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Physiotherapy in the management of visually impaired clients

Information for physiotherapists to improve
quality service

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Title of publication Physiotherapy in the management of visually impaired clients. Information for physiotherapists to improve quality service.		
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<p>Abstract</p> <p>The aim of this Bachelor's thesis was to collect information for physiotherapists in the management of visually impaired clients focused to improve the physiotherapy quality service. This qualitative study was done in collaboration with Satakunnan Näkövammaiset ry and carried out by interviewing visually impaired clients on their experience of physiotherapy service quality.</p> <p>The interviews were carried out by phone call in the spring of 2021. Three visually impaired people took part in this study. The duration of each interview was about 30-60 minutes, in which questions were asked regarding the background and personal experience as client in physiotherapy. A thematic analysis method was used to draw conclusions.</p> <p>A workshop for SAMK physiotherapy students was held in the campus in November 2021. Students were introduced to visual impairment, instructed how to approach visually impaired clients, and adapt physiotherapy treatments to make the session safe and professional.</p> <p>According to the experiences of the participants, physiotherapists in Satakunta region have overall a good knowledge of how to approach and treat visually impaired clients. As far as accessibility is concerned, healthcare facilities are still problematic, often the category is not taken into consideration when these facilities are built. The risk of ethical issues may arise when physiotherapist has no knowledge about visual impairment, and this can lead to confusion and create unpleasant situations. Telerehabilitation is a topic that has been discussed for the past two years, but this type of service cannot be used with visually impaired clients, so during the Covid-19 pandemic, participants continued with normal face-to-face physiotherapy sessions. In the future, it may be necessary to create a way to integrate telerehabilitation for visually impaired clients through technological innovation. An idea to ensure knowledge of this topic might be to integrate some course or event with a focus on assisting and treating visually impaired into the physiotherapy study program. Further studies on this topic are needed, for example with a larger number of participants, considering other areas of the world, or focusing on certain physiotherapy treatments.</p>		
<p><u>Key words</u></p> <p>Visual impairment, blindness, adapted physiotherapy, accessibility, client approach, guidance, ethical issues, physiotherapy quality service, vision assistive aids.</p>		

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1 INTRODUCTION

According to World Health Organization (2021) in the world 2.2 billion of people are affected by visual impairment, in Finland there are 55 000 people with moderate-severe visual impairment or blindness and 490 of them are present in Satakunta region (Website of Näkövammaisten liitto and Satakunnan Näkövammaiset 2021).

With continued population growth and aging, the risk of an increase in cases of visual impairment and blindness is expected in the future (Website of World Health Organization 2021).

Visual impairment means a more or less severe reduction of the sensory function, which derives from damage to the visual apparatus (Martinoli & Delpino 2009, 17). According to the World Health Organization (2021), the main causes of visual impairment are cataracts, glaucoma, corneal opacities, diabetic retinopathy, and trachoma.

In the group of people with visual impairments we find many and different constellations with varieties that cannot be reduced to simple patterns: people who do not see, people who see little, people who see poorly, people who have never seen, people who until yesterday were able to see, people who see less and less, people who also have other pathologies and complex functioning patterns (Bortolin 2012, 11).

Stevens in her guidelines (2003) emphasizes how evident the lack of education of health professionals is when it comes to the visually impaired, particularly in understanding the needs for assistance. Cupples et al. (2012) highlights the major issues encountered by visually impaired people in healthcare sector such as receiving information written in inaccessible formats, difficulties in communicating with healthcare personnel, professional personnel failing to respect individual's ability to take part in their own care, and difficulties in moving around facilities.

Physiotherapist supports and enables individuals to reach their highest mobility potentials through practices, such as therapeutic exercise, manual therapy, the use of technology, guidance, and accessibility (Website of Suomen Fysioterapeutit 2021).

Absence of knowledge regarding disability and rehabilitation issues leads to a lack of compassion and sensitivity in understanding clients with disabilities (Pather, Maddocks, Chemane & Chetty 2018). When dealing with visually impaired clients, physiotherapist should understand their difficulties as well as recognize their abilities, learn to communicate with them, and choose suitable treatments and tests to use during examination (Stevens 2003).

2 PURPOSE AND AIM OF THE THESIS

The aim of this Bachelor's thesis was gather information for physiotherapists in the management of visually impaired clients. This qualitative study was done in collaboration with Satakunnan Näkövammaiset ry and carried out by interviewing three visually impaired on their experience of physiotherapy service quality in the Satakunta region. The objective was to improve the quality of physiotherapy service for this category of clients. A workshop for physiotherapy students of Satakunta University of Applied Sciences was held in Pori campus on November 8, 2021, with the purpose of introducing students to visual impairment, instructing them on how to approach visually impaired clients and adapt physiotherapy treatments to make the session safe and professional.

3 VISUAL IMPAIRMENT

Visual impairment means a more or less severe reduction of the sensory function, which derives from damage to the visual apparatus. Pathological involvement can affect not only the eyeball, but also its annexes, the nerve pathways that carry visual stimuli towards the central nervous system and the cerebral cortex. The visual function includes specific perceptive abilities, such as visual acuity, vision field, contrast sensitivity, color recognition, stereopsis, adaptability, movement perception, etc. The most important functions in vision are visual acuity and visual field, they allow the individual to interact with the environment and to maintain complete autonomy in everyday life. Visual acuity is the ability to recognize the observed object with detail. It is determined by the high resolving power present in the macula, a small central area of the retina, and the integrity of the nerve pathways that originate from the neurons present at this level. Visual field is the ability to indistinctly perceive the objects that make up the environment in which the observed object is located. This ability depends on the function of the entire extramacular retina, up to its extreme periphery, and on the integrity of the nerve pathways that come from the neurons present throughout the retina, excluding the macula. Visual impairment describes a condition of low vision or blindness that compromises the autonomy of the individual. Blindness is complete lack of vision while low vision is a condition of reduced, bilateral, and irreversible vision. (Martinoli & Delpino, 2009, p. 17.)

The World Health Organization (WHO) divides visual impairment into five categories (Table 1) ranging from people with low vision to completely blind people (2021). Moderate visual impairment or low vision indicates a residual vision of no more than 3/10 (0,3) in both eyes or in the best sighted eye even with the best correction and a perimeter binocular residue of less than 60%, moderate-severe visual impairments indicate a residual vision of no more than 1/10 (0,1) in both eyes or in the best sighted eye even with the best correction and a binocular perimeter residue of less than 50%,

severe visual impairment indicates a residual vision of no more than 1/20 (0,05) in both eyes or in the best eye even with the best correction and a binocular perimeter residue of less than 30%, partial blindness indicates a residual vision of no more than 1/50 (0,02) in both eyes or in the best eye even with the best correction and a binocular perimeter residue of less than 10%, total blindness indicates total lack of vision in both eyes, a mere perception of shadow and light or hand motion in the best sighted eye and a binocular perimeter residue of less than 3% (Website of Polo Nazionale di Servizi e Ricerca per la Prevenzione della Cecità e la Riabilitazione Visiva degli Ipovedenti 2021).

