of Estonia (1918-1940)

A lot of attention was paid to public health and application of anti-epidemic measures, with the emphases on nurses´s training. Ideas for the development of nursing and training of nurses mainly came from Germany and Scandinavia. Till the beginning of 1920s the state health care system had gained general public approval.

Beside state education a great role in nursing training was played by voluntary professional organisations like Red Cross (1919) and Estonian Association of Sisters of Mercy (1922). The named associations created possibilities for the preparation of nurses and midwives. In 1920 the Estonian Red Cross Nursing School was opened by Tallinn Central Hospital.

The first task of the Estonian Nurses Union (ENU) was the harmonisation of nurses´education. The union operated during the years 1923-1940. In 1925 a nursing school was opened by the Tartu University. Eight years later (1933) the Estonian Nurses Association became the member of the International Council of Nurses (ICN). In 1925, at the request of the Estonian Nurses Association, a nursing school was opened by the Medical Faculty of Tartu University. Later on the shcool became a Tartu Medical School (Oponer, 2008, pp. 301-316).

During that period professional associations were acting really efficiently in Estonia, Latvia and Lithuania, organising conferences and establishing international contacts. The members of the Estonian Nurses Association took actively part in international conferences both at Baltic and Nordic States, as well as at the international level. During the conferences and congresses (Riga, Helsinki, Paris, Brussels) questions of vocational education, public health, curricula of nursing schools and possibilities of their improvement were discussed (Oponer, 2008, pp. 301-316).

Control over nursing curricula and work conditions characterised nursing speciality in all three Baltic States - Estonia, Latvia and Lithuania. This was the time of the beginning of international cooperation, which enabled Estonian nurses to get international training. For example, through the League of Red Cross Societies nurses had the possibility to study in Belford College in London (Tähelepanemiseks halastajatele õdedele) and through the International Nurses Union could apply to the 2-year health care course by the Columbia University in New York (Stipendium Eesti õdede ühingule, 1925).

Cooperation with close neghbours was also intense. In 1928 the Baltic Committee of Sisters of Mercy was established. The purpose of the Baltic nurses' organization was to discuss professional questions and cooperate in raising the professional standards of nursing. They discussed legislation and promoted registration based on minimum standards of education and experience. The Baltic nurses agreed that nursing theory and practice should be supervised by nurse instructors and not physicians. Students should have two years of training and be allowed to enter only after completing secondary school. They agreed to construct a curriculum with minimum standards for practice and to work toward its enforcement through legislation. Finally, they identified the need to educate themselves about different types of nursing, especially public health (Meeting of the committee of nurses of the Baltic States (ICN 1929;4:69-71.).

In 1928 the Estonian Nurses Association organised a 2-week excursion to Finland for sisters of mercy. Nurses came acquainted with hospitals, health care and care institutions in Helsinki and its surrondings. In addition every nurse had to practice about a week in some suitable institution in Helsinki (Halastaja-õdede ekskursioon Soome, 1928).

The period of the first Republic of Estonia was a period of diverse social services. Social care and health care was built on solid bases. One could work as a nurse only after completing a nursing school (Kõrran, 2008).

Before the World War II nursing profession in all three Baltic countries – Estonia, Latvia and Lithuania- was characterised by high prestige, powerful professional associations, wide international contacts, and strict control over nursing curricula and working conditions (Kalninš, 2001). As stated by Karosas & Riklikienė, "Between the World War I and World War II, the nursing profession was growing and, with some political maneuvering, was able to run its own affairs. Nurses were striving to improve their training and working conditions both through verbal discussions and professional organisations Baltic nurses were active and able to discuss health

care issues locally, nationally, and internationally. They continued to refine their profession and struggled for increased recognition" (Karosas & Riklikienė, 2011).

Nursing and training of nurses during the period of Soviet regime (1940-1991)

After the involuntary incorporation of all three Baltic States into the Soviet Union, nurses lost their professional standing and were assimilated into the Soviet health care system as mid-level medical workers, who were trained in technical schools after the completion of primary school (Kalninš, 2001). During the war all activities of medical schools in Tallinn and Tartu got interrupted, although the Tallinn Medical School continued in Tambov till 1943.

After the end of the war tuition in medical schools was provided on the bases of general and secondary education. During the Soviet period the schools operated under different names that were changed according to political decisions. In the course of time shools have emerged and dissapeared. Nurses in Estonia were trained just like in the other member states according to the centrally elaborated programmes.

After the World War II no significant changes took place in the health care policy of the Soviet Union. In towns health care was mainly provided by policlinics and hospitals (Tulva 1995). The key element of ambulatory care services in the rural areas, where one-third of Soviet citizens lived, was a feldsher's office. A feldsher was a mid-level practitioner with responsibility for immunizations, primary care, normal childbirth and minor surgery. More complicated cases were referred to district hospitals. In unevenly populated rural areas of the Soviet Union, the feldsher's services substitute for physician care. The feldsher was similar to the American nurse practitioner but performed many services that were restricted to physicians in the United States (Rowland & Telyukov, 1991).

