Bachelor's thesis

BBA in International Business

2019

Ella Eerolainen

LEADERSHIP STUDIES IN MEDICAL SCHOOL

– A survey to Finnish medical students abroad

TURKU AMK
TURKU UNIVERSITY OF APPLIED SCIENCES

BACHELOR'S THESIS | ABSTRACT

TURKU UNIVERSITY OF APPLIED SCIENCES

BBA in International Business

2019 | 37 pages, 6 pages in Appendices

Ella Eerolainen

LEADERSHIP STUDIES IN MEDICAL SCHOOL

- A survey to Finnish medical students abroad

Clinical leadership is a topic much discussed and researched during the recent years. Leadership competences are needed for all doctors in their daily clinical work. The World Federation of Medical Education has defined the standards for basic medical education programme in which the leadership competences are mentioned. Yet it cannot be taken for granted that leadership studies would be included in all medical degrees.

The purpose of this thesis is to find out how well the target group, Finnish medical students abroad, is prepared for their future carees with leadership competence. The empirical research is done as a questionnaire survey with quantitative method that gathers data on how much leadership studies is included in the medical degrees of these students. Furthermore, the research will analyse the attitudes and opinions the students have on leadership and whether they find it important that leadership studies are integrated in medical degrees. The focus is in the students' point of view.

There is a brief literature review on the latest clinical leadership research and characteristics that are beneficial for a clinical leader. Information is searched via the medical search engine PubMed and the university online library Finna.

Only 29% of the respondents have obligatory leadership studies as a part of their education. The respondents don't feel that their universities prepare them for leadership tasks as a doctor in the best possible way, the average preparedness being 2,5/5. The respondents have generally a positive attitude towards leadership and are interested in developing as leaders and consider leadership as a part of a doctor's professional competence. However, a significant part of the respondents are unware of whether their degree includes obligatory leadership studies (28% of respondents) or a possibility to choose extra optional leadership courses (43% of respondents), which reflects the conceptual unclarity of the topic.

The questionnaire results give an overall picture on how much leadership studies is offered during the basic medical education for the research group. The results are usuful when planning improvements in the content of the medical studies in the future.

KEYWORDS:

Clinical leadership, Management, Leadership competencies, Medical studies, Finnish medical students abroad

OPINNÄYTETYÖ (AMK) | TIIVISTELMÄ

TURUN AMMATTIKORKEAKOULU

BBA in International Business

2019 | 37 sivua, 6 liitesivua

Ella Eerolainen

JOHTAJUUSOPINNOT LÄÄKETIETEELLISESSÄ

- Kysely ulkomailla lääketiedettä opiskeleville suomalaisille

Kliininen johtajuus on paljon tutkittu aihe, joka on saanut näkyvyyttä viime vuosina. Johtajuustaitoja tarvitaan lääkärin päivittäisessä kliinisessä työssä. The World Federation of Medical Education on määritellyt standardit lääketieteen peruskoulutukseen, joissa johtajuustaidot on mainittu. Siitä huolimatta ei ole itsestään selvää, että johtajuusopinnot kuuluisivat lääketieteen koulutusohjelmaan kaikkialla.

Opinnäytetyön tarkoituksena on selvittää, kuinka hyvin kohderyhmän, ulkomailla lääketiedettä opiskelevien suomalaisten, jäsenet ovat valmistautuneet tulevaisuuden lääkäriuriinsa johtajuustaidoilla. Empiirinen tutkimus on toteutettu kyselytutkimuksena käyttäen kvantitatiivista metodia, ja kerää tietoa siitä, kuinka paljon johtajusopintoja sisältyy tutkimusryhmän jäsenten lääketieteen tutkintoihin. Lisäksi tutkimus analysoi opiskelijoiden asenteita ja mielipiteitä johtajuudesta, sekä siitä, pitävätkö opiskelijat johtajuusopintojen integroimista lääketieteen koulutukseen tärkeänä. Pääpaino on opiskelijoiden näkökulmassa.

Opinnäytetyö koostuu suppeasta kirjallisuuskatsauksesta viimeisimpään kliinisen johtajuuden tutkimukseen ja piirteisiin, jotka ovat hyödyllisiä kliiniselle johtajalle. Tiedonhaku on suoritettu lääketieteellisen hakukoneen PubMed:in ja ammattikorkeakoulun onlinekirjasto Finnan avulla.

Vain 29%:lla vastaajista pakollisiin opintoihin kuuluu johtajuusopintoja. Vastaajien mielestä heidän yliopistonsa eivät valmista opiskelijoita johtajuustehtäviin lääkärinä parhaalla mahdollisella tavalla, valmiuden keskiarvon ollessa 2,5/5. Vastaajat suhtautuvat yleisesti ottaen positiivisesti johtajuuteen, ja ovat kiinnostuneita kehittymään johtajina sekä kokevat johtajuuden osaksi lääkärin ammatillista osaamista. Kuitenkin merkittävä osa vastaajista on tietämättömiä siitä, kuuluvatko pakolliset johtajuusopinnot heidän koulutusohjelmaansa (28% vastaajista), sekä siitä, onko heillä mahdollisuutta ottaa valinnaisia johtajuusopintoja (43% vastaajista), mikä reflektoi aiheen konseptuaalista epäselvyyttä.

Kyselytutkimuksen tulokset antavat yleiskuvan siitä, kuinka paljon johtajuusopintoja kohderyhmän jäsenille tarjotaan peruskoulutukseen sisältyen. Tuloksille on käyttöä lääketieteen opintojen sisältöä kehitettäessä.

ASIASANAT:

Kliininen johtajuus, Johtajuus, Johtajuustaidot, Lääketieteen opinnot, Ulkomailla lääketiedettä opiskelevat suomalaiset

CONTENT

APPENDICES

FIGURES

PICTURES

1 INTRODUCTION

Improving the health of citizens and the performance of health systems is a common goal to all European countries. One of the specific development needs stated by European Comission in its State of Health Report 2018 is more effective and people-centered health systems (European Comission 2018, 3). One way of improving the existing health systems is via developmet of leadership in health care. It is attested that good clinical leadership is associated with high quality and cost-effective care (Jonas et al. 2011, 1). Developing leadership can be approached from different angles and in this thesis educating new doctors with knowledge and skills in leadership is in the focus.

Leadership is an essential part of the profession of a doctor and present in daily work, yet it is not necessarily covered in the curriculum for medical studies. A clinical doctor working in a hospital is always a part of a team and working in interaction with colleagues and representants from other professions. Leading a clinical practice, research, industry or public health are all examples of where doctors act as leaders. Leadership skills are expected to be a part of the profession and those skills should be trained. Leadership is the factor and power that drives effective and successful work. It defines what the future should look like and aligns people with that vision (Kotter 2012). It is about inspiring and making things happen. Its power and importance should not be undersestimated in health care education. (Carsen & Xia 2006.)

There is a need for developing health care towards better quality and minimizing the number of adverse events. One way to make a difference is by developing the leadership skills and challenging the traditional hierarchical culture in health care. Poor communication is of often the reason behind an adverse event that can be harmful or fatal to the patient (Green et al. 2017). Developing leadership enables providing better quality and safety to the patient. The set of values that leadership is based on in a challenging environment emphasizes the best for the patient (Virtanen 2010, 215).

1.1 Background of the topic

There is a lot of theory and research on leadership in health care organizations (Ayeleke et al. 2018; Reinertsen 1998; Rotenstein 2018). However, clinical leadership and how doctors see their roles in it has not been written on that much. Especially not from the

medical student point of view – the view of the future doctors responsible for developing the heath care for the challenging future needs. Clinical leadership has gained more attention during the recent years and there is a growing number of reasearch on it. In spite of this, it is unclear to what extent the knowledge has been taken into consideration in medical universities and their curricula.

The research on young doctors examined the satisfaction for the choice of career among the young doctors. A section regarding leadership in the later part of the education, in the phase of specializing, two thirds of the respondents thought that there was too little guidance for leadership and administrative work. 55 % thought that the amount of leadership education is unsatisfying. (Lääkäriliitto 2019.)

Leadership in health care has recently been discussed in Finland. Joel Kontiainen states on his comment in the finnish Doctor Magazine Lääkärilehti on November 13th that development and leadership tasks seem to have a negative clang among doctors. Health care resources are used for shortening the lines, which leaves development projects out of reach for resource allocation. This kind of priorization is an alarming phenomenon. Based on his experience, the general attitude towards developing and leading the health care remains unchanged: doctors would most likely like to avoid such tasks. When there is a lack of the right attitude and resources, it is unlikely that there will be any desirable development. (Kontiainen 2019.)

There are probably several factors explaining why leadership in health care has recently been in the center of attention. Health care systems under reforms set pressure on the leadership and management of teams. There is increasing need for a more cost-effective health care system while the aging population and longer living expectancy grow the number of patients. There is also a need for better quality in health care: mistakes are expensive and cause suffering to the patients that are affected. Currently 8% of care events lead to an adverse event in Sweden (Socialstyrelsen 2019). After all it is about patient safety and the level of quality of the care provided to the patients. Therefore, this topic should be approached with the appropriate solemnity.

1.2 Objectives and research problems

The topic choice was selected out of my personal interest. Selecting Finnish medical students as the research group was done since the author is also a member of the group

herself as a third year medicial student at Uppsala University in Sweden. The author is curious in finding out more about this group of students and what kind of leadership competences they will graduate with as doctors. The research's focus is on the point of view – the information is collected directly from the medical students.

The purpose of this thesis is to find out how the Finnish medical students studying abroad are prepared for clinical leadership after completing their medical degrees. It is explored to what extent leadership studies are integrated in their curricula and how well their studies equip them with leadership knowledge and competence for their future careers. This research will also examine their attitudes and opinions on the importance of leadership studies as a part of a medical degree. There is a focus on how much leadership studies is available, how interested the students are on taking those studies and how well they consider themselves being prepared for the leadership tasks ahead in their future careers.