Table 1. World Health Organizations (WHO) categories of visual impairment presenting distance visual acuity (Website of World Health Organization 2021)

Category	Visual acuity worse than	Visual acuity equal or better than
Moderate visual Impairment 1	3/10 (0.3)	1/10 (0.1)
Moderate-Severe visual impairment 2	1/10 (0.1)	1/20 (0.05)
Severe visual impairment 3	1/20 (0.05)	1/50 (0.02)
Partial Blindness 4	1/50 (0.02)	Light perception
Blindness 5		No light perception

Figure 1. Drawing of crystalline lens without and with cataract, and of eye with cataract and its vision (Website of Dr Brendan Cronin 2021)

Glaucoma is a disease that affects the optic nerve, or that bundle of nerve fibers that transmits electrical impulses, derived from visual stimuli to the brain and is caused by a continuous increase in intraocular pressure. In the eye affected by glaucoma the outflow of aqueous humor is hindered: fluid accumulates, and intraocular pressure begins to rise (Figure 2). After some time, a compression or crushing of the optic nerve occurs with consequent damage and death of the nerve fibers. The lesion of the optic nerve results in a progressive alteration of the visual field which progressively tends to narrow until its complete disappearance. If the optic nerve fibers are damaged, areas within the visual field are generated in which it is no longer possible to see, those are called scotomas. Initially very small, scotomas first affect the peripheral part of the visual field, the person will continue to see sharply in the center, and are often noticed when the damage to the optic nerve is already considerable. When nerve cells are destroyed, vision loss becomes permanent and irreversible. Even if cured, it will remain forever. The only way to prevent vision loss is early diagnosis. (Miglior, Avitabile, Bonini, Campos & Mastropasqua, 2014, p. 134-135.)

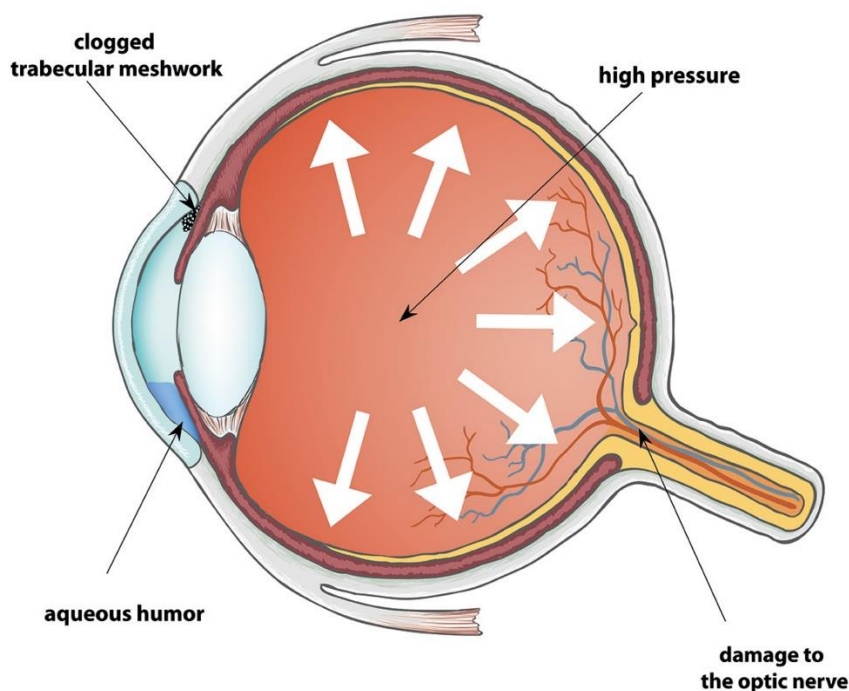


Figure 2. Drawing of eye with glaucoma (Website of De Ceunynck Ophthalmology 2021)

Corneal opacities affect the main refractive element of the eye, the cornea. Corneal opacities are scarring or clouding of the cornea and can cause anything from minor irritations to serious issues or even blindness. The causes of corneal opacities can be induced by viral keratitis (Herpes Simplex, Herpes Zoster), interstitial keratitis, parasitic keratitis (Acanthamoeba, Onchocercosis), peripheral ulcers (Mooren), pterygium, keratopathy, keratoconus, and corneal dystrophies. (Eagle, 2011, p. 77-95.)

Diabetic retinopathy is the leading cause of blindness between the ages of 20 and 74 and is the most frequent and most important complication of diabetes mellitus. It can occur in both people with type I and type II diabetes but is more common to affect the ones with type I. (Eagle, 2011, p. 159.)

Diabetic retinopathy is divided into two categories non-proliferative and proliferative. Non-proliferative diabetic retinopathy (NPDR) presents with microaneurysms, small hemorrhages, hard exudates and intraretinal microvascular anomalies (Figure 3). As the disease progresses, macular edema may appear, the presence of fluid inside the retinal cells, which is the major cause of decreased vision in NPDR. The evolution of edema can vary, it is sometimes stable, while in other cases it slowly worsens, giving rise to the formation of real cysts in the retina (cystoid edema). Macular edema is linked to the presence of parietal changes (with greater diffusion of fluids) and blood (greater aggregability of platelets, increased blood viscosity). With the increase in retinal ischemia, the patient can develop proliferating diabetic retinopathy. Proliferating diabetic retinopathy (PDR) includes all those forms of diabetic retinopathy in which vascular proliferation is present. PDR is more common in young patients with type I diabetes where glycemic control is more difficult. It can be an evolutionary stage of NPDR or appear early with the formation of newly formed vessels. The neovascularization is formed by capillaries that have a very fragile wall and can easily break causing a vitreous hemorrhage. The bleeding can be reabsorbed, but, if not treated with adequate laser therapy, they tend to recur and in such cases their absorption is increasingly difficult. Subsequently, a fibrovascular reaction may appear with the formation of membranes that can penetrate the vitreous, causing retinal traction and detachment of the retina. In the most severe cases, there may be the onset

of a neovascular glaucoma. (Miglior, Avitabile, Bonini, Campos & Mastropasqua, 2014, p. 219-225.)

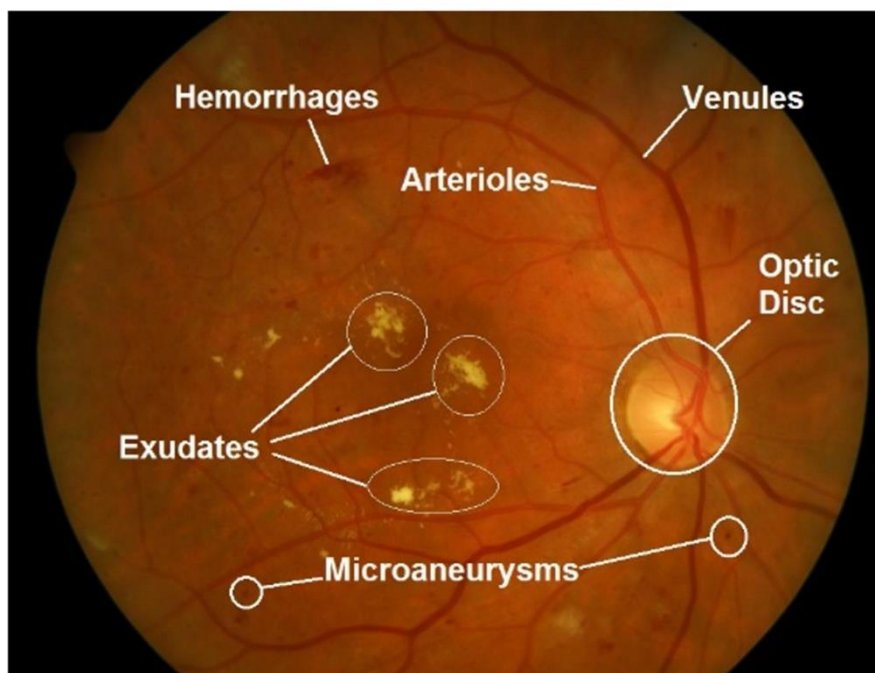


Figure 3. Image of retina affect by diabetic retinopathy

Trachoma is the main infectious cause of blindness in the world and is caused by a bacterium called *Chlamydia trachomatis*. This infection is transmitted by direct or indirect transfer of ocular and nasal secretions from infected people, particularly from young children, but there are also particular species of flies that can spread the infection. According to World Health Organization trachoma is widespread in the poorest and most rural areas of Africa, Central and South America, Asia, Australia, and the Middle East. (Website of World Health Organization 2021.)

