



LAUREA
UNIVERSITY OF APPLIED SCIENCES
Together we are stronger

Practical thesis on the production of a first aid guide for FC Espoo

Timonen, Hanna
Da Silva, Leandro

2018 Laurea





LAUREA
UNIVERSITY OF APPLIED SCIENCES
Together we are stronger

Laurea University of Applied Sciences

Practical thesis on the production of a first aid guide for FC Espoo

Hanna Timonen
Leandro da Silva
Degree Programme in Nursing
Bachelor's Thesis
May, 2018

Hanna Timonen, Leandro da Silva

Practical thesis on the production of a first aid guide for FC Espoo

Year	2018	Pages	25
------	------	-------	----

The purpose of this practice-based thesis is describe the academic experience of creation of a first aid manual for FC Espoo football club youth teams. The objective is to have a manual which FC Espoo teams parents, other responsible leaders, carers and coaches can use in case the players have any injuries during their football games or practice. The manual is a concise brochure material that is kept inside the first-aid bag. It is a written and visual practical guiding information of how to take care of injured players on the football field.

The contents of the first aid guide material describes the most common injuries and the first aid procedures which can be used in emergency situations. Our guiding material is a result of our research on the theory and best practices in the health field.

Keywords: First aid, football, sport injury, guide

Table of Contents

1	Introduction	6
2	Purpose of the thesis.....	6
3	Thesis method.....	7
4	Theoretical background and main concepts	8
4.1	First aid principles.....	8
4.1.1	Prevention of injuries.....	8
4.1.2	Knowledge on previous health conditions	8
4.1.3	Adequate exercise load	9
4.1.4	Water intake during sports	9
4.2	Common injuries and emergency situation in the football field that require first aid intervention.....	9
4.2.1	Straining, spraining or twisting of a limb.....	10
4.2.2	CPR of a child	10
4.2.3	Heat exhaustion	11
4.2.4	Muscle cramp	11
4.2.5	Wound care.....	11
4.2.6	Nose bleed.....	12
4.2.7	Foreign object in the eye	12
4.2.8	Concussion of a child	12
4.2.9	Hypoglycemia and Hyperglycemia	13
4.2.10	First aid for epileptic seizures.....	13
4.2.11	First aid for asthma	14
5	Process plan for practical thesis	14
5.1	Usage environment and target group description for the first aid guide	14
5.2	First aid guide - visual aspects	14
5.3	Co-operation with FC Espoo in producing guide material and training	15
5.4	Feedback questionnaire	15
5.5	Contents of the first aid bag.....	16
5.6	Responsibilities, resources, timetables and budget.....	16
6	Ethical considerations.....	16
7	Thesis project - risks	17
7.1	Risk of repetition	17
7.2	Risk of project becoming too wide	17
7.3	Risk of producing irrelevant material	17
8	Thesis plan evaluation and self reflection	18
9	Conclusions	19
	References.....	21

Appendices	24
------------------	----

1 Introduction

The first thing that comes to mind when you think of nursing is someone working in hospital or health center, but nursing can be implemented in many other areas of our lives. A nurse is not only someone who takes care of others but also plays a role in health promotion, giving guidance, awareness and prevention. Nursing as a profession has a relation to peoples lives from birth to the death. Nurses are involved in all areas of peoples lives; Education, working life, recreation and leisure time.

Football is one of the most popular sports in Finland as well as in the whole world. In this thesis writing project we describe our experiences with nursing guidance for young football players in need of emergency care. The health of the players is essential for the practice of an intensive physical activity of playing football. The benefits and enjoyment of the results of football playing will depend on the safety, integrity and improvement of players health and general physical conditioning. If the player is injured or unhealthy the practice might be compromised and even represent a danger for a young player. Football is a physical contact sport and for that reason often results in situations of emergency where intervention and care is required.

Sports and health have been academically researched through the years and methods and guidelines are constantly developing. The sports health is presented with a growing interest by those who are involved in the field which is helping to create new knowledge on the matter.

In our thesis we wanted to present the basic first aid methods with the support of the latest research on best practises for the benefit of the players in FC Espoo. We compared information on different sources before choosing the ones we thought to be most trustworthy to use as references in this thesis.

2 Purpose of the thesis

The purpose was to create a first aid guide for FC Espoo football club. The guide will be used by the players and care takers of the club in case of an emergency situation or injury on the field. The aim of the guide is to better the knowledge of the team and carers on how to treat most common football injuries.