The role of a doctor in health care often includes tasks that require leadership and managerial skills. Yet, teaching leadership might not be a part of the medical education at all. There is discussion on whether it would be beneficial to make leadership studies a part of medical studies so that graduating doctors would be more skilled and prepared for the requirements of the working life. The attributes and characteristics needed for a doctor performing leadership tasks are discussed based on literature review. What makes a good clinical leader according to research is investigated. Doctors are educated to become experts in medicine but how well are they educated to manage the role as a leader in their future work positions?

The thesis combines a literature review with an empirical research targeted to Finnish medical studenst abroad. Finding the information to the literature review was done by searching with following keywords: clinical leadership, leadership in health care, doctor and leadership, medical school and leadership. Searching information was approached both from PubMed, a search engine for medical articles and via Finna, the university online library.

The results of the empirical research are expected to give an overall picture on how much leadership studies Finnish medical students studying abroad have taken and and how they perceive the importance of those studies. The research will also give an insight on how interested the students are in taking optional leadership studies and developing their professional competences.

1.3 Structure of the thesis

This thesis combines a brief literature review on the current stage of leadership in health care with the focus on the doctor's role with an empirical research targeted to Finnish medical students abroad. Chapter two discusses the leadership concepts in health care from doctor's point of view and how leadership is taken into account in medical school curriculum. The focus is on explaining the concept of clinical leadership and why it is an important competence for a doctor to have when considering the benefit for the whole organization. Chapter three deepens the concept of clinical leadership with inspecting the specific charachteristics and competences that define good clinical leaders.

Chapter four builds a bridge with the theoretical concepts and the base group of the empirical research. The research group is introduced with some statistics and information on the structure of the studies that they complete. Chapter five presents the empirical research and its results in detail. There results are analyzed and validity and reliability of the research is examined. Finally, chapter six provides a discussion linking the results of the empirical research to the theory and the current field of clinical leadership. The text will be rounded up with a conclusion.

2 LEADERSHIP IN DOCTOR'S WORK

2.1 Defining leadership concepts

There are several studies on health care management and leadership, especially with focus on identifying the essential competences that are beneficial in carrying out work in a managerial or leadership position (Ayeleke et al. 2018, 87). However, there is conceptual unclarity both in literature and practice when it comes to defining medical leadership and roles and activities around it. Medical leadership can be seen as leadership that comes with a formal position or leadership that is carried by an informal leader acting in daily practices (Berghout et al. 2017). The focus in this thesis is on clinical leadership, a term that refers to the latter concept: doctors working in the clinics and using leadership skills in their daily work.

In health care, leadership and management often go hand in hand, but there is a fundamental difference in their meanings. A simplified definition of them gives an idea of the differences: leadership is creating a vision while management is getting things done (WHO 2008, 265). Another way of describing a leader is that he/she aligns people with the future vision and inspires to make the change happen, while a manager focuses on people and processes to get to the expected results (Reinertsen 1998, 834-835).

2.2 Clinical leadership

Clinical leadership is embedded in the competences of all doctors in health care organizations. It is a key part of doctors' professional work regardless of specialty and setting. "There is a role for clinical leadership at every level in healthcare organizations and systems; leadership is a process, not a position" (Swanwick & McKimm 2017). In this process doctors inspire others, promote the values and vision and make sure the patients' needs are at the central focus in the organization's aims. Berghout el al. (2019) point in their research that in addition to leadership in a formal managerial role, there is the informal role "where leadership is inherently part of physician's daily work", referring to clinical leadership. In the empirical research in this thesis, the focus is on clinical leadership and the competences that are included in the occupation of every doctor.

2.2.1 Clinical leadership in medical school curriculum

Traditionally leadership has not been prominent in the curricula for medical students. Although, sometimes leadership is touched on in other study areas, like professional studies or communication skills (Warren & Carnall 2010). Academy of Medical Royal Colleges and NHS Institute for Innovation and Improvement have created the Medical Leadership Competency Framework (MLCF) that can be used to help with designing curricula. It describes the leadership competences needed for doctors. According to the framework, the doctor has a role as a practitioner, partner and leader. (NHS Institute for Innovation and Improvement 2010, 6.)

A Canadian Framework, CanMEDS Physician Competency Framework, was implemented as a program to practice clinical skills already during the preclinical semesters. Training group leadership is one of the main modules in the program, as a peer-led tutorial course. Such approach gives the medical students a possibility to learn clinical skills from tutors, who have completed a specific training program for being qualified as peer-tutors. The concept has been successful and beneficial to the tutors, as well, who develop their own professional skills by reflecting their own competency acquisition. (Homberg et al. 2019.)

It is valuable information to know prepared the medical students feel about their roles as clinical leaders. According to Barnes' systematic review on how prepared medical students are for their role as clinical leaders, there is unawareness on how leadership is adopted in the everyday clinical practice. Medical students struggle to see their roles as clinical leaders and see what defines the concept of leadership. The discussion by Barnes speculates that this confusion is due to lack of leadership studies, understanding the theoretical basis and assuming that leadership is an inherent skill, rather than something that can be developed. (Barnes 2019.)

2.3 Benefits of clinical leadership competence

In health care sector, it is essential that the leader has the knowledge based on operations. Having own experience on applying it to the everyday work is valuable and this is what makes leadership in health care sector special compared to open business

sector. Therefore, it is beneficial that the leaders in health care have the understanding on the clinical decision making process. (Kekomäki 2019, 235-238.)

Kekomäki explored the economical side of Finnish health care (Kekomäki 2019) and explains the complexity of the situation that it is facing. He links the economy to leadership. He emphasizes the difference between leadership and management in health care and that traditionally doctor's have struggled with risktaking. Leadership's focus is on taking risks and managing them, which enables improving the quality of the operations. The clinical decision making binds approximately 70% of the resources and in other words is the cost driver of the entire health sector. That is the explanation to why doctors don't only make the medically important decisions, but also the economically significant ones in their daily clinical work.

According to Barnas and Addams, 95% of mistakes in health care are due to defective processes and only 5% depend on mistakes made by people. A good leader has a tremendous power on affecting the number of mistakes that happen and therefore improving the overall quality. (Barnas & Addams 2017, 120.) Individual standards are variable which leads to variations in quality (Warren & Carnall 2010).

2.4 Emerging need for leadership skills

There is a need for developing health care towards better quality and minimizing the number of adverse events. One way to make a difference is developing the leadership and challenging the hierarchy in health care. Poor communication is often the reason behind an adverse event that can be harmful or fatal to the patient (Green et al. 2017). In the US, adverse events are the third leading cause of death, which mostly depends on complex health care delivery systems (Lawson et al. 2019, according to Makary & Daniel 2016). Afterall, the underlying reason for the need for better leadership in health care, is providing better quality and safety to the patient.

The Finnish doctor union Lääkärilitto anticipates the future changes in the working environment for doctors in its project Lääkäri 2030. The purpose of it is to prepare the doctors for the changes to come in health care. Digitalization and increasing amount of knowledge will reform the role of a doctor. Also, the importance of patient self-care becomes emphasized. To be able to cope with the changing working environment,

communication skills, multiprofessionality and teamwork become emphasized among the skills that a doctor needs. (Suomen Lääkäriliitto 2019.)

2.5 Characteristics of a leader

Turner defines leaders as “people who can influence a group to commit willingly to a common goal” (Turner 2019). Critical thinking is an essential competence for a doctor, but can be a challenge for leadership, since leadership requires risk-taking (Reinertrsen 1998, 834). Therefore, a doctor might have to question the thinking models he/she has when acting as a leader. Being a successful leader requires the ability to change and adapt. (Barnas & Addams 2017, 7). Hogans find in their personality inventory (2007) that the following features correlate the most with leadership potential: adaptability, ambition, sociability, sympathy, creative intelligence and willingness to learn (see Leppänen & Rauhala 2012, 129-130).

Picture 1. Medical leadership competencies. (Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement 2010).

There are five categories of competence needed for leadership, which are visualized in Picture 1. Demonstrating personal qualities includes developing self awareness, managing yourself, continuing personal development and acting with integrity. In this category awareness of personal values and recognition of own strengths and limitations

is emphasized. As a competent doctor, it is essential to have a clear image and understanding on how you function. During medical school, personal competencies are trained in group work, independent studies and interaction with other students, teachers and patients. Feedback and reflection provide a possibility to develop in these areas. (Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement 2010, 13-23.)

The competence of working with others is fundamental. Building and maintaining relationships as well as encouraging contribution are included in this competence category. These skills are trained during the medical education when participating group based learning and in the clinic when attending and observing multidisciplinary team meetings. Team work skills are very essential, as well as understanding the roles of other professions, since the work environment comprises of multiprofessional teams. Managing services is about planning, managing people, resources and performance. Improving services via critically evaluating them and ensuring patient safety are a part of a doctor's work and a part of leadership competences. (Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement 2010, 27-39.)

Improving services requires capability to encourage innovation, critically evaluate and ensure patient safety. Assessing and managing the risk to patients when developing the should always be included in the decision making in a systematic way ensuring a minimized risk to patients. Setting direction requires the ability to identify what needs to be developed and data analysing skills. Opportunities to develop these skills as a medical student occur when being involved in the team work in clinical placements. (Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement 2010, 56-77.)

2.6 Personal leadership

Pesonal leadership is the foundation on which other leadership competences are built on. It is about knowing yourself and how you interact with others. Learning how to manage your own work is a skill that becomes very concrete for many during medical school studies and it is also something that traditionally doctors have been good at. Knowing yourself and how you work is essential. Self-knowledge supports growing into a leader and choosing ways to act with different people and situations. (Valpola 2015.)