The disease normally begins in early childhood due to repeated *Chlamydia trachomatis* ocular surface infections. Recurring chronic inflammatory episodes lead to the development of conjunctival scars. The eyelids are distorted by the contracting of the scar tissue causing contact between the eyelashes and the cornea, consequently a corneal opacification occurs. (Burton, 2007, 99.)

3.2 Vision assistive devices

Vision assistive devices can be divided into three groups: guide, optical, and technological.

Guide aids include sighted guides/assistants, canes, and guide dogs. Sighted guide refers to the individual who assists visually impaired to move around his / her surroundings. The sighted guide offers the elbow to the visually impaired person and guides him / her by walking a few steps ahead, this allows the visually impaired person to anticipate any changes in levels by sensing the movement of the guide. The white cane is used to indicate to others that the person is visually impaired, this helps in case of need to get assistance from others more readily. By using the white cane, the person can also be independent in traveling. An alternative is the use of the guide dog, which requires more responsibilities and costs due to the dog care and training work with the guide dog that takes place in a specialized school. (Crocker, 2006, p. 170-171.)

The most common optical aids can be divided into two categories: magnification and lighting. The selection of the optical aid is individualized in accordance with the subjective needs of the person. The visual acuity of the individual and the use made of it determine the amount of magnification needed. There are magnifiers for close -up work as well as distance. Closed circuit television (CCTV) and video magnifier are fixed desktop units equipped with a monitor and camera in which size, contrast and color can be set according to the individual's needs. There are also portable closed-circuit magnifiers which are smaller and easier to carry. As for the lighting, the flow of light and glare can be managed with a goose-neck-type lamp in order to direct the flow of light in the necessary direction or NOIR glasses can be use, these glasses have yellow filters and can also be worn over prescription glasses. (Crocker, 2006, p. 171-173.)

Technological assistive devices are equipment, devices and systems that can be used to overthrow infrastructural and other barriers encountered by the visually impaired and blind (Hersh, Johnson & Keating 2008, 15).

Assistive technologies for the visually impaired and blind is an ever-growing field of research. Invasive and non-invasive assistive technology solutions have been developed thanks to advances in computer vision, wearable technology, multisensory research, and medical interventions. In the last ten years new aids have been developed such as wearable electronic travel aids (ETAs), smart canes, tactile displays, smartphone-based devices, and apps just to name few. (Bhowmick & Hazarika, 2016.)

4 PHYSIOTHERAPY QUALITY SERVICE

The quality service can be defined when, at the same time, there is a double convergence between expectations and perceptions, and between the technical quality obtained and the reference technical standards (Website of Treccani 2021). The quality service in most cases does not refer to the clinical aspect of health care, but on the relationship that is created between clients, providers, and care processes (Jafar, Farid, Ali & Mohammad 2013).

Studies show that non-clinical aspects in healthcare services have an important influence on the outcome of the quality of service and on client satisfaction, as well as on the outcome of the treatment, some of the most important aspects are: listening to the client's needs, giving clients time to ask questions, good communication skills, involving clients in therapeutic decision making, giving correct information, respecting clients' ideas and characteristics, leaving the choice to the client whether to accept or not a treatment, availability of services, continuity in care, and timeliness in the provision of services (Gharibi, Tabrizi, Oskouei & AsghariJafarabadi 2014).

The key points of the quality assurance standard of physiotherapy practice and delivery according to European Region World Physiotherapy are addressed in the following chapters (2021).

4.1 Recognition of the client as an Individual

Physiotherapists exercise their profession while maintaining legal and ethical boundaries by acting in the best interests of clients, respecting, and upholding their rights. In the event of a conflict, the physiotherapists cease the activity. Valid informed consent is obtained prior to initiating any assessment or treatment, taking into account the client's condition, age, emotional state and cognitive ability. Clients are informed about treatment options, benefits, risks, duration, and costs. Clients' data is treated with the utmost confidentiality. (Website of European Region World Physiotherapy, 2021.)

4.2 Access to physiotherapy service and treatment cycle

Access to the physiotherapy service must be fair and equitable, this is based on need and priority through a written process that indicates the priorities of the clients referred to the service, eventually re-evaluated if any clients have not used the service within a specific period of time (Website of European Region World Physiotherapy 2021).

A careful evaluation of the client is carried out by the physiotherapist before each intervention. From this evaluation emerge clinical results, medical history, family and social information, use of medications, contraindications and allergies, client priorities and expectations, personal data, and any relevant investigation.

Clinical reasoning is applied to develop a diagnosis and to set up a treatment plan by analyzing and evaluating the information gathered, considering protocols, guidelines, and evidence based. The combination of finding and clinical reasoning is used by the physiotherapist to create a treatment plan in collaboration with the client. In the treatment plan are included chosen interventions, goals and outcomes, measurements, implementation and review time, used guidelines or protocol, and dated physiotherapy documentation. The treatment plan is implemented, and progress is continuously evaluated. At the end of the intervention, the physiotherapist guarantees a safe and effective transfer of care or discharge. (Website of European Region World Physiotherapy, 2021.)

4.3 Communication and Documentation

A professional and effective communication is used by the physiotherapists towards clients and carers. Communication must be easy to understand, guaranteed verbally, non-verbally, and written, as well as available in various formats. Sensitive information is disclosed in a private setting. Communication by the physiotherapist with other professionals is carried out in an effective and professional way. (Website of European Region World Physiotherapy, 2021.)

Complete written documentation of each physiotherapy session is kept, this documentation may be shared with other professionals, and be in electronic and paper form. The documentation starts from the first contact, it must be precise and effective and written at the same time or immediately after the session in an understandable way with precise date and time. The documentation is protected against damage, loss, or access by unauthorized persons. The management of physiotherapist client registers is done in accordance with national legislation or, where applicable, workplace policies. (Website of European Region World Physiotherapy, 2021.)

4.4 Professional development and education

Physiotherapists are responsible for maintaining their professional competence through updates. Physiotherapist's development needs are assessed according to career aspirations, feedback collected, transfer to a new clinic or area, any mandatory requirement such as fire safety and first aid, technological and practical innovations, and the needs of the organization.

Client education is an important part about physiotherapy intervention, the information given to the clients must be evidence-based to give the opportunity to choose about their care. (Website of European Region World Physiotherapy, 2021.)

4.5 Quality improvement, health, and safety

According to U. S. Department of Health and Human Services Health Resources and Services Administration (2021), quality improvement is a set of systematical and ongoing actions that aim to implement a measurable service improvement.

A quality improvement approach is used to identify issues. Issues can be identified through clinical outcome measures, clinical audit, disputes, complaints, accident reports, waiting times, and feedback. (Website of European Region World Physiotherapy, 2021.)