The thesis work was suggested as a thesis project work by FC Espoo for the purpose of educating their youth team carers on how to act when injuries occur on the field. The makers of this thesis work are using the skills and knowledge they have learned on their nursing studies, literature on first aid and previous guide books to help create a knowledge based first aid guide for the team.

The created material is made in a clear language and the content is presented in a compressed form to make it easy and fast to comprehend. For this purpose we also added pictures which will guide the users in the first aid procedures.

The main part of this project based thesis was making of the brochure material which provides guidance in different emergency situations possible in the football field. The brochure material is made originally in powerpoint form, but will be also printed out in hard copy and made available in the first aid bags of the teams and can be used whenever needed. The powerpoint slides will also be used as an instruction tool at the training day for the caretakers of the team. This training day was carried out as planned by the nursing students making this thesis in cooperation with the contact member from FC Espoo. In the training day for the caretakers, we tested the first aid material and emergency situations in the guide in order to provide first hand knowledge on how to act in situations which are given in the material. We had a questionnaire at the training day to find out how the participants perceived the material and the training itself. The questionnaire gave the participants opportunity to reflect and express their own experience as they get in contact with our material. It is an immediate feedback response from those who are going to benefit from the material in the future. The thesis, the production of the brochure material, the powerpoint slides and the guidance day were done in cooperation with FC Espoo.

All this material was created so that the caretakers and players will know how to better utilize the first aid bag content in a case of emergency on the field and know how to provide first aid on the field. Also to provide information on the importance of prevention of injuries and overall health issues in sports which can lead to emergency situations in the pitch during football practice.

As the thesis project is planned and carried out, searching for theoretical knowledge on the football and sports in general in relation to emergency situations, the purpose is to bring out results available in concrete form that present first aid procedures and principals that enhance safety of youth players. This project thesis thou very concised, is produced as an attempt to promote procedures that also aim the health integrity of the youth players by preparing those responsible for their physical activities. It is vitally important that those responsible for them in the practice of their activities are well prepared and trained for emergency situations.

3 Thesis method

The method we used in this thesis was project-based. We found the project thesis idea about making a first aid guide for a football club from Laurea website. It was requested by the FC Espoo football club physiotherapist Jukka Haarala for the use of the team caretakers.

4 Theoretical background and main concepts

To make this project based thesis we used the help of the book *Toiminnallinen opinnäytetyö* to better understand how the process of this kind of thesis unfolds and what kind of concepts we need to use in our thesis. According to Vilkka and Airaksinen it is not enough only to produce the material or guide but students should be able to implement their theoretical knowledge and research material in a thoughtful and critical way that adds something to the professional culture. (page 41-42)

(Hanna Vilkka, Tiina Airaksinen, *Toiminnallinen opinnäytetyö* Kustannusosakeyhtiö Tammi, Helsinki 2003)

4.1 First aid principles

Football is played by 500 000 people in Finland, with such big amount of players injuries are bound to happen sooner or later. 85% of the injuries which happen when playing football are located in the muscles, joints or ligaments of the leg. Most common injury in football is a muscle injury in the thigh. Thigh muscle can be torn or sprained due to straining the muscle too fast or too hard. Ligaments on the ankle and knee are also put to test in the fast paced sport of football. The best first aid for any of the injuries above is to apply cold, raise the extremity up and use compression. Repetitive strain injuries are fourth most common injuries in football, a growing child may have these types of injuries in the heel, lower part of the knee or hip area. Head injuries may also occur in the football field, usually the injury in these cases leads to concussion. Setälä (2016).

4.1.1 Prevention of injuries

Some of the football injuries may be prevented by taking time to practice and help the muscles get accustomed to the new type of exercise and always remembering to stretch before and after strainful activity. Use of proper equipment, warming up and getting enough rest in between practice can also help in preventing injuries. The person in charge of the practice, should be informed and pay attention to any factors which may affect players, such as weather conditions, exercise length or intensity, hydration and nutrition.

A person who has been injured should take enough time to rest before returning to practice.

4.1.2 Knowledge on previous health conditions

It will be very beneficial to the person who is giving emergency aid, to know if the one being helped has any underlying health conditions. Therefore, this thesis project material production emphasizes the importance of communication and openness, as much as possible, between team carers and parents of the players, regarding any health related ailments which might affect the player during the exercise. Players with previous or present health condition

will be better assisted, if needed, when there is enough knowledge provided on how to help in case of an event.

According to Pippa Laukka, a doctor of sports medicine, a person who is sick with the flu, has breathing difficulties, fever or other common symptoms should not participate in the game, but should instead stay home and rest. In this way they avoid getting others sick or deteriorating their own condition. Laukka (2015)

4.1.3 Adequate exercise load

It is a well known fact that team sports, such as football, are beneficial and recommended for young people in order to stay healthy and take part in social group activities. However if the training becomes excessive it might be more harmful than helpful.