The actual skills that are needed for a doctor as a leader include both understanding one's own abilities and those of others (O´Connor 2015). Therefore, both personal leadership skills and leading others play an important role when working as a doctor. Hopkins et al. have distinguished the competences in their research and come to the conclusion that the predominant competences are empathy, initiative, emotional self-awareness and organizational awareness (Hopkins et al. 2015). Everyone has their unique elements of personality that complement each other. Learning how these different features work together and being aware of it is the key to knowing yourself and how you work. A dialogue between these different personality features is important. (Leppänen & Rauhala 2012, 134-140.)

2.7 Beneficial skills for a clinical leader

The specific needed skills highlighted in several research are strong communicative and interpersonal skills. People are the focus in health care as health care organizations are comprised of human systems. Different backgrounds of people increase the need for better understanding one another. Therefore, it is obvious that a clinical leader needs to possess good communicative an interpersonal skills. According to the research by Berghout et al. (2017), the most important skills include good communication skills. Moreover, the ability to enthuse and motivate, ability to solve conflicts and skills to manage teams are valuable for leaders in health care. These are some of the top statements that were identified in the research. (Ayeleke et al. 2018, 87-88.)

The importance of communication skills is emphasized in patient contact, but it has equal significance in contact with colleagues. Cooperation with colleagues is an essential part of the profession of a doctor, and therefore networking ability and communication play a very important role in working for the ultimate goal: the best possible health care for the patients. The importance of communication skills becomes emphasized when the team members change often, which might be the case when working in shifts. (Parvinen 2005, 71.)

Gini and Green (2013, 13) list the qualities needed: "deep honesty, moral courage, moral vision, compassion and care, fairness, intellectual excellence, creative thinking, aestethic sensitivity, good timing, deep selflessness". Five main characteristics of a leader according to Valpola (2015) are strong problem-solving ability, creative decisionmaking, ability to make proactive plans, fast learning capability and ability to

communication inspirationally. The skill of listening to other is an important part of communication skills. Team management, negotiation and collaboration skills are mentioned in van de Riet's research (2019).

3 FINNISH MEDICAL STUDENTS ABROAD

3.1 Introducing the research group

The research base group, Finnish medical students abroad, is a group of Finnish students who choose to study their medical degree in another country. They are sometimes collectively called as the “sixth faculty” referring to the five medical faculties in Finnish universities (Lääkärilitto 2016). According to the Finnish Doctor Union Lääkäriliitto’s student research, there were 1120 students studying medicine abroad during the academic year 2018-2019. The number is constantly growing: year 2012 there were 357 students abroad, while 2018 the number was 1065 (Lääkäriliitto 2019). There are several reasons to this phenomenon, but since the quota for students applying for the first time was adopted in the application system for Finnish universities, some of the students that have previous university studies, would no longer consider applying to study medicine in Finland (Mäkipere 2019). The application process to universities in different countries tends to differ and students are admitted based on high school diploma, university entrance exam, motivation letter, SAT test score or other methods (Universitets- och högskolerådet 2019; MCV.Vermittlung Pislea &Heinrich OHG 2019.)

What is unique about this group is that all students will be equipped with international experience after graduating. They will have diverse perspective to the health care after completing their degree in a foreign country, studying in a foreign language and seeing alternative ways of organizing health care. These students’ opinions are valuable, and they will most likely be very interesting work force on the work market, whether they decide to return to Finland or start their career working in another country. According to Lääkäriliitto, 60% of Finnish medical students abroad plan to return back to Finland after studies (Parmanne 2019.)

Lääkäri 2013 research targeted for young doctors examines the satisfaction for the career choice among young doctors working in Finland. There was a short part regarding leadership in the later part of the education, in the phase of specializing. Two thirds of the respondents think that there is too little guidance for leadership and administrative work. 55 % thinks that the amount of leadership education is unsatisfying. This signals that the young doctors educated in Finland would like to be more prepared for the leadership tasks that they are expected to carry out in their jobs. The empirical reseach

in this thesis aims to clarify how the Finnish medical students abroad feel about the amount of leadership studies they have during their education. According to the research regarding health care in Netherlads by Van de Riet et al. (2019) it is stated that medicals students themselves wish for more management and leadership training to feel more prepared for the future career, which suggests that this phenomenom might be common to several medical programs. (Lääkäriliitto 2019.)

3.2 Structure of medical studies

The structure for the basic medical education varies between different universities and countries, since each university has the freedom to design their own curricula according to the global standard for basic medical education (World Federation for Medical Education 2015, 16-18). It is not expedient to make the curricula identical because of the different educational, social, economic and cultural conditions that apply for each country. Most of the Finnish students abroad study either in Sweden or Latvia (Yle 2019). The basic structure of studies in Sweden consists of 4-5 pre-clinical semesters of theoretical studies in subjects such as biochemistry, molecular biology, microbiology, anatomy and patology (Uppsala University 2019). The following 6-7 clinical semesters are in a hospital, making the total study time 5,5 years. The clinical semesters consist of lectures and clinical rotations on different departments in hospitals. After that there is a practical training that takes 18 months, before the legitimation to work independently is given by Socialstyrelsen, the National Board of Health and Welfare. The studies are divided into a pre-clinical and clinical part in Latvia, as well, where the total time of completing the degree is 6 years (Rīga Stradiņš University 2019.)

However, the global standard for basic medical education gives a framework with certain requirements that need to be fulfilled. Leadership is mentioned in the requirements under professional skills, that include team leadership and inter-professional training (World Federation for Medical Education 2015, 23). This means that those skills should be integrated in the degree in every university, but the way of implementation is up to the university.

The curriculum of medical school is often full of obligatory studies with only limited possibilities for extra-curricular courses. If a remarkable part of the medical students is interested in studying more leadership and management to feel more prepared for the

working life, that possibility should be offered to them. The challenge lies certainly in the large amount of information that needs to be included in a medical degree.

The amount of knowledge in medicine is constantly increasing on a pace that probably exceeds the pace on which the education is developed. Skills on how to manage the growing amount of information and accept the constant change would be valuable for the medical students. Those skills will lead to doctors that are educated to manage the change and find creative solutions on how to adapt to the constantly changing working environment. Change management is one of the competences needed for future doctors (Patja 2018.)

Doctors working in higher management positions, such as medical director, chief physician or deputy chief physician, comprise of 32% of all doctors working in public hospitals in Finland. The corresponding percentage in private sector is 12 % (Lääkäriliitto 2016). However, clinical leadership competences are essential to all doctors regardless working position.

4 EMPIRICAL RESEARCH

4.1 Methodology

The research method used is a survey and it is analysed by quantitative method. With quantitative analyses the results will be presented by different charting and statistical techniques (Saunders 2007, 472-475). The advantage of this method is that it enables analyzing a larger amount of information and makes it possible to create a generalized overall view on the responses. However, the disadvantage is that since the sample selected is not fully representative, the results aren't statistically accurate. Data was collected by using a self-completed internet questionnaire created in Webropol. A total of 75 responses were received to the questionnaire, which is a satisfying number and fulfills the goal of getting a minimum of 50 responses. The questionnaire was open for six days and a reminder was sent on a Sunday the day before closing, which increased the number of responses significantly.

The target group is Finnish medical students abroad. The contact information to all students was not available, but there is a closed Facebook group to the Finnish medical students abroad with 663 members and students were contacted via the group. It was also shared to Finnish medical students in Uppsala via a closed Facebook group with 101 members. Selecting non-probable convenience sampling based on volunteering was the most practical alternative. It would have been challenging to get a sample that proportionally represents the population since the personal contact information of the students wasn't available.

The structure and number of questions in the survey is kept simple and concise to enable as effortless answering as possible and therefore increasing the amount of responses. The questions were designed out of the need to get responses to the research questions. Different question types are utilized including list questions, category questions, Likert-style rating question and open questions. In question type selection, attention is paid to making sure that all the possible response alternatives are considered. The focus is on opinion and behavioural variables in finding out how the students think about leadership and whether they have intentions to take elective courses in the future (Saunders 2007, 425). There are only a few open questions and responding to those is optional. Open question form was considered the most suitable to question 9, since it gives the most

reliable response when the respondent can recall the answer without seeing alternatives. Open question for was used in questions 11 and 12, too, since providing response alternatives would have limited the response alternatives and therefore not provided all the possible answers. No pilot survey was run, but the content and structure of the questionnaire was discussed with the thesis supervisor prior to sending the questionnaire link to the respondents and a colleague filled in a test answer ensuring the optimal functionality.

The survey form is enclosed as Appendix 1. It is built so that some of the questions are targeted based on the responses to previous questions. After the basic information, it is asked whether obligatory leadership studies are included in the medical degree the respondent is participating. The ones who respond no or I don't know, will be directed further in the survey, while the ones responding yes will move on to more specific questions of their leadership studies.

4.2 The limits of the task

The survey was sent via two Facebook-groups to Finnish medical students studying abroad. Not everyone who belongs to the base group is a member in the Facebook-group, which limits the number of responses. Nevertheless, a significant part of the students are in the group and it was considered a plausible way of contacting them. The group being closed ensures that the questionnaire link was available only for respondents who are medical students. The Facebook-group is a portal to stay contacted with each other between the students that belong to the same group but come from different universities. To increase the response rate, there was a lottery of a gift card to an online bookstore.

The medical degree usually takes approximately six years to complete. The respondents of the survey are in different phases in their studies: some of them are first year students, while others might already have graduated. Therefore, they don't have equal possibilities of evaluating the level of their competence regarding leadership skills. Especially the students that have recently started studying might not even have thought about the topic much yet, since their actual focus is on the preclinical studies. This is one of the reasons, why the year of studies is included in the survey: it could reflect the responses to other questions.

Due to the sample selection method, the results don't apply statistically accurately on the whole group, which significantly limits the usefulness of non-probable convenience sampling as a sample method. Therefore, it is unlikely that the sample is representable. However, this was accepted, since the reaserach was aimed to be kept voluntarily and as simple as possible to the respondents. The questionnaire response time was six days, which is considerably shorter than the recommended 2-6 weeks. Therefore, the importance of a reminder was high, and the relatively short response time might have limited the number of responses. (Saunders 2007, 421.)