In 1966 the Estonian Nurses Society (ENS) was established that was the only one in the whole Soviet Union. ENS was active till 1990. Also the Red Cross Society continued it's existence during the Soviet period.

By Preker and Feachem (1994), in the immediate post-war years, the soviet countries of central and Eastern Europe (including Latvia, Ukraine, Moldova, Lithuania) creatly expanded their health-care systems. However, their economics began to falter in the late 1970s and long term improvements in health status also slowed and even, in some countries, reversed, in marked contrast to the continuing upward trend in Western Europe. As a result, health care system in Soviet countries entered economic transition with a legacy of low investment in the health sector compared to the neighboring, higher income countries in Western Europe. Primary health care was neglected and, by the 1990s, health services were delivered in dilapidated facilities by low paid staff (Profession of a nurse in the Soviet Union was characterised by a low prestige, absence of autonomy, bad work conditions and insufficient salary. Description of the main role of a nurse in publications was astounding. It was described "as an indisputable executor of doctors´ orders and commands". The publications never mentioned an independent role of a nurse in the assessment of patient´s condition and planning and application of nursing care (Kalninš, et al, 2001).

A nurse had to have knowledge about diseases and skills to accomplish different procedures. The quality of nurse´s work was assessed on the bases of its speed and accuracy. A nurse had to be obedient and independence of nurses was suppressed. "A medical nurse follows the orders of a doctor. Some procedures (injections, cups, mustard plasters, enemas etc.) can be accomplished by a nurse independently. In case of more complicated procedusres the task of a nurse is to prepare the patient and instruments and to assist the doctor. A ward nurse takes part in the tour of the doctor, helping in the examination of patients, shares the results of personal observation and takes new orders from the doctor. During the tour a nurse gets acquainted with the essence of each patient´s disease and its treatment; and learnes which aspects must be observed with special attention" (Gagunova, 1977, p. 8).

In 1980s the health care systems of the Baltic region were lagging far behind the western standards. Health services were concentrated in relatively expensive hospitals which took most of the health budget and encouraged exessive medical specialization, while primary health care services were neglected with polyclinics (in which most people had their first contact with health services) typically staffed by low status doctors offering very poor quality services. There was a shortage of workers, medicine and ecquipment. The ratio of hospital beds and patients was disproportional. The main shortage was of support staff, including nurses and paramedics (Healy & McKee, 1997).

Health statistics for the Soviet Union's 280 million citizens in the end of 1980s reveal poor life expectancy and high mortality rates, with striking disparities among the individual republics. The nation's health care system is plagued by chronic underfunding, antiquated and deteriorating facilities, inadequate supplies and outmoded equipment, poor morale and few incentives for health care workers, and consumer dissatisfaction. The Soviet Union spent 3.1

percent of its GNP on health in 1987, in contrast with an average of 7.5 percent for the nations belonging to the Organization for Economic Cooperation and Development (OECD) (Rowland & Telyukov, 1991).

Centralised power had strong impact on the Soviet health care system. Limited number of international contacts and close communion could be noticed in all areas, including health care.

Nursing and training of nurses during the period of reindependence (since 1991)

In the immediate aftermath of the collapse of communism, each country faced a major economic shock with failing economic output and rising inflation (Healy & McKee, 1997). The break-up of the Soviet Union in 1991 not only changed the political map of Europe but also brought about many other fundamental changes in the countries affected, including economic collapse and, in some places, war. Each country had to build a new national identity, with new constitutions, political systems, the symbols of nationhood and new ways of doing things, including the provision of health services (Rechel, et al, 2014, p. 1).

Together with the reindependence the Estonia health care education was also changed, following the examples of European education systems (Ernits & Sepp, 2010). The first big change took place at the beginning of 1990s, when nursing curricula based on general education (2 years and 10 months) were closed and programmes based on secondary education were opened (1 year and 10 months) (Ernits & Sepp, 2010; Kannus & Varik, 2011).

This was the period of rapid changes both in the organisation of nursing care and training of nurses.

Already before the restoration of independence in 1991 national nursing unions were re-established in all three Baltic States. They look back at their past history and achievements with pride and investigated international experiences of different models of nursing practice and education. The aim was to launch a reform of nursing education and to train persons promotiong professional education abroad, including additional training courses for nurses. The first time importance of teamwork in the whole nursing process was emphasised. In 1993 in Madrid the Estonian Nurses Association became the member of International Nurses Union again. In 2000 an Estonian Council of Nurse-researchers was established. The council aimed at the development of health care policy and evidence-based nursing and improvement of nursing quality (Toode 2005, Toode 2015a). ENU promotes evidence-based nursing together with Tartu University, professional higher institutions and the Ministry of Social Affairs; participates in the preparation of health care regulations and identifying training needs; improvement of nursing terminology and harmonisation of nurses starndards of competency. The union also coordinates international relations of the field (Kõrran, 2008).