The coach of the players should make sure that the exercise load is not too strainful to the players in order to avoid injuries and he should allow enough time for players to rest between practices. Each player has a different level of endurance and physical capacity which will effect the amount of time they can play without being harmed by an injury.

”The American Academy of Pediatrics Council on Sports Medicine and Fitness recommends limiting 1 sporting activity to a maximum of 5 days per week with at least 1 day off from any organized physical activity. In addition, athletes should have at least 2 to 3 months off per year from their particular sport during which they can let injuries heal, refresh the mind, and work on strength, conditioning, and proprioception in hopes of reducing injury risk. In addition to overuse injuries, if the body is not given sufficient time to regenerate and refresh, the youth may be at risk of “burnout.” Brenner (2007)

4.1.4 Water intake during sports

A good amount of water intake per day is 1,5 liters, on top of which 0,5 to 1 liter per hour excersised. Water can be taken in sips during the sport every 15 to 20 minutes, amount of 1-2 deciliters per sip. Normally water is the best form of liquid to consume, but if the duration of the sport lasts for longer than 2 hours at a time then it would be good to take in some sport drink or juice as well to upkeep the sugar balance and energy levels. The carbohydrates in the sports drink help to body to improve the water intake and the electrolytes keep up the electrolyte balance. (Terve urheilija 2018)

4.2 Common injuries and emergency situation in the football field that require first aid intervention

Summarized list of the injuries that are covered by our brochure. Not all the reasons are presented why it happens, but the main reasons and how to procede first aid help.

4.2.1 Straining, spraining or twisting of a limb

Lower extremities are the most common body parts to get injured in football. The injuries occur either due to trauma, such as twisting of the knee or a kick to the leg, or overuse of the muscle, tendon or bone. Burger and Fine (2010).

The most important aspects of first aid in case of strain, spraining or twisting of an extremity while on the field, is to provide compression, cover the area with a cold pack and elevate the limb, all of which should be done as soon as possible after the accident happens. The combination of compression, ice bag and elevation of the injured extremity, will help to reduce recovery time and control the swelling. Orthoinfo (2015). Using these methods can also decrease pain, inflammation, muscle spasms and tissue damage. Töpke (2011).

The reasoning behind these first aid procedures: Ice is used as a vasoconstrictor to reduce the blood flow to the injured area, therefore lessening the swelling. Compression is helpful in immobilizing and protecting the joint from more damage. While under compression the pressure inside the tissues increases which leads to decreased perfusion in the soft tissue and this prevents major swelling.

Elevation, preferably above the level of the heart, will allow gravity to prevent build up of excessive fluid, which causes the swelling of the limb, around the tissue. Castrén (2017).

4.2.2 CPR of a child

Being the first aid guide meant for children playing football, it is taken in to consideration a situation where CPR might be needed and how to perform it on a child. The childrens CPR guide is meant for kids before reaching teenage years, after which adult CPR is performed. Käypä hoito (2016).

The information we have on the guide is as follows: First rule before starting CPR is to check if the child is responsive to speaking or touching. If not, then a call needs to be made to the national emergency number 112 and they will help walk through the steps of actions that need to be taken. After placing the call the phone will be left open for further instructions or help. The child should be laying on their back with their head tilted back and chin lifted so that the airways can open up. Breathing and any airway obstructions should be checked for, if there is no airflow and any obstructions are removed then there needs to be 5 blows of air into the childs mouth, while the nose is pinched so that the air does not escape from there. The blow of air should be just strong enough to see the chest moving up and down. If the breaths did not help to revive the child then chest compressions should be started. Place the heel of a hand on the center of the chest, another hand on top of the first one with fingers interlocked, then press down quickly 30 times. After this 2 blows of breath should be given if the child is still not responsive. The blows and compressions should be continued with 30:2 ratio until help arrives or the child becomes responsive.

Our first aid guide material, which has been produced for FC Espoo, is not meant to subsidise the courses given by Finnish red cross on how to perform CPR. Finnish Red cross is the foundation responsible for providing the official guidance for CPR and gives classes of CPR training in Finland. Our guide follows their instructions. SPR (2016).

4.2.3 Heat exhaustion

When playing a sport that is highly energetic and aerobic, it is vital to keep hydrated and manage the body temperature, in order to prevent possible heat exhaustion. Especially when dealing with young people who might sometimes forget to drink enough, it is good to emphasise the importance of hydration, while playing a sport like football. Zhao et al (2013). Coaches and parents, who will be the ones primarily using our first aid guide, must be able to recognise the symptoms in order to provide proper aid for the players. For that reason we added a section on heat exhaustion and how to deal with it, should it be the case.