The topic is much researched and written on, and the objective of this thesis is not to provide an all-embracing review on that. Therefore, the related concepts are only superficially explained and the focus is on the research questions and finding out more about the research group. The purpose of the literature review is to provide a theory base to the reader so that it becomes easier to relate the research questions to the practice.

5 RESULTS OF THE RESEARCH

The first part of the survey provided the basic information on the following: gender, age, country and city of studying and study year. The respondents gender division was unequal: 78% are female and 22% male. The average age of the respondents is 26 years. Figure 1. shows the percentual proportion of students in each country. Most of the students (37%) are in Sweden and Latvia (34%). 11% study in countries not included in the options, and these countries are: Netherlands, Germany, Bulgaria, Belgium, Denmark and Norway.

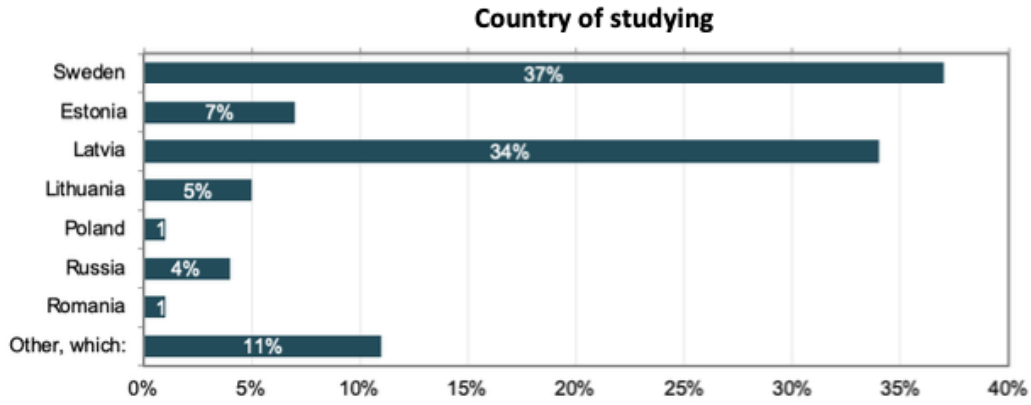


Figure 1. Country of studying.

Figure 2. shows the percentual number of students on different study years. There are respondents from all six years, with most of the students on their third or fourth year. Approximately a fifth of all respondents (18%) have already graduated, making it the third largest group of respondents.

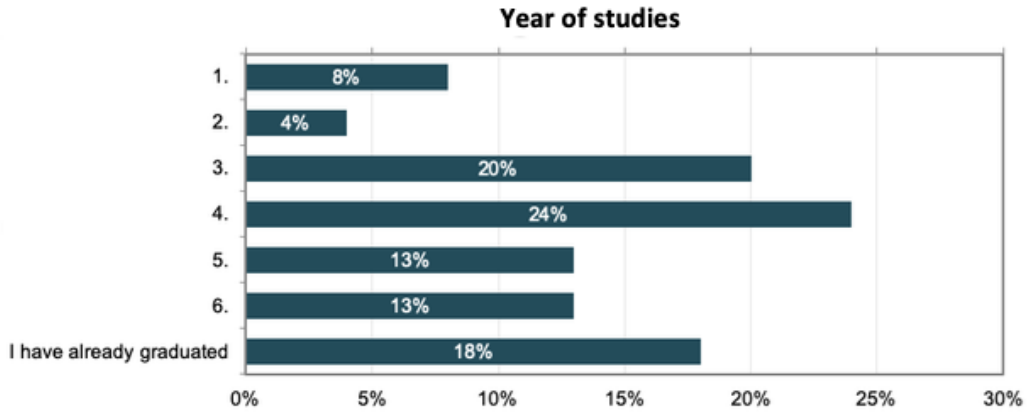


Figure 2. Year of studies.

Q3. Leadership studies as a part of medical degree

Those of the respondents who have leadership studies in their medical degrees, were directed to additional questions about the studies. It was sorted on the basis of whether leadership studies were a part of the obligatory and how many study credits (ETCS) those studies consist of. Figure 3. visualizes the division to those who have leadership studies, those who don't and those who don't know whether they have some.

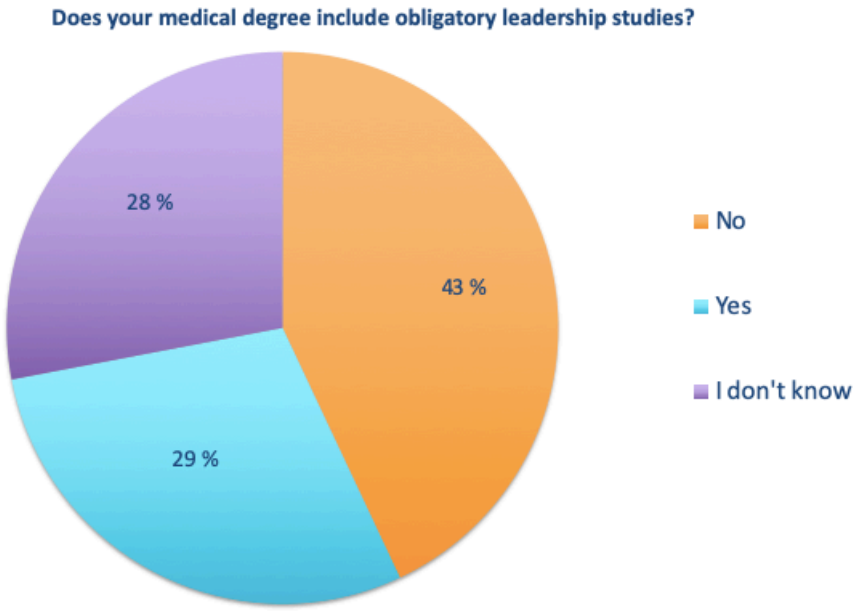


Figure 3. Obligatory leadership studies in medical degree.

Under one third (29%) of the respondents informed that they have obligatory leadership studies as a part of their medical programs. Almost equally large proportion does not know whether they have it and 43% responds that they don't have any.

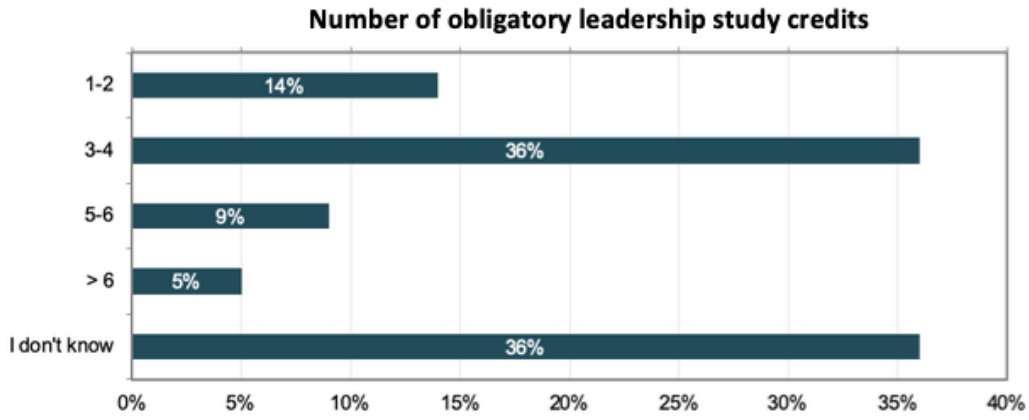


Figure 4. Number of obligatory leadership study credits (ETCS).

The majority (36%) has 3-4 study credits, which is seen in Figure 4. Equally large proportion of respondents did not know how many credits their leadership studies cover. The information of how many hours work one study credit corresponds, is given attached to the question in the survey.

Q9. Content of leadership studies

Those 22 students who stated that they have obligatory leadership studies as a part of their degree, have all already taken some or all of those studies. They were asked to clarify what they have learned and had a possibility to write in an open space. Nine responded communication. Motivating others, how to give constructive feedback, how to handle conflicts, and group working skills are common in many answers, too.

A respondent also mentioned getting concrete tips for a leader and learning the importance of how to lead by example. The responses include theory on leadership and leadership ethics. Some of the responses are more based on practical learning such as training in small groups, how to give and receive feedback and completing a personality test. Problem solving as a team and leaning on organizational structures are also mentioned.

Q10. Satisfaction in leadership studies

Respondents were asked to rate how satisfied they are with leadership studies on a scale from zero to five. Zero being not satisfied at all and five being very satisfied. The average is 3,2. Figure 5. shows the results.

Figure 5. Satisfaction in leadership studies on a scale between 0-5.

There is a question on whether the respondents think the amount of leadership studies is adequate. Figure 6. illustrates that approximately half of them (52%) think that it is enough, while 48% would like to have more practical studies. 24% of respondents think that there is need for more theoretical studies.

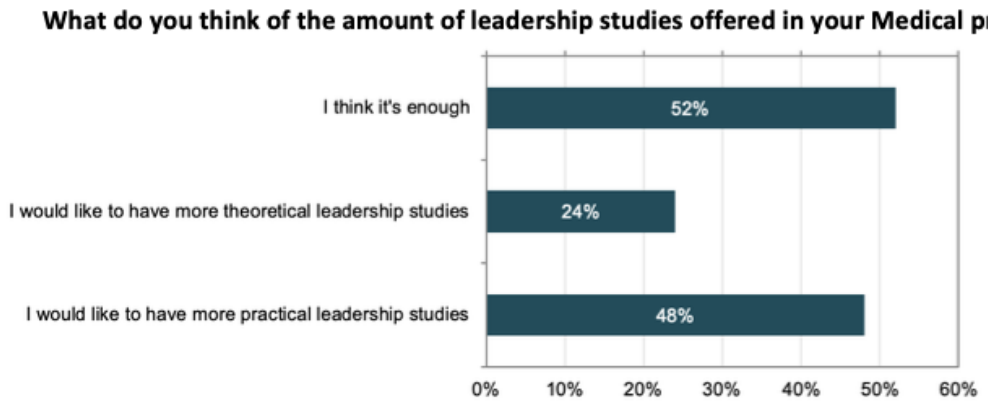


Figure 6. Satisfaction in the amount of leadership studies.