In 2011 an Advisory Counsil of Nurses Training was established by ENU. The task of the advisory council is to participate in discussions connected with the quality of nursing education and its development. Today health care colleges offer nursing training on three levels: basing nursing education, professional nursing training (health nursing, mental health nursing, clinical nursing, intensive nursing) and advanced professional training (Pruuden, 2011).

In 1996 a magazine “Eesti Õde” (Estonian Nurse) was founded. “Eesti Õde” is published four times a year and publishes information about evidence-based medicine and articles about the research of students and lecturers of higher education institutions (Kõrran jt 2008). The necessary information can also be acquired from and scientific nursing articles published in the magazine „Eesti Arst“ (Estonian Doctor).

The new era meant big challenges both for the system of social- and health care, as well as education institutions. Social progress was quick and intensive. Development of health care was closely connected with the development of society, including it´s social- and health care policy. Activities of the Estonian Nurses Union expanded significantly and international contacts, especially with Finland, Sweden and Denmark, were deepened. (Ende, 2000).

The health care workforce is always the key element in the process of reform. The health care system is labour intensive and reforms must be address the number, type and skill levels of staff, wages and working conditions, and the training and accreditaion of new staff. Nurses are the mainstay of most health care systems but those in former Soviet Union received less training and perform more restricted tasks than in the West. Statistics are hard to interpret as the definition of a trained nurse varies and, until mid 1990s, nurses were classified as „middle level workers“, a category that also included included lesser qualified nurses with only high school training (Healy & McKee, 1997).

Reindependence was the beginning of the change of the whole Estonian health care education system, following the examples of education systems in Europe (Ernits, Sepp 2010).

Like in Westerm Europe countries the development of nursing in Estonia was based on human rights, ethics and understanding of human approaches. The theoretical bases of Estonian nursing and it´s organisatsion became a holistic approach to a human (Rauhala, 1989;

Kalkim et al, 2016), aimed at patient´s well-being and recovery. Well-being of a patient is influenced by different factors like health and environment. Cultural sensitivity has also been considered important. These references were considered in development of nursing science. Nursing science plays a certain role Europe, just like in the whole world. Centuries-old-traditions of nursing science have developned it´s specific knowledge base and academic education based on this knowledge (Tomey & Alligood, 1998).

In 1991 the department of nursing science was opened by Tartu University Faculty of Medicine. Diploma studies in nursing science were opened in the academic year 1991/1992. Studies were conducted according to the 3-year curriculum and the first students graduated in 1994 (Aro, 2006).

The teatching problems connected with the search for new approaches in professional training of nurses after the Soviet period are described by the nursing professor of Saint Louis University of US state of Missouri Irene Kalninš: „*In 1991 the development of new curricula and selection of students was started in all three Baltic states. Responsible for launcing the new programmes were the existing higher education institutions. Economic and political considerations demanded as quick implementation of new study programmes as possible, but it was not possible without passing the research and planning phase. Lecturers from Estonia, Latvia and Lithuania got acquainted with BA curricula in Scandinavia and USA and tried to adapt them according to the needs and possibilities of all three coutries. That is why it is not suprising that all curricula had strong medical emphasis and only a limited part supported the role of nursing. Programmes in all three higher education institutions were leades by doctors; and most of the lecturers were also doctors. Conceptual framework of nursing, philosophy and common core of competencies that must be acquired were missing in the curricula. Development of all curricula was still quite quick, mainly thanks to the foreign lecturers and – councellors and students´ reactions*“ (Kalninš, 1995).

Together with Danish lecturers preparation of the European curriculum for nurses in medical schools was started. Nursing education was provided on the bases of secondary education (1 year and 10 months), curricula that were based on basic education (2 years and 10 months) were closed. In the academic year 1996/97 medical schools started providing education at the level of professional higher education. Although the beginning was quite chaotic and complicated, the cooperation of Danish Nurses Union, Estonian Nurses Union and Tartu University ended with the preparation of a joint curriculum for nursing specialities (3 years and 6 months) of all schools providing nursing education. Lecturers were offered a special additional training course, mainly led by Danish nursing lecturers (Ernits & Sepp, 2010, Kannus & Varik, 2011; Sõerde, 2013.) After opening professional higher education curricula in medical schools in 1996/97 and transfer to 3+2 system, the diploma- and bachelors' (BA) programmes in nursing science were closed in Tartu University as there was no need for such programmes any more.