Symptoms for heat exhaustion may vary. Possible common symptoms include: excessive thirst, heavy sweating, damp or clammy skin, feeling faint, nausea, headache, irritability and weakness.

The first aid, in the case of noticing these symptoms, is to bring the affected person to a cooler place, provide hydration by water or sports drink and possibly even cooling down with damp cloths or taking excessive layers of clothes off. THL (2018)

4.2.4 Muscle cramp

It is possible to get muscle cramps due to same reason as in the above section about heat exhaustion, lack of fluid intake. It is beneficial to drink water throughout the day so that there is not a need to drink excessively during the exercise. The overuse of the muscle may also cause cramping. The first aid for muscle cramp is to stretch out the muscle which helps to loosen and relax the muscle, it can also be gently massaged to help relieve the cramping faster. Grace (2015)

4.2.5 Wound care

There is a lot of wound care needed when dealing with athletic sports. Whether it is a blister, scrape, puncture, laceration or arterial wound it is important to have the knowledge on how to take care of the wound quickly and in a correct way, so that it does not get infected and heals faster.

When a player has been wounded it is vital to take care of the wound hastily. First the wound should be cleaned from any debris either with clean water or aseptic fluid. Then depending on the deepness and size of the wound a dressing or bandage should be placed on the dried skin to avoid further bleeding or foreign material getting into the wound. If there is exces-

sive bleeding a sterile gauze can be placed on top of the wound with slight pressure to prevent further bleeding. In the case of a deep cut or if bleeding does not stop from the wound, the player should be escorted to emergency room for medical care. Hoogenboom and Smith (2012)

4.2.6 Nose bleed

A bouncing or a flying ball hitting the nose will most likely cause the nose to bleed. In such case the injured person should be sitting down with head bowed down forward while pinching the nose from the lower part of the nose bone for at least 10 minutes or until the bleeding stops. Should the bleeding continue, an ice pack can be placed in the back of the neck to help with vasoconstriction. Jalanko (2017)

4.2.7 Foreign object in the eye

Football is often played outside where there are a lot of small rocks and other debris which might make its way to the players eye while falling on the ground or rubbing the eyes.

Usually the particle comes out with tear fluid but might need further assistance in getting out, in which case it can be tried to remove with clean running water.

If the debris is in the cornea of the eye then medical removal is recommended to avoid further damage to the eye. Saarelma (2017)

4.2.8 Concussion of a child

When there are a lot of moving parts such as a fast moving ball and after it a number of running children, an injury is just waiting to happen. A child may suffer from a concussion due to collision, head trauma or a fall. Whenever there is a head injury the child should be taken out of the field and monitored in case of a concussion. The symptoms of a concussion are; a headache which does not go away with pain killers, dizziness, feeling of sickness or vomiting, memory loss, clumsiness or off balance, unusual behaviour such as irritability or mood swings, changes in vision like blurriness or double vision, sleepiness. The injured child should not play anymore if they are feeling any of these symptoms and should be monitored for 24 hours for any changes in the condition. There are two schools of thought of whether or not the child should be woken up during the night and in duodecim "käypä hoito" instructions they say that if the injury has happened in the evening it is good to wake the child up a couple of times to check on them, but otherwise can be better of letting the child have a proper rest. Jalanko (2017)

If the injured child has been passed out or has heavy symptoms then they should be taken to the doctor for further monitoring. Luoto (2013).

4.2.9 Hypoglycemia and Hyperglycemia

Hypoglycemia or low blood sugar can occur in diabetic children due to insulin intake. The most usual symptoms of low blood sugar are; hunger, dizziness, sweating, shaking, feeling weak, headache, blurring of vision, feeling absent, moodiness and paleness. The first aid in case of hypoglycemia is to give food or drink that contains sugar, a banana or other fruit for example which a child playing football might carry in their bag to sports events. If the symptoms are not removed after 10 minutes of eating, then another portion of sugar containing substance can be given. In case of unconsciousness or insulin shock of diabetic person glucagon medication may be given as a shot if the person has it with him/her and the emergency number should be called. Diabetesliitto (2017)

When the blood sugar rises too high the state is called ketoacidosis or hyperglycemia. The symptoms for this are; increased need for urinating and drinking, shortness of breath, nausea, stomach pain, tiredness, smell of acetone in breath, red face, dry skin, shallow breathing. If there is a suspicion of ketoacidosis then the emergency number should be called immediately. A layman is not allowed to inject insulin to a diabetic but this should be done by the professional. As a first aid the diabetic person in ketoacidosis can drink plenty of water to flush out the excessive sugar in the bloodstream and of course use insulin on themselves to lower the blood sugar levels. Windsor first aid (2015).