Respondents are asked to estimate on a scale from zero to five how well they think their university prepares them for leadership tasks as a doctor. The average is 2,5 and the responses are rather dispersed. Results are illustrated in Figure 7.

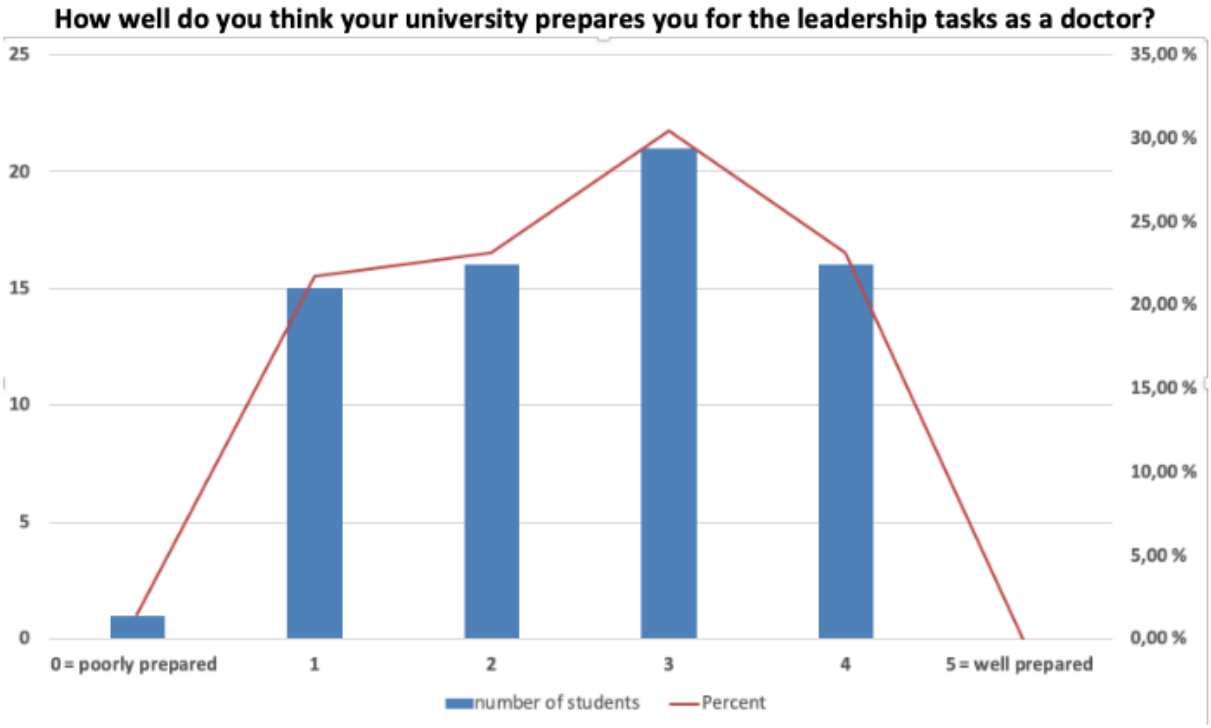


Figure 7. How well prepared for leadership tasks.

5.1 Interest and attitudes towards leadership

The respondents were asked whether their universities offer optional leadership studies and if they have interest in taking such courses. 22% have the possibility of taking optional studies, while 35% don't. Nearly a half of the respondents (43%) did not know whether they have that possibility. The results are presented in Figure 8. Figure 9. illustrates that 64% of the respondents are not planning on taking optional leadership studies, while 11% have or have planned to do that. 25% are unsure.

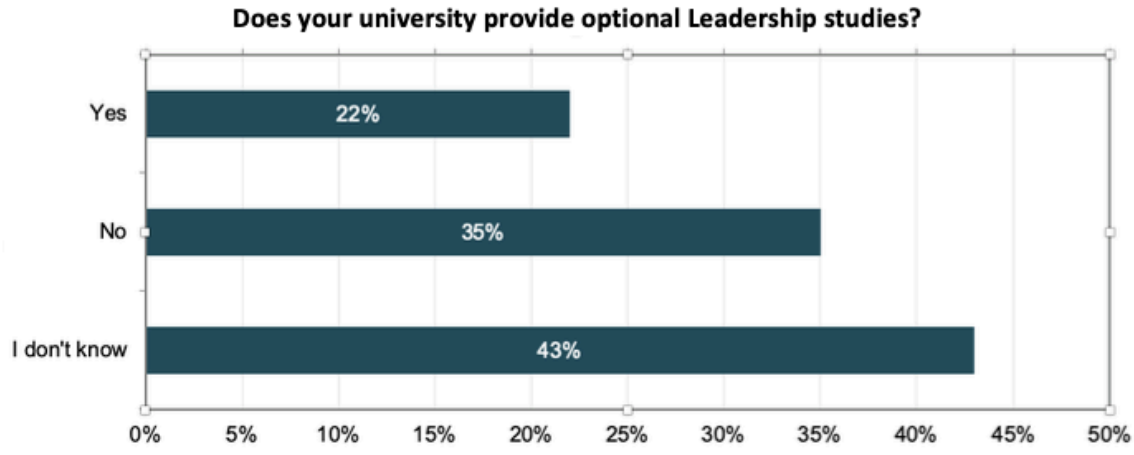


Figure 8. Availability of optional leadership studies.

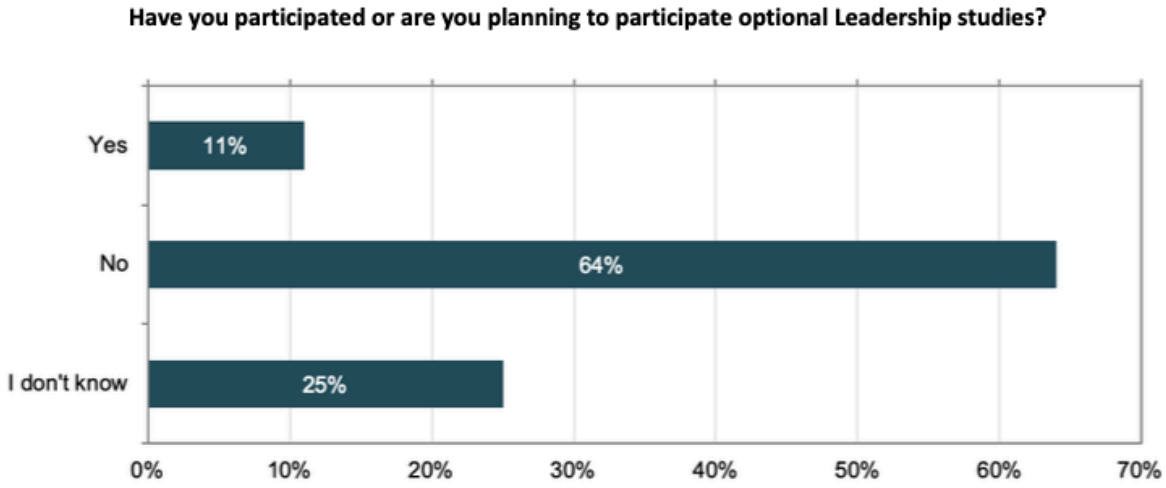


Figure 9. Plans to participate optional leadership studies.

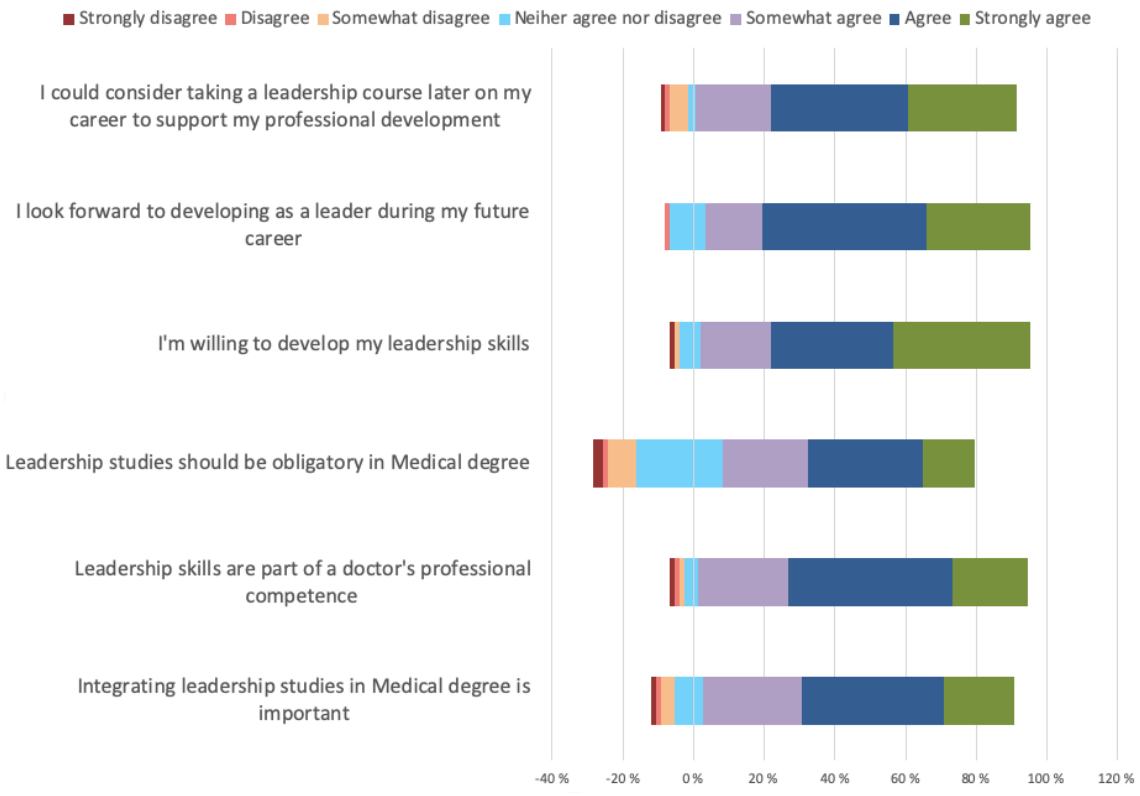


Figure 10. Statements on leadership.