BA curricula were launched by the university in 1997/1998 and masters' curricula in 1998/1999 (Aro, 2006). In the frames of Tempus Phare project "Master´s studies in nursing science in Tartu University to educate nurse-lecturers" a new curriculum was developed. The new curriculum complied with the European standards that concentrated on nursing pedagogy and research work. Studies were organised in cooperation with the lecturers from three different countries. The main subject (nursing science) was coordinated by Kuopio University, nursing didactics by Göteborg University and supporting subjects by Tartu University.

The goal was to prepare nurses with high level academic education - specialists with analytical skills and critical thinking - who are able to affect nursing education and development. Need for nurses with academic higher education arose with the development of health care system. Nurses with academic education were needed to fill in the positions of a head nurse, nursing managers and other managerial positions, as well as for teaching nursing students (Ende, 2000).

The biggest reforms in health care system took place in 1991-1998, when smaller hospitals of curative care were closed or reprofiled into care hospitals (Ruusmann 2001, Eesti haiglavõrgu…2002). The next big reform took place in 1999-2002, after the compilation of the development plan of hospital network Hospital Master Plan together with the consultation company Scandinavian Care. The plan outlined the development of hospital network during the next 15 years. At the beginning of the process there were 115 hospitals with more than 14 000 beds in Estonia. In less than ten years the hospital network changed in a way that in 2001 there were left only 67 hospitals with less than 10 000 beds. Reduction of the numbers of hospitals and beds was a really significant change (Eesti haiglavõrgu…2002).

The aim of the development of hospital network was centralisation of complicated treatments, de-centralisation of easier treatments, decresing the ratio of outpatient and day care and increasing the ratio of hospital care, implementation of new effective treatment methods

and increase of the importance of nursing care (Eesti haiglavõrgu…, 2002). After the Estonian reindependence nursing activities developed together with the development of health care and hospital network. Need for health care workers, mainly for nurses, was discussed with educational institutions and professional unions during the preparation of hospital development plans (Eesti haiglavõrgustiku arengukava. 2002).

Changes in the Estonian society have created several possibilities for the elaboration of new health care policy. Earlier achievements have been analysed and history of health care has been studied again and again, with the aim to transfer the results of analyses to current practice. "The content of education and the whole profession is mainly influenced by the health needs of the society, that in turn are influenced by culture and availability of resources. Societal challenges may be observed in the context of political, religious, social and economic factors. Changes in the society have an effect on the work of nurses. Changes in living style, concepts of health and illness influence the development of nursing profession (Krause & Salo 1992, p.67).

The professional standard of a general nurse, approved by the Health and Social Care Qualification Authority, was adopted in June 1999. Professional standard is a set of requirements for skills, knowledge and personal qualities agreed between respective institutions that are necessary for a working in certain level of qualification (Üldõe kutsestandard 1999). Professional requirements are devided between general- and special skills and corresponding knowledge. The professional standard of a nurse includes a list of knowledge and skills about social work, knowledge of law and etc.

As follows from the foregoing description, a nurse in today´s Estonia is independent and competent; works with families and cooperates with other spheres; knows legislation and is a contact person between different authorities. Due to the new occupational requirements it is necessary to stress the aspects connected with social nursing in nurses' work. In addition to legal acts (Tervishoiuteenuste.., 2001), nurses´ work is regulated by the International Code of Ethics of the Nurses´ Union (2006), the aim of which is to support nurses in everyday decision making. At the beginning of the Estonian reindependence the ratio of the state impact was significantly smaller in comparison with the impact of voluntary sector. At that time the goal was to transfer into a society that can manage independently. The main goal was to develop a wide-ranging social- and health care policy that will cover all areas of life. Such a goal can only be achived with the existence of meaningful social- and health care policy and educated and competent health care workers (Tulva, 1995).

Legislation has played a significant role in the modernisation of healthcare. Health Services Organisation Act amended in 2001 sets the requirements for the organisation of health care and the order of management, financing and auditing. (RT I 2001, 50, 284). The law has been constantly updated. According to the law a health care worker can be a nurse, doctor, dentist, midwifer, pharmacist or pharmacy pharmacy assistant only in case they are registered in Health Authority. According to the law a patient is a natural person who has applied for or is getting some kind of a health service.

New trends in professional curriculum

According to the Bologna declaration and 3+2 system a new Master´s curriculum was launched in Tartu University (2002). The new curriculum is more concentrated on the specialisation of nursing management and pedagogy. Curriculum development, including the application of international specialists and preparation of lecturers, was supported by the Republic of Estonia and European Union (Aro, 2006). Graduates of Master´s curriculum are working as lecturers in professional higher education institutions, nursing managers, and ward nurses at hopitals. Some of the graduates are working in public office like the Ministry of Social Affairs or the Ministry of Education and Science. In 2004 medical schools were preparing to the first international external evaluation (Ernits & Sepp, 2010; Sõerde, 2013). External evaluation was devided into institutional evaluation and evaluation of curricula group. Both Tallinn and Tartu medical schools passed evaluation successfully and became professional applied higher education institutions in 2005. The names of shools were changed into Tallinn Health Care College and Tartu Health Care College (Ernits, 2015). Curricula of

health care colleges passed national quality assessmement in 2009, international institutional accreditation in 2011 and international quality assessment in 2016 (Bauman & Mattisen, 2011).