4.2.10 First aid for epileptic seizures

It is important to remain calm and provide help to a person who is having epileptic convulsions, also known as tonic-clonic epileptic seizure. It is vital to protect them from hurting themselves by placing a pillow or other soft object under their head. Nothing should be put to the mouth of seizing person because it might make it hard for them to breathe. The epileptic person should be put to recovery position after the convulsion is over, in order to help them keep airways open and for possible fluids to come out. The recovery positioning; Lay the person on one side, pull the knee on the top leg over to the ground, place the top laying hand underneath the head to support it and make sure the airways are open by pulling the head slightly up from the chin. Eriksson et al (2016)

According to Epilepsy foundation, group activities, such as football, can be beneficial for children with epilepsy and they may take part in it without the need for extra precautions. However it is essential to keep properly hydrated and rest enough between practices in order to avoid possible attacks. Children with epilepsy can also monitor the frequency of their seizures while exercising and modify their practice routine accordingly. Wheless and Sirven (2014)

The British Epilepsy Association, known by the working name of Epilepsy Action, gives advice to call the emergency number on the following cases: if the seizure lasts for more than 5 minutes, if the person is having consecutive seizures, if the person is injured during the seizure, if it is their first seizure, or if there is any other reason to believe the person needs immediate medical care. Epilepsy action (2015).

4.2.11 First aid for asthma

The caretakers requested a section on asthma for the first aid guide, therefore we added information on what to do in case of asthma attack on the field.

First it is good to calm down the person having respiratory problems and help them loosen any tight clothing. If they have medication it is important to give it as soon as possible to alleviate the respiratory problems. In case the medication does not help we urge the helper to call 112 for further assistance. SPR (2018).

5 Process plan for practical thesis

5.1 Usage environment and target group description for the first aid guide

The first aid material, produced by the nursing students writing this thesis, is going to the use of FC Espoo football club youth group carers and parents. The carers and parents will be using the material as a guide for first aid in case of emergency situation on the field during football practices and games. The material guide is in a form of a brochure and will be placed inside the first aid kit bag.

Parents and coaches who are in charge of football teams' practices will always have the first aid bag available and the brochure will be inside. The material is intended to be well familiarized in details beforehand by the users, not only when there is an emergency need. The brochure is intended to work as a reminder of the knowledge the users already have.

A part of our project was to present the first aid material to the audience who will be in charge of the football practices. Participation to the guidance event was voluntary, however by popular demand we will have another session in the future to make it possible for a bigger number of people to be able to attend.

5.2 First aid guide - visual aspects

The first aid guide was initially produced by the nursing students with Powerpoint, this material was used for presentation during the two guidance events with the end users. The Powerpoint content material, which will be printed out as a guide brochure will be in size A5. The brochures, which will be placed in the first aid bags, is to be printed out and folded by a collaborator of FC Espoo.

To help visualise the scenarios in the first aid guide, photos were taken at the office of FC Espoo in Leppävaara by the nursing students and the physiotherapist Jukka Haarala. One of the FC Espoo youth players was asked, by Mr. Haarala, to become the model in the pictures of the first aid guide. The parents of the girl were asked for permission for her to be in the guidebook pictures and a written consent was given for that purpose. The pictures which were used in the guide were chosen by the nursing students, in accordance with Jukka Haarala.

5.3 Co-operation with FC Espoo in producing guide material and training

The two student nurses got interested in the thesis idea of a first aid guide in late fall 2016. The suggestion was taken from Laurea webpage, where it was presented as a thesis project for nursing students, by Jukka Haarala. The students decided to undertake the assignment, due to the fact that guidance is an important part of nursing.

The initial information of the desired contents of the first aid guide was gone through in co-operation with Jukka Haarala, who has first hand knowledge on the types of injuries that happen in their football practices. After going through the contents points together with Mr. Haarala, the nursing students started to do research on the topics in the first aid guide to be able to produce most recent information for each first aid case in the guide. Important part of this project was to plan and decide on what to include and exclude from the content to keep the material concise, clear, relevant and user friendly. Once the research was done and the content for the material was chosen, nursing students started to work on the Powerpoint slides. Throughout the process the nursing students would send the work they had gathered to Mr. Haarala by email, for comments and to follow up on the process of the project. The collaborators met face to face on few occasions, at the FC Espoo office in Leppävaara, to go through the material together and to set the dates for the guidance events for the parents and carers. Feedback on the material produced was also given at the guidance events by the carers and parents present. The material was finalized taking into consideration the feedback and suggestions from the end users.