The respondents were asked to express their opinions to the statements on leadership, which are collected in Figure 10. There are six statements that are agreed on by the majority.

5.2 Analysis of the results

There is a significant female predominance, which can partly be explained by the gender imbalance in university studies. In the year 2018, 58% of all university degrees in Finland were completed by women (Tilastokeskus 2019.) There is quite significant age variation, which probably depends on that the respondents represent everything between a first year medical student to doctors working independently. A total of 71% of the respondents study in Sweden or Latvia, and therefore the results mostly correspond to the education in those these countries.

There appears to be unclarity on whether leadership studies are a part of the degree. The lack of knowledge might be explained by that leadership studies come later in the education and students in the beginning of their studies might not have gotten acquainted with it entirely. Another explanation is that there might not be enough information on the overall content of studies, or that the topic in question isn't interesting to the student.

The overall satisfaction on how well the university prepares the respondents for leadership tasks as a doctor is on average 2,5/5. The responses are rather dispersed on the scale, which can be seen on Figure 7. This probably is a result of having respondents with so different basis in leadership studies depending on which university they come from. The overall leadership experience and possible earlier education from other studies can have an affect on the individual's feeling of preparedness. 70% of the answers are $\geq$ 3/5 and none of the respondents felt 5/5 prepared for the leadership tasks, which clearly indicate that there is room for an improvement.

Figure 10. lists six statements on leadership and the majority of the respondents agree on those. "I could consider taking a leadership course later on my career to support my professional development", "I look forward to developing as a leader during my future career" and "I'm willing to develop my leadership skills" are three statemens aim to find out how willing the respondents are to develop their leadership competence and develop as leaders. It is very positive that the great majority either agrees or strongly agrees on these. It signals that the respondents have interest in becoming better leaders and show interest in participating education that supports professional development.

Most of the students think that integrating leadership studies in medical degree is important and that leadership skills are parts of a doctor's professional competence. The only statement that gains a significant number of unsure responses and even 8% "somewhat disagrees" is the statement "Leadership studies should be obligatory in Medical degree". This signals that some of the respondents don't consider leadership studies relevant for all doctors, or have an unclear opinion on that. This can be interpreted as that they aren't aqcuinted with the concept of clinical leadership and consider leadership studies as something targeted for those who seek for a leadership position in the future.

All six statements gain a significant number of "somewhat agree"-responses that indicate there to be some uncertainty. Based on these results it is not possible to get a reasoning to the opinions other than speculations on what it can possibly be. But the respondents

in this group certainly have some unclarities related to leadership, since they don't totally agree with the statement. It is a positive sign that the number of "disagree" and "strongly disagree"-responses are limited to a couple of individual responses. It would have been interesting to find out what these strong opinions against the statements are caused of but that would require further research.

Generally open questions tend to require more effort from the respondent, but the responses to the question on what the students had learned in leaderhip studies were well. Almost all responses included several relevant points that are exactly the same than some of the important characteristics for a clinical leader reviewed in chapter three. This is a positive finding showing that the focus of the teaching has been in very relevant topics and the fact that students can recall their learning indicates that they have managed to get something meaningful out of the teaching. The general attitude towards leadership as a part of medical studies seems to be positive, which is very deligting to see, since the recent research highlights the importance and benefits of clinical leadership clearly.

5.3 Validity and reliability

Internal validity refers to the fact whether the questionnaire measures what is it intended to measure (Saunders 2007, 429). When thinking of getting the most accurate results, it is good that the great majority of respondents have completed some semesters or already graduated. Then they most likely have the knowledge of what is included in the curriculum and have some experience from the clinical rotations. When considering the validity of the results, it is possible that the general unclarity around the leadership concepts can have affected the end result. The eventual leadership studies might also be called something else, which might have caused uncertainty in some respondents. Many of the the clinical leadership competences might be learned during the clinical studies without a specific course targeted for leadership only. This might lead to difficulties responding the question regarding the amount of study credits gained from leadership studies.

Content validity is a term assessing how adequately the questions in the questionnaire cover the research questions (Saunders 2007, 429). Content validity assessment was done in cooperation with the thesis supervisor by discussing the relevance of each question. Reliability refers to consistency and analyzing whether the questionnaire would

lead to corresponding results under different conditions (Saunders 2007, 430). The unclear terminology in clinical leadership might have affected the reliability of the research since the respondents might have different views on what is meant with clinical leadership which is reflected in the responses.

6 DISCUSSION

The empirical research gives an overall picture on whether leadership is integrated in the medical studies of the target group or not. It is surprising that only 29% of the respondents have obligatory leadership studies, while the recent research clearly points out the significance of clinical leadership competence. However, this research does not provide a deeper analysis on how well equipped the medical students are for the leadership tasks included in their future jobs. Neither does it provide the detailed information on which speficic universitites offer those studies.

Other than the clinic, some of the leadership competences might be included in the basic structure of studies. Some medical universities use problem-based-learning method and case-studies. That is a study form that develops many of the leadership competencies listed in NHS Framework, such as working within teams, encouraring contribution, managing yourself and critically evaluating to name a few (Academy of Medical Royal Collges & NHS Institute for Innovation and Improvement 2010, 13-65.) This means that the students will actually learn many of the competences needed for clinical leadership, even though their education doesn't include a specific course of leadership.

A major part of the medicl studies take place in the clinic in different hospital departments– the real working environment. The learning result depends partly on the supervisor that each student has and the different cases encountered during the clinical placement. Therefore, many of the students might have gained experience of practical leadership skills in the clinic, even though they would lack the theoretetical classroom knowledge on it. Nevertheless, the skills learned in the clinic are difficult to measure and they vary between students, since the result depends on several surrounding factors.

The results of the questionnaire support the pre-assumption on the lack of knowledge regarding clinical leadership in medical studies. Almost a third of the respondents don't know whether leadership studies are included in their education. The students that are in the start of their studies might not have gotten familiar with the whole curriculum yet, which might be seen as unawareness regarding the content of the studies. Another possible explanation is that some universities communicate it unclearly or integrate teaching of the topic in other courses without naming leadership clearly.

The results show that the unawareness what it comes to the optional leadership study possibilities is quite remarkable. This signals that either the universities don't provide the students with clear information on the possibilities, or that the student's aren't very interested in it. It is typical for medical school that there isn't much time left for optional studies, since the contect of the basic education is mostly same for everyone. This was also mentioned in open comments: due to the full-packed curriculum there it is hard to make time for optional studies.

In the field for open comments some students gave suggestions on how leadership could be taught in medical school. Online cources and real-life scenario training were mentioned. There are also comments on leadership compenteces learned in other contexts. A respondent mentioned the leadership education in the army, another earlier business studies as a source for gained leadership competence. All kind of leadership competence and experience is positive for the future doctor career and this is something that is not taken into consideration in the survey.

Unawareness stamps the understanding of leadership as a concept in health care and in doctor's occupation. The answers to the open question and feedback field give a hint of that some students think leadership in medicine is something only associated with those doctors' jobs that have a leadership position at work. This shows that there is need for at least defining what leadership means in the role of a doctor. In some open feedback comments it was mentioned that not all the doctors have to reach for a leadership position and this is why implementing leadership education in medical program in unnecessary.

Unawareness and confusion is not surprising since the terminology and concepts seem to be somewhat unclear even in medical leadership research (Berghout et al. 2017). This emphasizes the need for fundamental basic studies on leadership. If the future doctors aren't aware of the requirements of their future occupation themselves, it is hard to develop in it.

The survey didn't provide a link between the specific universities and whether leadership studies are included in the medical program. This would have given more information and possibility to compare different countries with each other. Nevertheless, the objective was to find out on how much the group learns on leadership collectively, not specifically for each university.

To find out in more detail what leadership competences are taught in medical school, more extensive research is needed. The curricula are university-specific, and therefore the differences between individuals graduating from different universities can vary notably. Therefore, only a detailed and university specific research would give the exact information on how leadership is integrated in medical studies in each university. There is evidence on the importance and clear benefits on leadership competences that are convincing for the need of teaching leadership in medical schools (Ayeleke et al. 2018; Lawson et al. 2019.)

The respondents seem to feel like their universities could prepare them better for the future leadship tasks. The average response is 2,5 on a scale between zero and five. This signals that there is need for an improvement. There is dispersion in the responses, though, which can be explained by many factors. Nevertheless, it is important that the students have a subjective feeling of competence and self-confidence. This can also be seen as a meter for how well the students feel like the education they have gotten corresponds to the requirements of working life.

7 CONCLUSION

Good clinical leadership can be seen as the key to developing more cost-effective health care with better quality. Clinical leadership competences are described and included in global guidelines for medical education (World Federation for Medical Education 2015; Academy of Medical Royal Colleges & NHS Institute for Innovation and Improvement 2010). However, those competences aren't necessarily clearly present in the curricula for basic medical education.