The development of the hospital network according to the Hospital Master Plan was finished in 2007. There were 63 hospitals, 21 of which were care hospitals (Ruusmann, 2001; Normet 2007). Hospitals are devided into regional-, central-, general and local hospitals. In several regions there is only a general hospital. There are four central hospitals, two regional hospitals and three local hospitals. Problem was considered a shortage of healthcare workers,

as well as weakened infrastructure, low share of outpatient care services, unreasonably long waiting time and lack of availability of nursing care. (Normet, 2007).

Need for nurses with doctoral degree has been pointed out in the Estonian Nursing Development Strategy for the years 2011-2020 «Eight steps for human wellness" that aims at increasing the number of nurses with doctoral degree to support the development of nursing science as an important academic discipline and sustainability in Estonia. In 2015 there were five Estonian nurses acquiring PhD in Finland and two nures were preparing for the defence of PhD theses in public health in Tartu Universty (Veski, 2015). Today there are four Doctors of Health Sciences in Estonia with the specialisation of Nursing Science (Hinno, 2012; Toode, 2015; Demidenko, 2018; Ernits 2018), who have studied in Finland and are working as nurse managers and educators. Furthermore, there are two Doctors of Medical Science in Estonia (Freiman, 2017; Vorobjov, 2012) who studied in Estonia. Besides that some oractising nurses are also PhD students in some other curriculum in Estonia. Therefore we can state that the future of nursing in Estonia is hopeful.

Current (as on 1st September 2017) basic nursing curricula correspond to the standard of higher education (Kõrgharidusstandard 2008) and directives of the European Union (EU 2005). Curricula (210 ECTS) integrates theory with practice: the propotion of practical training in different health care, social and care institutions is 50 % of the whole volume of the curriculum. Research- and development work form an inseparable part of the curriculum. The main goal of reseach- and development activities is nursing practice and its development. Practical training can be passed both in Estonia and abroad, as both health care colleges are participating in international cooperation and mobility projects. Graduates of Russian gymnasium have a possibility to study in special students groups with extended study period, during which they also learn Estonian language. A person who has successfully passed basic nursing curriculum can work as a nurse in all sphares in health care in Estonia or other

European countries. Nurses can continue their studies at Master´ s level in nursing science in Tartu University and other universities in Europe or pass a nursing specialization course (Õe põhiõppe.., 2011 ja 2017). Tallinn Health Care College is developing simulation learning and application of NANDA nursing diagnoses and research. Curricula have been developed in joint cooperation of both health care colleges and are following the same principles and trends.

NANDA-I in nursing practice and training

NANDA International (formerly the North American Nursing Diagnosis Association) is a professional organization of nurses standardized nursing terminology that was officially founded in 1982 and develops, researches, disseminates and refines the nomenclature, criteria, and taxonomy of nursing diagnoses. The purpose of the Association is the implementation of nursing diagnosis which enhances every aspect of nursing practice, from garnering professional respect to assuring consistent documentation representing nurses' professional clinical judgment, and accurate documentation to enable reimbursement. NANDA International exists to develop, refine and promote terminology that accurately reflects nurses' clinical judgments. In 2002, NANDA became NANDA International in response to requests from its growing base of membership from outside North America. The correct abbreviation now is NANDA-I (with a hypen). (NANDA website: www.nanda.org.)

The first Estonian contact with NANDA (Nursing Diagnoses: Definitions&Classification) took place in 2000, after the need to teach nursing process and its documentation arised. It was necessary to find a unique language of nursing that is based on nursing terminology. The search for diagnostic systems and comparison of their application experiences (Ingerainen jt, 2008, Puusepp 2017) resulted in a conclusion that it will be wise to translate and apply some of already existing diagnostic systems. NANDA was adopted, as it is an evidence-based classification created in 1982 in US. NANDA and NANDA-I diagnoses continue to be a research subject and additions and updates are made to NANDA in every three years (Herdman 2013; Herdman & Kamitsuru 2016). Estonia is among 16 states in the world where NANDA-I diagnoses are available in national language. Till 2017 almost the third of Estonian nurses had passed NANDA-I basic examination during a basic nursing course or advanced training (Puusepp, 2017).