Physiotherapists are responsible for risk management, this means identifying any risks that can affect clients, staff, and organizations, assessing the impact the risk could have and implementing measures for the elimination or control. Health and safety legislation and regulations are complied in order to provide clients and staff a safe environment. Physiotherapists follow national and local guidelines relating to mandatory training in fire safety, first aid, infection control, violence and assault management, and emergency procedures. The maintenance of physiotherapy equipment is essential to ensure its safe use; a written proof of the service contract is kept according to the manufacturer's instructions, the electronic calibrations, the report and repair of the defective or broken equipment, the dangers of equipment and contraindications. Aids or devices are provided in relation to the client's needs, for this an evaluation and treatment cycle is used, the reasons for the choice are documented, and the client is instructed to the use. (Website of European Region World Physiotherapy, 2021.)

5 PHYSIOTHERAPY FOR VISUALLY IMPAIRED AND BLIND PEOPLE

For people with disabilities, rehabilitation is an important process that can help achieve a better quality of life. Physiotherapy through physical and manual therapies and rehabilitation programs tailored to the client can help to preserve and strengthen some

residual functions and develop others, making the person as autonomous as possible in everyday life (Website of Physiopedia 2021).

There are many things to consider when a physiotherapist has to give service to a visually impaired or blind client, among which accessibility, approach, testing, treatment and guidance.

Previous research highlights the major problems encountered by visually impaired or blind people in healthcare, the most relevant are receiving information written in inaccessible formats, difficulties in communicating with healthcare personnel, professional personnel failing to respect individual's ability to take part in their own care, and difficulties in moving around facilities (Cupples, Hart, Johnston & Jackson 2012).

5.1 Accessibility

Accessibility means safety and quality, it is about taking into account the diversity of people in the design, implementation and maintenance of the built environment (Website of Invalidi Liitto 2021).

Visually impaired people can encounter information and environmental accessibility difficulties. Receiving inaccessible information can lead to serious consequences such as the loss of privacy and independence, the risk to personal safety (e.g., drugs), and the inability to make informed decisions about health care matters. It is important to consider how to share information with clients, for example the use of documentation with large letters, different styles, greater contrast between the background and text / images, or providing the information in audio format, or if necessary, in Braille. (Cupples, Hart, Johnston & Jackson, 2012.)

As physiotherapist, knowing the facility's level of accessibility is another important matter. The entrances to the facility must be barrier-free, obstacles extending from the side or from the top to the aisle are dangerous. The clear height of the aisle must be at least 2100 mm. A person using cane when moving needs a 1000 mm wide walkway, with a guide dog the width is 1100 mm, and when moving with an assistant-guide 1200

mm. Stairs are not suitable for everyone, but proper placement, sizing, material choices and lighting increase their safety. If there is an elevator, the elevator call buttons must be sufficiently large and with a minimum diameter of 25 mm, embossed numbers with good dark contrast, it is important that the button on the output layer is of a different color, for example green, and 5 mm higher than the other buttons. A barrier-free toilette is essential in healthcare facilities. Signs, materials, colors, and lighting can affect the accessibility, perceptibility, and safety of a space. The signs should be placed in a place where they are easily visible. The accessibility of the signs by means of different senses is ensured by using, for example, raised signs and symbols. Voice prompts help visually impaired people to target at the target. The lighting should be even and not cause glare. Ramps, steps, thresholds, and level differences along the way must be clearly indicated by lighting and differences in surface darkness or attention markings. (Website of Invalidi Liitto, 2021.)

In the gym, to make physiotherapy equipment more accessible, it can be use larger fonts, embossed dots, or contrast tape to mark settings or limits (Website of American Printing House for the Blind 2021).

5.2 Client approach and guidance

In approaching the client, it is important to introduce yourself verbally, speak directly while looking at the client, and put yourself at the same level of position (Stevens 2003). Asking the client to describe the visual condition and if assistance is needed can help provide better service and understanding (Cupples, Hart, Johnston & Jackson 2012). If the client is accompanied, avoid talking to the assistant about client matters without permission. It is appropriate the use of normal language including words such as "see", "look" and "read". Never leave the client without informing.

If the client needs assistance getting to the physiotherapy room, offer the person your arm to grab it just above the elbow, walk side by side or few steps ahead at the client's pace, remember to describe any obstacles or changes in the environment. (Stevens, 2003). When guiding the client to sit, describe the chair / treatment table and let the client independently take up into the seat (Cupples, Hart, Johnston & Jackson 2012).

5.3 Physiotherapy treatments and testing

Physiotherapy method and technique must be carefully selected and adapted to the visual impaired client, which depends mainly on auditory and tactile information (Sterle & Vidovič-Valentinčič 2001).

Before choosing the treatment, physiotherapist should be informed about the age of visual impairment onset, the vision, and the prognosis of the diagnosis (Haegele 2021, 137).

The physiotherapist must carefully choose the tests to be performed, taking into consideration the possibility of modifying the test according to the client's conditions. For example, gait analysis should be performed in both independent and guided conditions since findings in independent walking could be no present in guided walking. (Haegele ,2021, p. 156.)

6 ASSOCIATION FOR VISUALLY IMPAIRED

Satakunnan Näkövammaiset ry is an association for the blind and visually impaired operating in the region of Satakunta. The association was founded in 1933 and operates in Eura, Eurajoki, Harjavalta, Huittinen, Jämijärvi, Kankaanpää, Karvia, Kokemäki, Köyliö, Merikarvia, Pomarkku, Pori, Rauma, and Ulvila. In the association there are currently about 490 members.

The association organizes recreational trips, sightseeing visits, club activities, sports opportunities, culture, courses, aids and other products presentations. (Website of Satakunnan Näkövammaiset ry, 2021.)

7 METHODS

7.1 Research method and data collection

The study was conducted in collaboration with Satakunnan Näkövammaiset ry using a qualitative research method. As this study concerns the physiotherapy service, a qualitative description method was used in which the participants described their experience as visually impaired clients in physiotherapy (Kim, Sefcik & Bradway 2016).

Data were collected via call phone interviews in spring 2021, the interview duration was approximately 30-60 minutes, in which participants were asked about the visual impairment background and their experience as a client in physiotherapy. The interview was done in Finnish using a semi-structured interview (APPENDIX 1) with open questions (Barret & Twycross 2018).

7.2 Analysis

A thematic analysis was carried out by recording, analyzing, describing, organizing, and reporting the interviews one by one (Nowell, Norris, White & Moules 2017). Each interview was recorded, carefully listened several times, transcribed in Finnish, translated into English, analyzed into sentences, and subsequently divided into categories (Table 2).

7.3 Ethics

Each participant received by mail an informational document (APPENDIX 2) on participation in this study, and two copies of the research bulletin (APPENDIX 3) describing the thesis research and the contribution of the participants to it. After got acquainted, participants were asked for consent to participate in the thesis research by signing a copy of the bulletin and returning it to the author of the study.

In these documents a description of how personal information would be handled during the investigation was provided.

The requisites to participate in the study were to be visually impaired and have experience as client in physiotherapy services.

Participation in the thesis research was voluntary. The participants had the opportunity to suspend their participation at any time without giving a reason.

The personal data was processed on the following basis pursuant to Article 6 (1) of the General Data Protection Regulation with the consent of the data subject. Pursuant to Article 9 (2) of the Data Protection Regulation, the processing of sensitive data was based on the following legal basis with the consent of the participant.

The information collected from the participants during the interviews was treated confidentially. The material was anonymized. No individuals were identifiable in the thesis report. During the thesis research, the material was stored in a lockable cabinet at the thesis author's home, to which non-thesis authors did not have access. The materials were destroyed at the end of the thesis research.