This thesis aspired to find out how well Finnish medical students are educated for leadership by their universities. According to the empirical research, 29% of Finnish medical students abroad have obligatory leadership studies integrated in their medical degrees. 22% of the students have a possibility of taking optional leadership studies and 11% has planned to do that. Overall the number of the students participating leadership studies isn't very high. However, an interesting factor is that 28% didn't know whether their curricula include obligatory leadership studies. The interest in optional leadership studies is rather low, which might partly be explained by the extensive amount of obligatory studies in medical studies in general and lack of time for extra studies.

Another objective of the research was to find out what kind of attitudes on leadership the students have and whether they consider leadership important in medical school curriculum. The majority of respondents either agree or strongly agree on the statements in Figure 10. This indicates that the students are willing to develop their leadership skills and consider leadership competence a part of a doctor's professional competence. They also think that leadership studies should be integrated in medical school curricula, even though the opinions are somewhat scattered on whether it should be obligatory.

The respondents don't feel like their universities prepare them well for the leadership tasks as a doctor. On average their level of preparedness is 2,5/5. 48% of the respondents think there should be more practical leadership training. These results indicate that the students aren't satisfied with the current amount of leadership studies they are offered to and cannot feel self-confident on being prepared with the leadership competences that correspond to the requirements of the working life.

It is clear that clinical leadership has not gotten enough visibility and it has not been prioritized in the curricula for medical degrees. However, the recent discussion and

growing amount of research show that there is change to come, which seems promising thinking of the future of medical studies and quality of future health care.

REFERENCES

Academy of Medical Royal Colleges & NHS Instiurte for Innovation and Improvement. 2010. Medical Leadership Competency Framework. Enhancing Engagement in Medical Leadership. Third Edition. Coventry: NHS Institute for Innovation and Improvement. Referred to 28.11.2019. https://www.leadershipacademy.nhs.uk/wp-content/uploads/2012/11/NHSLeadership-Leadership-Framework-Medical-Leadership-Competency-Framework-3rd-ed.pdf.

Adinolfi, P. & Borgonovi, E. 2018. The Myths of Health Care. Towards New Models of Leadership and Management in the Healthcare Sector. Cham: Springer International Publishing. https://link-springer-com.ezproxy.its.uu.se/content/pdf/10.1007%2F978-3-319-53600-2.pdf.

Armstrong Persily, C. 2013. Team Leadership and Partnering in Nursing and Health Care. Springer Publishing Company.

Ayeleke, R.; Dunham, A.; North, N. & Wallis, K. 2018. The Concept of Leadership in the Health Care Sector. London: IntechOpen. Referred to 27.11.2019. https://www.intechopen.com/books/leadership/the-concept-of-leadership-in-the-health-care-sector.

Barnas, K. & Addams, E. 2017. Enemmän kuin sankareita. Lean-ajattelun mukainen terveydenhuollon johtamisjärjestelmä. Helsinki: Kustannus Oy Duodecim.

Barnes, T.; Yu, T-C. & Webster, C. 2019. Preparedness of medical students and junior doctors for their role as clinical leaders: A systematic review. Medical Teacher. Referred to 19.11.2019. https://www.tandfonline.com/doi/abs/10.1080/0142159X.2019.1665632?journalCode=imte20.

Berghout, M.; Fabbricotti, I.; Buljac-Samardžić, M. & Hilders, C. 2017. Medical leaders of masters? – A systematic review of medical leadership in hospital settings. San Francisco: PLoS ONE. Referred to 25.11.2019. https://doi.org/10.1371/journal.pone.0184522.

Carsen, S. & Xia, C. 2006. The physician as leader. McGill Journal of Medicine. Referred to 20.10.2019. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2687888/pdf/mjm9_1p1.pdf.

European Union. 2018. Health at a Glance: Europe 2018. State of Health in the EU Cycle. OECD/ European Union 2018. Referred to 29.11.2019. https://ec.europa.eu/health/sites/health/files/state/docs/2018_healthatglance_rep_en.pdf.

Green, B.; Oeppen, R.; Smith, D. & Brennan, P. 2017. Challenging hierarchy in healthcare teams – ways to flatten gradients to improve teamwork and patient care. British Journal of Oral and Maxillofacial Surgery. Volume 55, Issue 5, June 2017. Pages 449-453. Referred to 22.10.2019. https://www-sciencedirect-com.ezproxy.its.uu.se/science/article/pii/S026643561730061X.

Hogan, R. & Hogan, J. 2007. Hogan Personality Inventory Manual. Tulsa: Hogan Assessment Systems. Referred to 7.12.2019. https://www.crownedgrace.com/wp-content/uploads/2016/04/Hogan-Personality-Inventory.pdf.

Homberg, A.; Hundertmark, J.; Krause, J.; Brunnée, M.; Neumann, B. & Loukanova, S. 2019. Promoting medical competencies through a didactic tutor qualification programme – a qualitative study based on the CanMEDS Physician Competency Framework. BMC Medical Education. Referred to 12.11.2019. https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-019-1636-5.

Hopkins, M; O´Neil, D. & Stoller, J. 2015. Distinguishing competences of effective physician leaders. Emerald Group Publishing Limited: Journal of Management Development. Vol 34 No.5, 2015. Referred to 20.10.2019. https://www-emerald-

com.ezproxy.its.uu.se/insight/content/doi/10.1108/JMD-02-2014-0021/full/pdf?title=distinguishing-competencies-of-effective-physician-leaders.

Kekomäki, M. 2019. Etiikasta ekonomiaan - ja takaisin. Helsinki: Kustannus Oy Duodecim.

Kontiainen, Joel. 2019. Johtamista ei opi, jos sitä ei opeteta. Lääkärilehti. https://www.laakarilehti.fi/ajassa/verkkokommentti/johtamista-ei-opi-jos-sita-ei-opeteta/?utm_medium=newsletter&utm_source=uk&utm_campaign=uk47ke-2019&m=OTQzMDYsYTIxMmZkM2IzYmY0MmZjYjNiMTA1NDUyZDE2MmRkNDY%3D&tmpaccess=2a2cf0887b00bae665717877cbbd650c&valid_until=1574246953. OBS! Tarkista lähdemerkkaus.

Kotter, J. 2012. Leading change. Boston: Harvard Business Review Press. Referred to 25.11.2019. https://ebookcentral.proquest.com/lib/uu/reader.action?docID=5182145.

Lääkärilehti. 2018. Ulkomailla lääketiedettä opiskelevien suomalaisten määrä on taas kasvanut. Referred to 22.10.2019. www.laakarilehti.fi > ajankohtaista.

Lääkäriliitto. 2016. Lääkärit Suomessa. Tilastoja lääkäreistä ja terveydenhuollosta. Helsinki: Suomen lääkäriliitto. Referred to 7.12.2019. https://www.laakariliitto.fi/site/assets/files/5223/ll16_tilasto2016_net1_170114.pdf.

Lääkäriliitto. 2019. Lääkäri 2013-esitysmateriaali (ppt). Lääkärilitto.fi > Tutkimus. Referred to 11.11.2019. https://www.laakariliitto.fi/laakariliitto/tutkimus/ammatillinen-kehittyminen/.

Lääkäriliitto. 2019. Lääketieteen opiskelijat ulkomailla 2018-2019. Referred to 17.10.2019. www.laakariliitto.fi > haku > Lääketieteen opiskelijat ulkomailla 2018-2019.

Lääkärilitto. 2016. Ulkomailla lääketiedettä opiskelevien suomalaisten määrä kasvaa edelleen. Lääkäriliitto.fi > Ajankohtaista > Tiedotteet. Referred to 11.11.2019. https://www.laakariliitto.fi/uutiset/ajankohtaista/ulkomailla-laaketiedetta-opiskelevien-suomalaisten-maara-kasvaa-edelleen/.

Lawson, L.; Lake, D.; Lazorick, S.; Reeder, T.; Garris, J. & Baxley, E. 2019. Developing Tomorrow's Leaders: A Medical Student Distinction Track in Health System Transformation and Leadership. Academic Medicine, Vol. 94, No.3. Referred to 3.12.2019. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6392214/.

Leppänen, M. & Rauhala, I. 2012. Johda ihmistä. Psykologiaa johtajille. Alma Media. Referred to 15.11.2019. https://bisneskirjasto.almatalent.fi/teos/FABBBXXTBBAEC#/kohta:JOHDA((20)IHMIST((c4)((20)Psykologiaa((20)johtajille((20)/piste:b1065.

Mäkipere, T. 2019. Ensikertalaiskiintiö oli viimeinen pisara – Yhä useampi suomalainen lähtee opiskelemaan lääketiedettä ulkomaille. Referred to 7.11.2019. Tylkkäri Turun ylioppilaslehti. www.tylkkari.fi > uutiset.

Morley, L. & Cashell, zA. 2017. Collaboration in Health Care. Journal on Medical Imaging and Radiation Sciences 48 (2017) 207-216. Referred to 22.10.2019. https://www.jmirs.org/article/S1939-8654(16)30117-5/pdf.

MVC. Vermittlung Pislea &Heinrich OHG. 2019. Universities. Referred to 27.11.2019. https://www.eu-medstudy.com/universities.

O´Connor, C. 2015. Physician-Leaders: A Call for Cardiovascular Specialists to Step Up. JACC: Hearth Failure. Vol.3 No 10.2015. Referred to 20.10.2019. https://reader.elsevier.com/reader/sd/pii/S2213177915004989?token=A80145F4664075DF710010B9E36B2490FC81C4FD961651FECC026A7D418A6544344E011BA3EEEB37CBEEB0D2A94DE367

Onyura, B.; Crann, S.; Tannenbaum, D.; Whittaker, M. Murdoch, S. & Freeman, R. 2019. Is postgraduate leadership education a match for the micked problems of health systems leadership? A critical systematic review. SpringerLink. Referred to 12.11.2019. https://link.springer.com/article/10.1007%2Fs40037-019-0517-2.