International cooperation of nursing colleges

International cooperation of healthcare colleges is based on the international trends of Estonian higher education institutions and development needs of colleges and specialities/curricula. An important part of international cooperation is mobility of learnenrs and teachers (Erasmus+ mobility progranmes), development projects (NordPlus programme, Innove) and participation in international networks and workgroups. Since 2015, after new

ERASMUS+ credit mobility programme was launched, cooperation with countries like Israel, Ukraine, Georgia, Moldova, Albania and Bosnia and Herzegobina was started. International networks the colleges are participating in can be devided into higher education networks like EURASHE (European Association of Institutions in Higher Education), IUHPE (European Association of Institutions in Higher Education) ja COHEHRE (Consortium of Institutes of Higher Education in Health and Rehabilitation in Europe) and professional networks like, for example, ATCN (Advanced Trauma Care for Nurses), ENOTHE (European Network of Occupational Therapy in Higher Education), and EAOO (European Academy of Optometry and Optics).

Cooperation between nursing education and health care institutions

In 1998 an Estonian nursing and midwifery development strategy was compiled with the aim to develop nursing. The team consisted of nursing lecturers, head nurses and representative of the Ministry of Socal Affairs. Development Strategy was prepared in the frames of the the WHO project (Tervis 21, 2000). The consultants were Finnish specialists from the ministry of social and health care, research and development centreof social affair STAKES and Kuopio University. The development of nursing as a part of health care, completion of nursing legislation, patient- and family centered nursing care, necessity for higher education in nursing, possibilities for advanced training and research work were seen as the priority of the development strategy (Õdede ja Ämmaemandate …, 1998).

The need for nurses´ specialisation arose after the turn of the century. Estonia established four specialisation fields: clinical nursing, intensive nursing, healt nursing and mental health nursing. The priorities of the Nursing Development Plan for the years 2002-2015 were independent work (independent receptions), improvement of specialisation, adequacy of staff and planning (Õendusala arengukava 2002). Since 2011 the development priorities are patient- and family centeredness, patient safety, availability of nursing care, quality of nursing care, nursing-scientific research and evidence-based training and practice (Kaheksa sammu.., 2011). Professional nursing colleges are participating in research projects, developing nursing education and practice and organising international and local conferences and seminars. Research and development is done in cooperation with social and health care organsations, training organisations and the third sector (Ernits, 2010; Kannus, 2011).

The ratio of nurses and doctors is strongly out of place. In OECD states there are 3 nurses per one doctor in average. In our neighbouring countries like Finland, Sweden and Norway there are 4 nurses per one doctor. In Estonia the ratio has fallen below 2. It is important to increase the preparation of nurses and doctors. Estonian health care has reached the state, where the lack of nurses has led to the significant increase of workload and development of patient-centered care is being seriously impeded. Nurses with modern preparation are able to take over several doctor´s tasks, but there is nobody available doctors could delegate their duties in practice. The deficit is particularly in the area of primary health care and elderly care (Kiivet 2013).

Both the development of health technologies and aging population increase the need for nursing care, but changes in duties and division of labour can be possible only in a situation, when there is somebody, between whom the duties could be distributed. Nurses have the key role in the functioning of modern medical care. Only the capacity and abundance of nurses have helped the Nordic and European countries to develop a modern patient-centered health care system. Both hospital- and nursing care is leaning on nurses and an increased contribution of nurses is expected in first level health care and development of home care, to be able to manage with the continually gowing number of chronic patients. To meet this demand there is no other way than a sharp and sustained increase of the number of prepared nurses. The development of care technologies and aging population also increase the need for nurses (Tulevikuvaade.., 2017).

Curriculas are improved according to the requirements of labour market and the patients` needs of the European Union and Estonia. Huge momentum has been building up over the past few years in nursing education, with accompaning problems like deficit of lecturers with the required qualification. Development in all spheres of nursing practice and nursing education must be done following the directives of the European Union. Nursing care has to be based on scientific knowledge and results of research work, what is a challenge for lecturers. Especially important here is to take into account the results of scientific work and their inclusion into the study programme. The quality of nursing education can be raised by systematic training of the supervisors of practical training and modernisation of training programmes in cooperation with practical training bases. A nurse today is a specialist, who can see, assess and analyse patient´ s needs, set goals for personal activities and draw up a nursing plan for nursing operations.

Cooperation between higher education institutions and health care institutions is continually developed by advanced training courses.

In addition to the Master in Nursing Science in Tartu University there has been developed a third field in nursing science, focused on clinical nursing. With that aim a Master´s programm in Health Science will be opened in Tartu and Tallinn Medical Colleges in the near future (2018/2019). All the necessary prerequisites (existence of competent lecturers, required study environment like simulation centre) for that have been created and there is employers have confirmed their need for Master´s students.

Need for health care workers and migration of nurses

Worldwide, there is a dramatic shortage of nurses. An increase in the migration of nurses from their home countries to recipient countries is having a global effect on the healthcare system. This global phenomenon stems from historical, economical, social, and political factors. Migration has a significant impact on both the individual and national level (Hongyan et al, 2014).