7.4 Participants

In this study took part three members of the Satakunta association for the blind and visually impaired. All participants were Finnish female age between 45 and 65 with different types of visual impairment. The total number of years with visual impairment ranged from 10 to 30.

All the participants were officially retired, with two of them still working part-time. Participants shared handcrafts and outdoor activities as a hobby.

Participants reported that visual impairment affects their daily life in moving outside and in public spaces, reading, and performing household chores such as cooking, baking, and doing laundry. The vision aids used were mainly white cane, computer magnification program, speaking phone and reader. Two of the participants reported that they needed personal assistance with out-of-home activities.

All participants had experiences as clients in physiotherapy due to musculoskeletal issues.

8 RESULTS

8.1 Physiotherapy booking

All participants reported they had their first physiotherapy appointment booked via medical referral. The most common way to book a physiotherapy appointment result to be by call phone, or as an alternative, by sending an email.

There is no feedback from participants regarding other types of physiotherapy booking such as apps, website booking forms, or other.

Participants reported that they never encountered any issues with booking an appointment with physiotherapists.

8.2 Accessibility

Participants reported to be overall satisfied with the physiotherapy facilities accessibility, but they highlighted what factors may make a facility and hospital difficult to access for the visually impaired. Facilities such as hospitals are complicated for visually impaired, a participant said, "Often hospitals are like mazes", the guidance signals are too small and this prevents people from reading or noticing what is indicated in it, the door opening system is not easy if there is needed to push a button, not to forget the corridors already complex for sighted people. Stairs, steps, and narrow corridors make it difficult for people with visual impairments to move around safely. A participant talking about the frequented physiotherapy facility "The corridors are narrow, and the bathroom is at the end of the corridor, but after several times it became familiar". Limited space toilets are challenging, in healthcare facilities there should always be a bathroom accessible to people with disabilities. Two out of three participants report to not be able to move around the gym without a guide, the machines result to be positioned too close to each other or in the middle of the path.

8.3 Client approach

Participants described how the physiotherapist approached them in the waiting room during the first meeting; The physiotherapist approached the client and introduced him- / herself, asked about the visual condition and how much the client is able to see, a participant told "During the first time, I taught the physiotherapist how to assist a visually impaired, some people instinctively use to take by the hand and not all visually impaired people correct the way to assist".

One participant pointed out "The physiotherapist called me by name, and I went into the room by myself as the waiting room was small, but in a larger waiting room where there are many people waiting and a long distance from the physiotherapy room, it is impossible to understand who is shouting and where to go".

With visually impaired it is good to pay attention as how much a person see, as this participant talked about her experience "Once a nurse came to take me from the chair, holding me, and I felt it was too much since I am still able to move by myself. It is important to think about who and how assist, better ask first if help is needed".

8.4 Adapted physiotherapy

Participants shared their experiences regarding physiotherapy sessions and treatments. Safety plays an important role when dealing with visually impaired clients, based on the experiences of the participants, the physiotherapist adequately controls the treatment table both at the beginning and at the end of the session and verbally guides the client informing when to move and / or get up. A participant told "The physiotherapist tells in advance what we are going to do".

The physiotherapist cannot show the movements, so the movements are guided manually and verbally. Participants agree that the movements chosen by the physiotherapist are simple to perform.

One participant reported her doubts about the validity of a test in which it was necessary to perform a movement that was impossible for visually impaired people "I remember in a test there was one movement that had to be performed but it was not possible for a blind person, I do not know if I got 0 or got some point from it".

Another participant talked about the telerehabilitation theme, which had a great impact during the Covid-19 pandemic, in agreement with the physiotherapist they concluded that this service does not work for the visually impaired therefore the normal session is necessary.

8.5 Ethical issues and inclusion

One of the participants reported an important ethical issue during a physiotherapy session; the participant told her experience "It was the first meeting, the physiotherapist told me in the treatment room about next time and what to do with Kela documentation. When he took me back to the waiting room, he started telling my assistant the same things, the assistant does not need to know my personal matters".

Participants agreed that with visually impaired it is good to pay attention to how much a person sees, it is better to ask first if a person needs help instead of giving assistance without permission.

Participants pointed out how important it is to remember to speak directly with the visually impaired person, "If an assistant is involved, be sure to talk directly to the visually impaired person not the assistant, of course in case of a family member it is a different matter".

One of the participants said, "When it comes to filling out some forms, help from the physiotherapist is needed".

Another participant talked about the timetable change issue "Once, on the door there was a note where it read that the schedule has changed, but I could not actually read it, the changes need to be notified via call phone". When the timetable is suddenly changed the physiotherapist must call and inform the visually impaired clients of the aforementioned change.

Table 2. Interview result table.

Physiotherapy booking	Accessibility	Client approach	Adapted physiotherapy	Ethical issues- Inclusion
Medical referral +	Hospitals -	Introducing to client +	Checking treatment table/machines +	Do not talk with assistant about client

				situation without client's permit -
Call phone +	Guidance signals -	Asking about visual condition +	Verbal/ manual guidance +	No associate visual impairment with mental/memory issues -
E-mail +	Corridors -	Calling by name -	Explaining before what is going to happen +	Talk directly to the visually impaired person -
	Stairs -		Simple movements +	Give assistance only if needed(ask) +-
	Doors opening system -		Test -	Changes in timetable need to be informed via email/phone -
	Gym -		Telerehabilitation -	Filling documents -
	Toilettes -			Changes in timetable -

9 WORKSHOP

A workshop for SAMK physiotherapy students was held in the campus on November 8, 2021. A workshop invitation (APPENDIX 4) was emailed to all physiotherapy students one week earlier, ten spots were available booking through Doodle website. Five students took part in the workshop, three from first year, one from third year, and one graduating student. The duration of the workshop was one hour and fifteen minutes. The workshop content was visual impairment definition, numbers, causes, vision assistive aids, task one, client approach, task two, client guidance, task three, treatment and testing, task four, accessibility, ethical issue, discussion, and feedback. The content was presented with a PowerPoint presentation, a video clip from the YouTube channel Lighthouse Guild "Guide Techniques for people who are blind or visually impaired" (2015) was integrated into the visual assistive aids slide.

Students had to complete four tasks without prior instructions, the idea was to challenge them with common situations for a physiotherapist who has to serve a visually impaired client. Students were provided with a blindfold mask so that they could experience what it means to be a blind person. They worked in pairs, each student had the opportunity to experience both roles physiotherapist and client. The first task was to introduce himself or herself to the client, the second was to guide the client from the waiting room to the physiotherapy room and guide the client to sit down, the third was to guide a movement or exercise, and the last was to have the client fill out a document. After each task there was a short discussion and a theoretical explanation. Students were active with many questions throughout the presentation, in the discussion it emerged most of them had previous experience with visually impaired people, the task that turned out to be more challenging was the filling of the document, but even in the approach the students doubted to ask about the visual condition. For the feedback, a post-it note was provided on which the students wrote their feelings about the workshop. The feedback was positive, some of the most significant part were "I thought it was very interesting", "Very good content and organized", "Very informing on a subject not told so much", "It was very useful time to have theory and practice in real life situation", "I have never had experience with visually impaired people, so I learned a lot", "Medical condition explanations were a very nice touch". The PowerPoint material was emailed to each participant after the workshop.

10 CONCLUSION

According to the experiences of the study participants, the physiotherapists in Satakunta region know overall how to approach and treat visually impaired clients. Accessibility still appears to be an issue for the visually impaired, this category of clients should be considered when building healthcare facilities.