5.4 Feedback questionnaire

The questionnaire we had for the training day had 4 questions. We wanted to keep it simple and help us with the guide material itself as well as give feedback on the session.

The questions:

1. What did you think about the training day in scale from 1 to 5?
2. How clear/understandable was the material in scale from 1 to 5?
3. Do you think you will have use for the guide material in the future?

4. Are there any other situations you would like to add to the guide? If so, what?

We got 14 answers altogether. The feedback was positive and the average evaluation was 4 out of 5 for the first two questions. Questions number three about using the material in the future, everyone answered yes. We also got suggestions for other situations in question number 4 and most wanted was asthma which we added to the guide with emergency instructions.

5.5 Contents of the first aid bag

The nursing students who are writing this thesis were asked to put together a list of materials which could be beneficial to keep in the first aid bags of FC Espoo football club carers. The suggested materials were; ice packs, adhesive bandages, gauze, scissors, bandages, tweezers, safety pins, medical gloves, antiseptic wipes, space blanket, roller bandage and triangular bandage. In addition to these the physiotherapist wanted to add to the list a sports tape and kinesthesia tape. Discussion with the carers at the first aid instructional event revealed, however, that the contents of each bag is a little different from each other and they agreed that they should unify the contents so that the same materials can be found in each bag and bag contents should be put together in similar way so that the needed aid is easy to find.

5.6 Responsibilities, resources, timetables and budget

The responsibility of FC Espoo was to decide upon the dates for the first aid guidance events held by the nursing students for the parents and carers of the team, and to send information on the event to the people interested in participating. The students responsibility was to produce the first aid guide and to plan and host the guidance events.

Resources used in making of the thesis and the materials produced for the first aid guide, were; time needed for research, personal computers and calendars.

Timetable for the first aid guide was set together with Mr. Haarala while taking into consideration the need for the guide and the guidance events before the new season for football starts. The powerpoint slides had to be ready before the guidance event took place, which was the at end of october 2017.

After being printed the first aid brochures will be laminated, so that they can resist the weather conditions and last longer in the first aid bags. FC Espoo has agreed to take care of the costs which arise from printing and laminating the material.

The budget for FC Espoo was minimal for this project, therefore they had the first aid guide done by nursing students as a thesis project to save on costs.

6 Ethical considerations

Aforementioned our produced brochure guide in general and first aid instructions do not intend to substitute or undermine the importance of knowledge, courses and official training

for first aid services, provided by Finnish Red cross. On the contrary, one of the goals of this material is to inspire the users to become more interested in acquiring deeper knowledge of first aid procedures, which is provided and certificated on regular basis following the most updated instructions for competence in the field of first aid. Due to the consized nature of our guide material, it necessary to make it clear that there is just a limited amount of information given both in the field of sports medical and first aid care.

Another ethical consideration is the use of pictures of underage girl in the guidebook. The girl is dressed in sports clothes which are used in the football training. These clothes are quite revealing and the positions that she had to take for the pictures included lying on the floor. The nursing students made sure that the pictures are as neutral as possible and do not reveal any intimate parts of her body.

7 Thesis project - risks

7.1 Risk of repetition

In the book "toiminnallinen opinnäytetyö" by Vilkka and Airaksinen (2003) there is a mention of the importance of creating something new instead of repeating other already made ideas. Knowing that there are many first aid manuals out there, we wanted to produce something that has correct, up to date information but still does not repeat or dublicate others. Our idea was to produce a manual to our own target group FC Espoo according to their ex-pectaions and needs.

7.2 Risk of project becoming too wide

Another risk given in the book by Vilkka and Airaksinen (page 18) is the one of not being realistic of the size of the project. As the project goes on there is a risk of expanding the amount of information, making it too big and unrealistically difficult to be executed.

To avoid this risk we try to focus on the needs of our target group and keep it as short and simple as possible.

7.3 Risk of producing irrelevant material

In the field of nursing and more specifically in first aid the practical procedures or methods are reviewed and updated from time to time to match the most up to date research data. On that matter there is a significant contribution given by Finnish Red Cross that is the official channel where first aid knowledge is updated.

Going through the material for first aid procedures we learned that the guidelines change often and therefore used the most recent information for the production of our own first aid guide to make sure it is up to date and relevant.