Throughout human history people have migrated to find better living conditions or have been affected by displacement caused by natural disaster, wars or human trafficking. Report of the International Organisation for Migration 2010 says that estimatedly 214 millions of people are living outside their home country and nurses form a part of ever-increasing migration folws (Kingma, 2007).

Nursing can increasingly be characterised like a mobile profession, one can manage with all over the world. Health care workers and their knowledge is universal, as it can be applied in the same way in every country, what makes migration between countries easier (Võrk jt, 2004,8-10). Thousands of nurses migrate every year in a search for better salary and work environment, possibilities for career, professional development, personal security or novelty and adventures (Kingma 2007, Freeman jt 2012). Availability of jobs, opportunities for professional or career advancement, personal development, recognition of sensitive employment policies, stable socio-political environments, quality of life improvement, attractive salaries, and social and retirement benefits represent several of the pull factors that attract nurses to the recipient countries. The following push factors in the source country contribute to nurse migration: low wage compensation, limited career opportunities, limited educational opportunities, lack of resources to work effectively, unstable and/or dangerous working conditions, lack of social and/or retirement benefiits etc. International Centre on Nurse Migration reported that the primary causes of migration (‘push’ factors) stem from a desire for more professional development opportunities, a need for greater wage compensation (Haour-Knipe, & Alero, 2008).

International migration of health care workers is under the special attention of states for the reason that there is a lack of health care workers in several countries. These states include both Estonian neighbouring states in Scandinavia and the other EU member states like, for example, Great Britain. To cover the deficite of labour foces the states are trying to recruit workers from abroad and workforce with lower labour earnings is easily willing to accept jobs offered (Võrk jt, 2004, p. 8). Typically, the nurse migration stream moves predominantly from developing countries to industrialized countries (Hongyan et al, 2014).

Migration of nurses abroad has become a significant problem in Estonian health care. The main reason for moving aboad was connected with remuneration. Important were also considered possibilities for additional training and professional practice, as well as disappointment in the Estonian life and the concrete health care institution (Adamson, 2014, 7).

Critical lack of nurses in industrial states has created a huge demand for nurses that can be evidenced during international recruitment campains. The World Health Raport (2006) has pointed out that international recruitments and migration of health care workers is influencing state labour supplies and has became an important aspect in politics. The analyses of the Organisation for Economic Co-operation and Development`i (2012) also confirms that the ratio of nurses in Estonia is lower than the average and is preventing the increase in the efficiency in health care sector. The number of nurses was increading till 2008 and then started to decreas – in 2008 there were 6,4 nurses per 1000 inhabitants and in 2010 the ratio was 6,1. Whilst the average ratio in Europe is 8, in Finland even 15 per 1000 inhabitants, the Estonian nurses´ feel the trend for growing workload. In the conditions of constantly growing workload nurses can pay only minimal attention to patients (OECD: Health at glance Europe 2012, p. 72). Continual and regular recruitment campains of Finnish and Swedesh hospitals and foreign language courses organised by the Estonian Unemployment Insurance Fund do not contribute in any way to improve the situation.

European Union legislation in force support the mobility and migration of health care workers, that in the context of Estonia means one-way movement from Estonia. This can also be proved by the certificates issued by the Estonian Health Authority for the recognition of

professiona competency abroed. Heavy ship traffic between Tallinn and Helsinki enable to work simultaneously in Estonia and Finland (Kiivet et al, 2013). That is often the case.

Migration of health care workers abroad raises legitimate questions about the sustainability of health care system. During the recent years international migration of doctors and nurses has become increasingly visible. Estonia has set the aim that there should be 9 nurses per 1000 inhabitants, but during the past decade the ratio has stayed between 6-7 (Kiivet et al, 2013). In OECD member states the average is three nures per one doktor. In Estonia the ratio of doctors and nurses is out of place: to achieve the average ratio of Europe and OECD 3:1 there should be 4000 nurses more working in Estonia than now (Tulevikuvaade.., 2017). During the years 2007–2008 a “Nationa Health Plan 2009-2020” (1) was prepared under the responsibility of the Ministry of Social Affairs. s koostati Sotsiaalministeeriumi juhtimisel „Rahvastiku tervise arengukava 2009–2020“ (1), that has became a main document for planning. In this development plan is the number of nursing specialists per 1000 inhabitants one of the five indicators of development. The number of nurses should increase 50% during the years 2011-2020 (from 6,4 to 9 nurses per 1000 inhabitant).

To achieve a balanced health care system it is necessary to know how to foresee the education needs of health care workers both in quantitative and qualitative aspects (content). Mobility and migration of health care workers has been constantly growing in the states of European Union. In case of Estonia it means mobility in only one direction – out from Estonia. It is absolutely clear that doctors and nurses leaving abroad increase the need for their training. Planning the need for training shpuld also consider age composition of health care workers. European Union legislation in force support the mobility and migration of health care workers. The age distribution of working-age nurses is quite even, the biggest is the 35-44 generation. The biggest number of nurses leave to Finland, Sweden, Denmark, Norway, Grait Britain and other countries (Kiivet et al, 2013).