Physiotherapists must remember to ask before giving assistance to visually impaired to not run into unpleasant situations. The choice of treatments and tests appropriate to the clients' conditions is important, it must be remembered that adapting the tests to the situation can give completely different results and / or lack of validity. The chosen movements should be simple and guided verbally and manually.

The risk of ethical issues arises when the physiotherapist lack of knowledge about visual impairment, and this can lead to confusion and create unpleasant situations. Eventual difficulties in filling the forms should be taken into consideration and help should be offered. Changing in schedule should be communicated in advance via email or phone call.

Telerehabilitation is a topic that have been discussed in the last two years, but this kind of service cannot be used with visually impaired clients, during the Covid-19 pandemic, participants continued with normal face-to-face physiotherapy sessions. In the future, it may be necessary to create a way to integrate telerehabilitation for visually impaired clients through technological innovations.

Further studies on this topic are needed, for example with a larger number of participants, considering other areas of the world, or focusing on certain physiotherapy treatments.

11 DISSCUSSION

The topic of this thesis was chosen on the basis of the author's previous work experience as an optician. The idea of combining the knowledge of previous studies with that of physiotherapy motivated the author to proceed with this qualitative study.

The choice to use a qualitative method for this study arose because the focus was to improve the physiotherapy quality service for visually impaired clients. The author collected the data by conducting telephone interviews through semi-structured interview with open questions in order to obtain the sought answers. For the author, the most challenging part was creating the questions related to the topic in Finnish. Overall, participants were satisfied with the interview, one in three reported having difficulty understanding interviewer's speech.

The results of this study were consistent with previous literature and research, this highlights how important it is for a physiotherapist to have knowledge on this topic.

The idea of organizing a workshop for physiotherapy students in SAMK was born after noticing the lack of knowledge of the subject by the author's peers during an adapted physical activity session. The workshop was an opportunity of professional growth for the author. Despite the low attendance, the workshop was a success. The students were intrigued by the topic and during the session were active by asking a lot of questions. The students gave positive feedback to the author.

Overall, this thesis has its strengths and weaknesses. On the theoretical basis, the author could have deepened some parts. Difficulties have also arisen due to the limited availability of evidence-based material on the subject.

The results of the study may have been influenced by the limited number of participants, the presence of the female gender only, and the age group.

Further studies on this topic are needed, for example considering a larger number of participants with both females and males, considering other areas, or focusing on some physiotherapy treatments.

An idea to ensure knowledge of this topic might be to integrate a course or event with a focus on assisting and treating visually impaired into the physiotherapy study program.

The process of writing the thesis was fundamental for the personal and professional growth of the author. In the future, the author hopes to increase her knowledge and raise awareness on the subject.

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APPENDIX 1. SEMI-STRUCTURED INTERVIEW

1. Taustatiedot (ikä, näkövamma taustatiedot, apuvälineet)
 - Minkä ikäinen olet?
 - Kuinka kauan sinulla on ollut näkövamma?
 - Oletko mukana työelämässä?
 - Millaista työtä teet?
 - Harrastukset?
 - Mitä harrastat?

2. Kokemukset toimintakyvystä arjessa
 - Miten näkövamma haittaa arjessa?
 - Millaisia näkemisen apuvälineitä mahdollisesti tarvitset arjessasi, ja miksi?

3. Kokemukset fysioterapiasta
 - Millaisia kokemuksia sinulla on fysioterapiasta?
 - Mikä oli fysioterapian syy? Miksi menitte fysioterapeutille?
 - Kerro ajan varaamisesta fysioterapiaan.
 - Miten varasit fysioterapiakäynnin?
 - Miten koet, että ajan varaaminen onnistui?
 - Mikä helpottaisi ajan varaamista mielestäsi?
 - Miten fysioterapiatiloissa oli huomioitu näkövammaisten liikkumisen esteettömyys?
 - Miten parantaisit esteettömyyttä, jos parantaisit?
 - Miten fysioterapeutti huomioi näkövammasi fysioterapiassa?
 - kun fysioterapeutti vastaanotti sinut ensimmäistä kertaa?
 - fysioterapeuttisessa tutkimisessa (Miten koet, että fysioterapeutti huomioi näkövammasi, kun hän tutki sinua?)
 - fysioterapian suunnittelussa (Miten koet, että fysioterapeutti huomioi näkövammasi fysioterapian suunnittelussa? kun fysioterapian sisältöä suunniteltiin, mitä fysioterapiahoidoja, ohjausta ja neuvontaa hän tulee saamaan/tarvitsee?)

- fysioterapian toteutuksessa (Miten koet, että fysioterapeutti huomioi näkövammasi fysioterapian toteutuksessa? fysioterapia hoidot, ohjaus ja neuvonta jne)
- fysioterapian arviointi (Miten koet, että fysioterapeutti huomioi näkövammasi fysioterapian arvioinnissa? palaute jne)
- Miten fysioterapeutti ohjasi ja neuvoi sinua fysioterapiassa?
- Miten mielestäsi fysioterapeutti/-tit osasi huomioida näkövammasi?
 - Mitkä asiat huomioitiin hyvin?
 - Mitkä asiat huomioitiin huonosti?
- Mitä asioita haluaisit, että fysioterapiavastaanotolla kehitettäisiin, jotta ne vastaisivat paremmin näkövammaisten tarpeita?
- Haluaisitko lisätä tai täydentää jotain? Avoin sana.
- Miten koit tämän haastattelun?

APPENDIX 2. INFORMATIONAL DOCUMENT

Tietoa tutkimukseen osallistuvalla

Olet osallistumassa Satakunnan ammattikorkeakoulun opintoihin kuuluvan opinnäytetyöhön liittyvään tutkimukseen.

Tämä seloste kuvaa, miten henkilötietojasi käsitellään tutkimuksessa.

Tähän tutkimukseen osallistuminen on vapaaehtoista. Voit myös halutessasi keskeyttää osallistumisesi tutkimukseen. Jos keskeytät osallistumisesi, ennen keskeytystä kerättyä aineistoa voidaan kuitenkin käyttää tutkimuksessa. Tässä tietosuojaselosteessa kerrotaan tarkemmin, mitä oikeuksia sinulla on ja miten voit vaikuttaa tietojesi käsittelyyn.

1. Tutkimuksen, kehittämistoiminnan tai opinnäytetyön rekisterinpitäjä

Cristina Gregori
XXXXXX, XXXXX Ulvila
+358 XXXXXXXXX

2. Kuvaus tutkimuksesta tai muusta selvityksestä ja henkilötietojen käsittelyn tarkoitus

Tämän tutkimuksen tarkoituksena on selvittää näkövammaisten asiakkaiden kokemuksia fysioterapiapalveluista ja niiden mukauttamisesta näkövammaisten tarpeisiin ja luoda sitä varten ohjeistus fysioterapeuteille.

Opinnäytetyötutkimuksessa aineisto kerätään yksilöhaastattelulla kolmelta (3) näkövammaiselta henkilöltä, joilla on kokemusta fysioterapiapalveluiden asiakkuudesta, lisäksi myös tutkimusnäyttö aiemmista tutkimuksista on aineistona. Haastattelussa Teitä pyydetään kuvailemaan kokemuksianne toimintakyvystä arjessa ja fysioterapiakokemuksistanne. Haastattelu kestää noin tunnin (1 h). Haastattelu nauhoitetaan. Nauhoite tuhoetaan opinnäytetyön valmistuttua.