In order to make the project relevant, information on first aid must be not only updated but also limited to the specific needs of the players on the football field. There are a broad extent amount of information on health, wellbeing, prevention and procedures on first aid. Having too much information would present a risk of irrelevancy. Having that in mind, we focus on the needs of our target group.

8 Thesis plan evaluation and self reflection

Our primary goal for the thesis project was to produce an up to date first aid guide for FC Espoo caretakers and parents, which they can use in case of emergency situation on the football field. In producing the guide we used many different sources to confirm that the material will be most recent and relevant to each emergency situation. We searched for information on the most common injuries and also consulted our FC Espoo collaborator to make sure that the material will cover all the subjects they want, but also other areas which might be important in a first aid guide for football players. On the other hand there could be many more first aid situations to add to the guide, but due to trying to keep it concise we had to choose the most important ones to add.

Second goal was to plan and execute training day for the care takers and parents. The date for the training was planned in collaboration with Jukka Haarala who was in contact with the participants to come up with a day which would suit most people interested in attending. In the event itself we went through the material produced and told examples in each case of what to do and answered any questions the participants had concerning the cases. In planning the event we had reserved a class room from our school with comfortable seating and enough space for everyone. Originally we planned to have some hands on training for the participants but due to many questions from the audience we could not stick with our original plan but only had time for two live examples; CPR and recovery position. Also the audience would have been interested in having more examples but unfortunately the time frame was not enough to execute the original plan. In the feedback people were still satisfied with the end result and what they had learned, but for future reference we will book a longer time for training day.

Third goal was to include more about basic health information to the guide, such as not going to practice while feeling ill or stretching and warming up before practice, but this was later decided to be left out due to wanting to keep the guide as clear as possible for the end user.

The graphics and pictures in the material produced were all in the hands of the students making this thesis. Powerpoint material was put together as best as possible to the knowledge of the program of the students. Due to lack of funding for this project from FC Espoo, photog-

raphy used in the guide material was taken in the premises of FC Espoo by the nursing students writing this thesis. Therefore the first aid guide produced is basic but agreed with Mr. Haarala and the participants to the training day, to be sufficient and clear for the end users.

We made a plan that the best execution of our thesis was to begin with the building of the first aid manual and to keep record of our process for later use in the thesis work. Once the manual's rough version was ready we held the training day where we got feedback on what we might be missing in the manual and which information the caretakers and parents would like to have more of. From there on we proceeded to start with the actual writing of the thesis itself. The process has proved to take longer than expected due to different factors but we are still proud that we were able to produce something that will be useful on regular bases in a concrete way and that we as nursing students were able to make use of what we have learned and pass that knowledge forward. According to Vilkka and Airaksinen, this kind of thesis project is a good way of making students get practical experience in the field of nursing to grow as a professional. In our own experience being in contact with people that will use the produced material, we felt enriched from the perspective of future nurses as promoters of health knowledge.

(Hanna Vilkka, Tiina Airaksinen, Toiminnallinen opinnäytetyö Kustannusosakeyhtiö Tammi, Helsinki 2003)

One challenge during this thesis work was the language used. We had to make the first aid material in Finnish but the thesis work is in English. There were some difficulties in trying to translate the information from one to the other while still making sure that the language is understandable and the writing is academic. Due to concentrating to proper translation and making the text easy for the reader the academic writing presented a big challenge.

9 Conclusions

This thesis project gave us a challenge to produce material which will be used in practice by people from different backgrounds and with varying levels of previous knowledge in first aid. Therefore we did our best to keep the first aid guide easy to read and quick to find the help for the situation at hand. We took into consideration the feedback given in the training day and moulded the guide accordingly to meet the needs of the end users.

As nursing students we felt that the project gave us a chance to use the knowledge we already have and to educate ourselves more in the current first aid practices before passing that knowledge on to layman.

The co-operation with FC Espoo was fluent from both ends. Jukka Haarala, who was our contact person, was very flexible and understanding as a collaborator. He was satisfied with the end result of the first aid guide and offered us a chance to do more guidance sessions in the

future. The communication between us and Jukka was clear and we were both able to compromise along the making of the guide, if needed.

Participants of the guidance day were content with the session and recommended participation to other caretakers in the team. In the questionnaire all of the participants said they would use our guide material in the future.

References

Vilkkä,H. and Airaksinen,T. 2003. Toiminnallinen opinnäytetyö, Kustannusosakeyhtiö Tammi

Setälä,S. 2016. Jalkapalloilija ei kolhuilta säästy. Accessed 22.5.2017.