Parmanne, P. 2019. Mikä viel opiskelijan ulkomaille? Lääkäriliitto. www.lääkärilitto.fi > Ajankohtaista > Blogi. Referred to 29.11.2019. https://www.laakariliitto.fi/uutiset/blogi/mika-vie-opiskelijan-ulkomaille/.

Parvinen, P.; Lillrank, P. & Ilvonen, K. 2005. Johtaminen terveydenhuollossa. Käytännöt, vastuut, valvonta. Helsinki: Talentum Media Oy.

Patja, K. 2018. Lisää lääketieteellistä johtamista tulevaisuuteen terveydenhuoltoon. Suomen lääkäriliitto. Referred to 2.12.2019. https://laakari2030.fi/blogi/lisaa-laaketieteellista-johtamista-tulevaisuuden-terveydenhuoltoon/.

Reinertsen, J. 1998. Physicians as Leaders in the Improvement of Health Care Systems. Annals of Internal Medicine. Vol. 128 (10), 833-838.

Rīga Stradiņš University. 2019. Study programme. Medicine. Referred to 2.12.2019. https://www.rsu.lv/en/study-programme/medicine.

Rotenstein, L.; Sadun, R. & Jena, A. 2018. Why doctors need leadership training. Referred to 22.11.2019. https://hbr.org/2018/10/why-doctors-need-leadership-training.

Saunders, M.; Lewis, P. & Thornhill, A. 2012. Research Methods for Business Students. Sixth edition. Harlow: Pearson Education M.U.A. Referred to 7.12.2019. https://www-dawsonera-com.ezproxy.its.uu.se/abstract/9780273750802.

Socialstyrelsen 2019. Mätningar och resultat. Referred to 22.10.2019. www.socialstyrelsen.se > patientsäkerhet > mätningar och resultat.

Stoller, J; Goodall, A. & Bake, A. 2016. Why the best hospitals are managed by doctors. Harvard Business Review. Referred to 16.11.2019. https://hbr.org/2016/12/why-the-best-hospitals-are-managed-by-doctors?referral=03759&cm_vc=rr_item_page.bottom

Suomen Lääkäriliitto. 2019. Lääkäri 2030. Tietoa hankkesta. Referred to 1.12.2019. https://laakari2030.fi/tietoa-hankkeesta/.

Swanwick, T. & McKimm, J. 2017. ABC of Clinical Leadership. Chichester, West Sussex: John Wiley & Sons Incorporated.

Tilastokeskus. 2019. Naiset suorittivat lähes 60 prosenttia kaikista yliopistotutkinnoista vuonna 2018. Referred to 26.11.2019. https://www.stat.fi/til/yop/2018/yop_2018_2019-05-09_tie_001_fi.html.

True, M.; Folaron, I.; Colburn, J.; Wardian, J. et al. 2019. Leadership Training in Graduate Medical Education: Time for a Requirement? Military Medicine. Referred to 9.11.2019. https://doi.org/10.1093/milmed/usz140.

Turner, P. 2019. Leadership in healthcare. Delivering Organisational Transformation and Operational Excellence. Palgrave macmillan. Cham, Switzerland.

Universitets- och högskolerådet. 2019. Platsfördelning och urval. Referred to 26.11.2019. https://www.antagning.se/sv/Hur-du-anmaler-dig-och-haller-koll/Platsfordelning-och-urval/.

Uppsala University. 2019. Läkarprogrammet 2020/2021. Upplägg. Referred to 8.12.2019. https://www.uu.se/utbildning/utbildningar/selma/program/?pKod=MME2Y.

Valpola, A. 2015. Johtajuuden salat. Helsingin seudun kauppakamari. Referred to 15.11.2019. https://kauppakamaritieto-fi.ezproxy.turkuamk.fi/fi/s/ak/kirjat/johtajuuden-salat-2015/.

Van de Riet, M. ; Berghout, M.; Buljac-Samardžić M.; van Exel M. et al. 2019. What makes an ideal hospital-based medical leader? Three views of healthcare professionals and managers: A case study. PLoS One. Referred to 9.11.2019. 10.1371/journal.pone.0218095.

Viera, A. & Kramer, R. 2016. Management and Leadership Skills for Medical Faculty. A Practival Handbook. New York: Springer Science + Business Media.

Virtanen, J. 2010. Johtajana sairaalassa. Johtajan toimikenttä julkisessa erikoissairaalassa keskijohtoon ja ylimpään johtoon kuuluvien lääkäri- ja hoitajataustaisten johtajien näkökulmasta. Turku: Uniprint.

Waara, J. 2019. Ledarskap & kommunikation för blivande läkare. Referred to 16.11.2019. file:///Users/ellaeerolainen/Downloads/Ledarskap%20&%20kommunikation%20kompendium%203.0%20(3).pdf.

Warren, O. & Carnall, R. 2010. Medical leadership: why it's important, what is required, and how we develop it. Postgrad Med J 2011;87:27e32. Referred to 27.11.2019. https://pmj.bmj.com/content/postgradmedj/87/1023/27.full.pdf.

WHO. 2008. Operations manual for staff at primary health care centers. Chapter 10: Leadership and management. Geneva: WHO Press. Referred to 27.11.2019. https://www.who.int/hiv/pub/imai/om.pdf.

World Federation for Medical Education. 2015. Basic Medical Education WFME Global Standards for Quality Improvement. The 2015 Revision. Ferney-Voltaire & Copenhagen: WFME. Referred to 2.12.2019. https://wfme.org/download/wfme-global-standards-for-quality-improvement-bme/?wpdmdl=831&refresh=5de4b834a2c641575270452%27;return%20false;%22%3EDownload%3C/a%3E%20%20%20%20%20%20%20%20%3C/div%3E%20%20%20%20%3C/div%3E%3C/div%3E%3Cdiv%20style=%22clear:%20both%22%3E%3C/div%3E%3C/div%3E.

Yle. 2019. Ulkomailla lääkäriksi opiskelevien määrä on kasvanut selvästi. Referred to 2.12.2019. https://yle.fi/uutiset/3-10983428.

Leadership survey for Medical students

Leadership survey for Medical students

This is a survey for Finnish medical students studying abroad. It is a part of my Bachelor's thesis for Turku University of Applied Sciences, and its purpose is to collect data on whether leadership is included in medical studies in different universities and the students' views on the importance of it.

Your responses are important and will help me to get a better understanding on leadership in medical studies. Taking part in the questionnaire takes only 5-7 minutes.

There will be a lottery of a gift card worth 25 € to Adlibris to those who fill in their email in the last page.
The email addresses won't be saved and will only be used for the lottery. The winner will be contacted personally.
Please don't hesitate to contact me with any questions.

Thank you for your help.
Have a nice day!

Ella Eerolainen
student in BBA in International Business, Turku School of Applied Sciences
medical student in Uppsala University
+ 358 50 469 2620

1. Gender

- ◯ Female
- ◯ Male
- ◯ Other

2. Age

3. Country of studying

- ◯ Sweden
- ◯ Estonia
- ◯ Latvia

- ◯ Lithuania
- ◯ Poland
- ◯ Russia
- ◯ Romania
- ◯ Other, which: [ ]

4. City of studying

[ ]

5. Which year student are you?

- ◯ 1.
- ◯ 2.
- ◯ 3.
- ◯ 4.
- ◯ 5.
- ◯ 6.
- ◯ I have already graduated

6. Does your Medical degree include obligatory studies in leadership?

- ◯ Yes
- ◯ No
- ◯ I don't know

7. How many study credits (ECTS) of obligatory leadership studies are included in your Medical degree?

ECTS stands for European Credit Transfer and Accumulation System. One ECTS study credit corresponds 25-30 hours of work. (European Comission, 2019).

- ◯ 1-2
- ◯ 3-4
- ◯ 5-6

- ◯ > 6
- ◯ I don't know

8. Have you already completed some/all of the leadership studies?

- ◯ Yes
- ◯ No

9. What did you learn in the leadership studies?

10. How satisfied are you with the leadership studies?

0

I'm not satiefied at all — I'm very satisfied

11. What are you satisfied with in leadership studies?

12. What could be developed in leadership studies?

13. What do you think of the amount of leadership studies offered in your Medical program?

You can choose more than one alternative.

- ☐ I think it's enough
- ☐ I would like to have more theoretical leadership studies
- ☐ I would like to have more practical leadership studies

14. Does your university offer optional Leadership studies that you can choose on the side of medical studies?

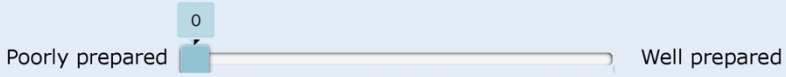
- ○ Yes
- ○ No
- ○ I don't know

15. Have you participated or are you planning to participate optional Leadership studies?

- ○ Yes
- ○ No
- ○ I don't know

16. How well do you think your university prepares you for the leadership tasks as a doctor?

Leadership tasks include setting goals and choosing strategies how to reach them, motivating team members, developing team cooperation, organizing work activities, delegation, develop and share new competences, to mention a few examples. (Waara, 2019).



17. Choose the alternative that best corresponds to your opinion on the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neiher agree nor	Somewhat agree	Agree	Strongly agree

				disagree			
Integrating leadership studies in Medical degree is important	○	○	○	○	○	○	○
Leadership skills are part of a doctor's professional competence	○	○	○	○	○	○	○
Leadership studies should be obligatory in Medical degree	○	○	○	○	○	○	○
I'm willing to develop my leadership skills	○	○	○	○	○	○	○
I look forward to developing as a leader during my future career	○	○	○	○	○	○	○
I could consider taking a leadership course later on my career to support my professional development	○	○	○	○	○	○	○

18. Please write here in case you have any additional comments or feedback:

19. If you would like to participate the lottery of a gift card to Adlibris, please fill in your e-mail adress.

Email

Thank you for taking part in this survey! Good luck with your studies!