Haastattelussa Teiltä kerättyjä tietoja käsitellään luottamuksellisesti. Aineisto anonymisoidaan. Henkilöt tai organisaatiot eivät ole tunnistettavissa opinnäytetyöraportissa. Aineisto säilytetään opinnäytetyötutkimuksen tekemisen ajan opinnäytetyön tekijän kotona lukittavassa kaapissa, jonne muilla kuin opinnäytetyön tekijällä ei ole pääsyä. Aineistot tuhoetaan opinnäytetyötutkimuksen päätyttyä.

3. Opinnäytetyön tekijä

Nimi: Cristina Gregori
Osoite: Satakunnan ammattikorkeakoulu
Satakunnankatu 23, 28130 Pori
Puhelinnumero: +358 XXXXXXXXX
Sähköpostiosoite: cristina.gregori@student.samk.fi

4. Tietosuojavastaavan yhteystiedot

Satakunnan ammattikorkeakoulun tietosuojavastaava on Osmo Santavirta.
Häneen saa yhteyden sähköpostiosoitteesta tietosuojavastaava@samk.fi

5. Opinnäytetyön aihe ja kesto

Opinnäytetyön nimi: *Physiotherapy in the management of visually impaired clients - A guideline for physiotherapists*

Kertatutkimus Seurantatutkimus

Henkilötietojen käsittelyn kesto:
Opinnäytetyön arvioitu valmistumisaika on lokakuu 2021.

6. Henkilötietojen käsittelyn oikeusperuste

Henkilötietoja käsitellään seuraavalla yleisen tietosuoja-asetuksen 6 artiklan 1 kohdan mukaisella perusteella:

- tutkittavan suostumus
 rekisterinpitäjän lakisääteisen velvoitteen noudattaminen
 yleistä etua koskeva tehtävä/rekisterinpitäjälle kuuluvan julkisen vallan käyttö:
 tieteellinen tai historiallinen tutkimus tai tilastointi
 tutkimusaineistojen arkistointi
 rekisterinpitäjän tai kolmannen osapuolen oikeutettujen etujen toteuttaminen
 mikä oikeutettu etu on kyseessä:

7. Mitä tietoja keräämme ja tallennamme

Haastattelussa Teitä pyydetään yhteystiedot, taustatiedot, kuvailemaan kokemuksianne toimintakyvystä arjessa ja fysioterapiakokemuksistanne. Haastattelussa Teiltä kerättyjä tietoja käsitellään luottamuksellisesti. Aineisto anonymisoidaan. Henkilöt tai organisaatiot eivät ole tunnistettavissa opinnäytetyöraportissa.

A. Arkaluonteiset henkilötiedot

Tarkenna kerätäänkö ja tallennetaanko arkaluonteisia tietoja.

Tietosuoja-asetuksen 9 artiklan 2 kohdan mukaan arkaluonteisten tietojen käsittely perustuu seuraavaan oikeusperusteeseen:

- Tutkittavan/osallistujan suostumus
- Tieteellinen tai historiallinen tutkimustarkoitus tai tilastollinen tarkoitus
- Tutkittava/osallistuja on saattanut käsiteltävät arkaluonteiset tiedot julkisiksi
- Muu peruste (mikä?):

8. Mistä henkilötietoja kerätään

Aineisto kerätään yksillö haastatteluilla jotka kestävät noin tunnin (1h).

9. Automatisoitu päätöksenteko

Automaattisia päätöksiä ei tehdä.

10. Henkilötietojen suojausten periaatteet

- Tiedot ovat salassa pidettäviä.

Manuaalisen aineiston suojaaminen:

Tietojärjestelmissä käsiteltävät tiedot:

- käyttäjätunnus
- salasana
- käytön rekisteröinti
- kulunvalvonta
- muu, mikä:

Suorien tunnistetietojen käsittely:

- Suorat tunnistetiedot poistetaan analysointivaiheessa
- Aineisto analysoidaan suorien tunnistetiedoin, koska (peruste suorien tunnistetietojen säilyttämiselle): Aineistot tuhoetaan opinnäytetyötutkimuksen päätyttyä.

11. Henkilötietojen käsittely tutkimuksen tai kehittämistyön päättymisen jälkeen

- Tutkimusrekisteri tai muu rekisteri hävitetään
- Tutkimusrekisteri tai muu rekisteri arkistoidaan:
 - ilman tunnistetietoja
 - tunnistetiedoin

Mihin aineisto arkistoidaan ja miten pitkäksi aikaa:

12. Mitä oikeuksia sinulla rekisteröitynä/tutkittavana on ja oikeuksista poikkeaminen

Yhteyshenkilö tutkittavan oikeuksiin liittyvissä asioissa, johon voi ottaa yhteyttä on Satakunnan ammattikorkeakoulu.

Suostumuksen peruuttaminen (tietosuoja-asetuksen 7 artikla)

Sinulla on oikeus peruuttaa antamasi suostumus, mikäli henkilötietojen käsittely perustuu suostumukseen. Suostumuksen peruuttaminen ei vaikuta suostumuksen perusteella ennen sen peruuttamista suoritettun käsittelyyn lainmukaisuuteen.

Oikeus saada pääsy tietoihin (tietosuoja-asetuksen 15 artikla)

Sinulla on oikeus saada tieto siitä, käsitelläänkö henkilötietojasi hankkeessa ja mitä henkilötietojasi hankkeessa käsitellään. Voit myös halutessasi pyytää jäljennöksen käsiteltävistä henkilötiedoista.

Oikeus tietojen oikaisemiseen (tietosuoja-asetuksen 16 artikla)

Jos käsiteltävissä henkilötiedoissasi on epätarkkuuksia tai virheitä, sinulla on oikeus pyytää niiden oikaisua tai täydennystä.

Oikeus tietojen poistamiseen (tietosuoja-asetuksen 17 artikla)

Sinulla on oikeus vaatia henkilötietojesi poistamista seuraavissa tapauksissa:

- a) henkilötietoja ei enää tarvita niihin tarkoituksiin, joita varten ne kerättiin tai joita varten niitä muutoin käsiteltiin
- b) peruutat suostumuksen, johon käsittely on perustunut, eikä käsittelyyn ole muuta laillista perustetta
- c) vastustat käsittelyä (kuvaus vastustamisoikeudesta on alempana) eikä käsittelyyn ole olemassa perusteltua syytä
- d) henkilötietoja on käsitelty lainvastaisesti; tai
- e) henkilötiedot on poistettava unionin oikeuteen tai jäsenvaltion lainsäädäntöön perustuvan rekisterinpitäjään sovellettavan lakisääteisen velvoitteen noudattamiseksi.

Oikeutta tietojen poistamiseen ei kuitenkaan ole, jos tietojen poistaminen estää tai vaikeuttaa suuresti käsittelyn tarkoituksen toteutumista tieteellisessä tutkimuksessa.

Oikeus käsittelyn rajoittamiseen (tietosuoja-asetuksen 18 artikla)

Sinulla on oikeus henkilötietojesi käsittelyn rajoittamiseen, jos kyseessä on jokin seuraavista olosuhteista:

- a) kiistät henkilötietojen paikkansapitävyyden, jolloin käsittelyä rajoitetaan ajaksi, jonka kuluessa yliopisto voi varmistaa niiden paikkansapitävyyden
- b) käsittely on lainvastaista ja vastustat henkilötietojen poistamista ja vaadit sen sijaan niiden käytön rajoittamista
- c) yliopisto ei enää tarvitse kyseisiä henkilötietoja käsittelyn tarkoituksiin, mutta sinä tarvitset niitä oikeudellisen vaateen laatimiseksi, esittämiseksi tai puolustamiseksi
- d) olet vastustanut henkilötietojen käsittelyä (ks. tarkemmin alla) odottaessa sen todentamista, syrjäyttävätkö rekisterinpitäjän oikeudet perusteet rekisteröidyn perusteet.