<https://www.terveystalo.com/fi/Palvelut/Urheilijat-ja-aktiiviliikkujat-Sport/Tietoa-urheiluterveydesta/Yleisimmat-vammat-Jalkapallo/>

Castrén,M., Korte,H. and Myllyrinne,K. 2017. Tuki- ja liikuntaelinten ja pään vammat. Accessed 22.5.2017.

http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=spr00008&p_teos=spr

Orthoinfo 2015. Sprains, Strains and Other Soft-Tissue Injuries. Accessed 22.5.2017.

<http://orthoinfo.aaos.org/topic.cfm?topic=a00111>

Laukka, P. 2015. Flu and sports don't mix. Accessed 20.8.2017

<https://www.pippalaukka.fi/en/flu-and-sports-dont-mix/>

Brenner,J. 2007. Overuse Injuries, Overtraining, and Burnout in Child and Adolescent Athletes. Accessed 14.9.2017.

<http://pediatrics.aappublications.org/content/119/6/1242>

Terve urheilija, Urheilijan ravitseminen, nestetasapaino, juominen. Accessed 10.12.2017.

<http://www.terveurheilija.fi/kymppiympyra/urheilijanravitseminen/nestetasapaino/juominen>

Burger,R. and Fine,K. 2010. Soccer injuries. Accessed 10.1.2018.

http://www.stopsportsinjuries.org/STOP/STOP/Prevent_Injuries/Soccer_Injury_Prevention.aspx

Töpke,F. 2011. RICE therapy. Accessed 15.1.2018.

https://www.physio-pedia.com/RICE_Therapy

Käypä hoito. 2016. Accessed 15.1.2018.

<http://www.kaypahoito.fi/web/kh/suosituksset/suositus?id=hoi17010>

SPR. 2016. Accessed 20.01.2018.

https://www.punainenristi.fi/sites/frc2011.mearra.com/files/tiedostolataukset/2016_suomi_lapsi_ppe_-_final.pdf

Zhao,J. Lorenzo,S., An,N., Feng,W., Lai,L and Cui,S. 2013. Accessed 20.1.2018.

<https://www.sciencedirect.com/science/article/pii/S1728869X13000087>

THL. 2018. Accessed 20.1.2018.

<https://www.thl.fi/fi/web/ymparistoterveys/helle/lamposairaudet>

Grace,C. 2015. Professional first aid and CPR courses. Accessed 20.1.2018.

<http://firstaidandcprcourses.ca/muscle-cramp-in-the-legs/>

Hoogenboom,B. and Smith,D. 2012. Management of bleeding and open wounds in athletes. Accessed 5.2.2018.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3362987/>

Jalanko,H. 2017. Nenäverenvuoto lapsella. Accessed 5.2.2018.

http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=dlk00740

Saarelma,O. 2017. Silmävammat. Accessed 5.2.2018.

http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=dlk00329

Luoto,T. 2013. Urheilija ja pään vammat. Accessed 5.2.2018.

<http://www.terveurheilija.fi/materiaalit/getfile.php?file=322>

Jalanko,H. 2017. Aivotärhdys lapsella. Accessed 10.2.2018.

http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=dlk00106

Diabetesliitto. 2017. Diabeetikon ensiapu on sokeri. Accessed 10.2.2018.

<https://www.diabetes.fi/diabetes/ensiapu>

Windsor first aid. 2015. First aid for hyperglycemia. Accessed 10.2.2018.

<http://firstaidwindsor.ca/first-aid-for-hyperglycemia/>

Eriksson,K., Kuisma,M., Kälviäinen,R., Lahikainen,J., Myllyrinne,K. and Nylen,M. 2016. Epilepsiakohtauksen ensiapu. Accessed 10.2.2018.

<https://www.terveyskyla.fi/lastentalo/tietoa-lastensairauksista/epilepsia/epilepsiakohtauksen-ensiapu>

Wheless,J. and Sirven,J. 2014. Playing sports and other activities. Accessed 12.2.2018.

<https://www.epilepsy.com/living-epilepsy/parents-and-caregivers/about-kids/playing-sports-and-other-activities>

Epilepsy action. 2015. Treatment and care for seizures that last more than 5 minutes and for status epilepticus. Accessed 12.2.2018.

<https://www.epilepsy.org.uk/info/firstaid/emergency-treatment-seizures-last-long-time>

SPR. 2018. Astmakohtaus. Accessed 1.5.2018.

<https://www.punainenristi.fi/ensiapuohjeet/astmakohtaus>

Appendices

Appendix 1: Questionnaire **Error! Bookmark not defined.**

Appendix 2: First aid guide **Error! Bookmark not defined.**