Summary

Although in 1800 there was no generally accepted body of medical knowledge as well as no legal definition of a doctor, a hospital or a nurse, we have to admit that nursing as a profession has existed throughout history. In the beginning the nursing was given by family members or servants, especially women. In the early nineteenth century nursing was not an identifiable and self-conscious occupation. second half of 19th century.

We must agree with the statement that „The main resource of every health care system is the personnel who work in it. Staff pay is a major budget item and staff control most of the other expenditure, but money is not the whole story. The quality of the contribution of each person, is central to success or failure. In the long run, the achievements of any health care system are primarily influenced not by the choice of structure or funding mechanism, important as these are, but by how well the system develops, motivates and deploys its staff. The well-trained nurses are an important part“ (Salvage, 1997, p. 4).

Although the Estonian nursing and nursing education developed in parallel with Europe and reached quite a high level before the beginning of the World War II, the further development was restrained by the prolonged war and the following Soviet occupation. After the end of the World War II the rapid repair of the health care system was started – free medicine was available for everyone. Nurses lost their professional standing and autonomy. They were assimilated into the Soviet health care system as mid-level medical workers with low prestige who’s quality of work was assessed on the bases of its speed and accuracy. Till the end of 1970s – beginning of 1980s all resources were exchausted and economic misery reached the health care system. Primary healthcare was totally left for policlinics with elderly personnel with low status, without the necessary training and able to offer only extremely low-quality service. Top-medicine was concentrated into hospitals. The collapse of the Soviet Union caused the collapse of the health care system of the time and everything had to start form scratch to be built up.

Nursing profession in the Soviet Union was characterised by low prestige, lack of autonomy, poor work conditions and insufficient salary. It has been really had to get rid of such image after the Estonian reindependence. We may say that we have not really succeeded to do that till now. Doctoral studies and academic nursing that were started in Scandinavian states already in 1980s, only start to develop in Estonia now.

Since the Bologna process (3+2) Estonian nursing education has been significantly influenced by European cooperation. The purpose of the Bologna process has been to create harmonised, comparable and high quality curriculums. Still not all member countries are able to provide nursing education at the level of Master´ s or Doctoral degree. It shows that there is still

a long way to go not only in Estonia but also in Europe as a whole to achieve the purpose of the Bologna process.

Bologna process, cooperation between higher education institutions and harmonised curriculums brougth without any doubt anhigh quality education but also another problem - an increasing number in the migration of nurses from Estonia to the neighboring countries, mostly to Finland and Sweden. Availability of jobs, personal development, better work conditions, significantly higher salary, quality of life improvement, and social and retirement benefits represent some factors that attract nurses to the recipient countries. Doctors and nurses leaving abroad increase the need for their training. But we have to ask a serious question – why we train and educate our doctors and nurses for other countires instead to increase their salaries and develop the working conditions?

Scientific-based approach in nursing education still needs developing in Estonia. Prerequisite for the provision of effective and high quality nursing care are nursing research papers and their application into practice. We are already making progress in nursing education that will help us move in this direction. Today, 100 master degree students have graduated from the University of Tartu and health care colleges have just begun master curriculums for a total of 120 students. All this has become possible thanks to the overcoming of the so-called critical mass, with whom science can already be integrated and put into practice. And it is not less important that every students' research and graduation thesis contributes the new knowledge of our own cultural space and information about nursing.

Still, the biggest challenge in increasing the effectiveness of health care services and development of patient-centered health care is the lack of nurses. Although the international migration of nurses has been slowing down, there are many health care institutions in Estonia constantly looking for new nurses and nurse assistants as well. The number of state-commissioned student places for nurses has grow a bit during the recent years – during the years 2005–2011 the number of students places for nurses and midwives grew 20% in total, about 10 students places in average per year and the number of nursing graduates that has been falling for year turn to a little raise, still, the growth rate remained several times lower than necessary and the number of gradustes, who stay in Estonia and start working as a nurse has not grown. (Kiivet et al, 2013).

Lack of personnel does not allow to bring nursing care to the level which would be helpful for aging population and would increase the workload both in hospitals and family care. It is important to create conditions that motivate nurses to work in Estonia. This can be achieved through the proficient and capable management and changes in health care policy that would value nursing as a profession and improve the nurse's professional image. International cooperation and participation in networks should be strengthened. The support of Nordic States, especially the support of Finnish colleagues, is of considerable importance. The continuing cooperation with Baltic Nurses Association is also the basis of continues development. A good base for internationalisation is formed by the opportunities of digital culture.

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