Oikeus siirtää tiedot järjestelmästä toiseen (tietosuoja-asetuksen 20 artikla)

Sinulla on oikeus saada yliopistolle toimittamasi henkilötiedot jäsennellyssä, yleisesti käytetyssä ja koneellisesti luettavassa muodossa, ja oikeus siirtää kyseiset tiedot toiselle rekisterinpitäjälle yliopiston estämättä, jos käsittelyn oikeusperuste on suostumus tai sopimus, ja käsittely suoritetaan automaattisesti.

Kun käytät oikeuttasi siirtää tiedot järjestelmästä toiseen, sinulla on oikeus saada henkilötiedot siirrettyä suoraan rekisterinpitäjältä toiselle, jos se on teknisesti mahdollista.

Vastustamisoikeus (tietosuoja-asetuksen 21 artikla)

Sinulla on oikeus vastustaa henkilötietojesi käsittelyä, jos käsittely perustuu yleiseen etuun tai oikeutettuun etuun. Tällöin yliopisto ei voi käsitellä henkilötietojasi, paitsi jos se voi osoittaa, että käsittelyyn on olemassa huomattavan tärkeä ja perusteltu syy, joka syrjäyttää rekisteröidyn edut, oikeudet ja vapaudet tai jos se on tarpeen oikeusvaateen laatimiseksi, esittämiseksi tai puolustamiseksi. Yliopisto voi jatkaa henkilötietojesi käsittelyä myös silloin, kun sen on tarpeellista yleistä etua koskevan tehtävän suorittamiseksi.

Oikeuksista poikkeaminen

Tässä kohdassa kuvatuista oikeuksista saatetaan tietyissä yksittäistapauksissa poiketa tietosuoja-asetuksessa ja Suomen tietosuojalaissa säädetyillä perusteilla siltä osin, kuin oikeudet estävät tieteellisen tai historiallisen tutkimustarkoituksen tai tilastollisen tarkoituksen saavuttamisen tai vaikeuttavat sitä suuresti. Tarvetta poiketa oikeuksista arvioidaan aina tapauskohtaisesti.

Valitusoikeus

Sinulla on oikeus tehdä valitus tietosuojavaltuutetun toimistoon, mikäli katsot, että henkilötietojesi käsittelyssä on rikottu voimassa olevaa tietosuojalainsäädäntöä.

Yhteystiedot:

Tietosuojavaltuutetun toimisto

Käyntiosoite: Ratapihantie 9, 6. krs, 00520 Helsinki

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APPENDIX 3. RESEARCH BULLETIN

TIEDOTE TUTKIMUKSESTA

Physiotherapy in the management of visually impaired clients

Pyyntö osallistua tutkimukseen

Teitä pyydetään mukaan opinnäytetyötutkimukseen, jossa selvitetään näkövammaisten asiakkaiden kokemuksia fysioterapiapalveluista ja niiden mukauttamisesta näkövammaisten tarpeisiin. Opinnäytetyötutkimukseen osallistumiseksi teillä tulee olla kokemusta fysioterapiapalvelujen asiakkaana.

Tämä tiedote kuvaa opinnäytetyötutkimusta ja Teidän osuuttanne siinä. Perehdyttyänne tähän tiedotteeseen teillä on mahdollisuus esittää kysymyksiä opinnäytetyön tekijä Cristina Gregorille. Perehtymisen jälkeen teiltä pyydetään suostumus opinnäytetyötutkimukseen osallistumiseen.

Vapaaehtoisuus

Opinnäytetyötutkimukseen osallistuminen on vapaaehtoista. Kieltäytyminen ei vaikuta oikeuksiinne Satakunnan Näkövammaiset ry:n jäsenenä. Voitte myös keskeyttää osallistumisen koska tahansa syytä ilmoittamatta. Mikäli keskeytätte osallistumisen, teistä keskeyttämiseen mennessä kerättyjä tietoja voidaan käyttää osana opinnäytetyön tutkimusaineistoa.

Tutkimuksen tarkoitus

Tämän tutkimuksen tarkoituksena on selvittää näkövammaisten asiakkaiden kokemuksia fysioterapiapalveluista ja niiden mukauttamisesta näkövammaisten tarpeisiin ja luoda sitä varten ohjeistus fysioterapeuteille.

Tutkimuksen toteuttajat

Opinnäytetyön tekijä on fysioterapiaopiskelija Cristina Gregori Satakunnan ammattikorkeakoulussa, Porissa. Satakunnan Näkövammaiset ry on opinnäytetyön tilaaja.

Tutkimusmenetelmät ja toimenpiteet

Opinnäytetyötutkimuksessa aineisto kerätään yksilöhaastattelulla kolmelta (3) näkövammaiselta henkilöltä, joilla on kokemusta fysioterapiapalveluiden asiakkuudesta, lisäksi myös tutkimusnäyttö aiemmista tutkimuksista on aineistona. Haastattelussa Teitä pyydetään kuvailemaan kokemuksianne toimintakyvystä arjessa ja fysioterapiakokemuksistanne. Haastattelu kestää noin tunnin (1 h). Haastattelu nauhoitetaan. Nauhoite tuhotaan opinnäytetyön valmistuttua.

Haastattelussa Teiltä kerättyjä tietoja käsitellään luottamuksellisesti. Aineisto anonymisoidaan. Henkilöt tai organisaatiot eivät ole tunnistettavissa opinnäytetyöraportissa. Aineisto säilytetään opinnäytetyötutkimuksen tekemisen ajan opinnäytetyön tekijän kotona lukittavassa kaapissa, jonne muilla kuin opinnäytetyön tekijällä ei ole pääsyä. Aineistot tuhotaan opinnäytetyötutkimuksen päätyttyä.

Tutkimuksen mahdolliset hyödyt

Opinnäytetyötutkimuksen tuloksia hyödynnetään kehitettäessä fysioterapiapalvelujen laatua näkövammaisille asiakkaille.

Kustannukset ja niiden korvaaminen

Tutkimukseen osallistuminen ei maksa teille mitään. Osallistumisesta ei myöskään makseta erillistä korvausta.

Tutkimustuloksista tiedottaminen

Kysymyksessä on opinnäytetyö, joka julkaistaan avoimesti Theseus-tietokannassa.

Tutkimuksen päätyminen

Opinnäytetyön arvioitu valmistumisaika on lokakuu 2021.

Lisätiedot

Pyydämme teitä tarvittaessa esittämään tutkimukseen liittyviä kysymyksiä opinnäytetyön tekijälle.

Tutkijoiden yhteystiedot

Opinnäytetyön tekijä
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Opinnäytetyön ohjaaja
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Suostumus

Olen saanut tietoa opinnäytetyötutkimuksesta ja ymmärrän mitä osallistuminen siihen merkitsee. Suostun osallistumaan opinnäytetyö tutkimukseen.

Paikka:

Päivä:

Allekirjoitukset:

APPENDIX 4. WORKSHOP LEAFLET

WORKSHOP
PHYSIOTHERAPY IN THE
MANAGEMENT OF VISUALLY
IMPAIRED CLIENTS

Cristina Gregori, PH18. cristina.gregori@student.samk.fi

Monday 8.11.2021 at 16-17

SAMK Campus, room A351

10 available spots will be filled in
registration order - be quick!

