

Video Consultation in Outpatient Clinics

A Techno-Anthropological study of clinicians' experience with the use of Video Consultations in the wake of COVID-19



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STUDENT REPORT

Introduction:

In the spring of 2020, the COVID-19 pandemic resulted in a lockdown of Danish society. In the time since then, society has re-opened and shutdown again several times, resulting in uncertainty and the need to access to healthcare being more flexible and able to reduce the amount of physical consultations.

This project examines how clinicians in psychiatric outpatient clinics have experienced this and their experiences in using video consultations during this period.

The empirical data was gathered through a series of interviews with psychologists and psychiatrists in North Region Denmark.

The Thesis concludes that, although video consultation is useful for some types of consultations, and that it has worked within the context of the lockdowns. However, it is not able to replace in-person therapy that is required for patients in its current state.

By signing this document both group members confirm having participated equally in the project and are collectively responsible for the contents of this report.

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Preface

This report is a Master's Thesis written by two Techno-Anthropology students enrolled at Aalborg University, Aalborg Campus in the spring semester of February 2nd - June 4th 2021. It is a study examining the experiences of clinicians working within psychiatric outpatient clinics in The North Denmark Region.

We would like to thank everyone who made the study a possibility; our supervisor Lone Stub Petersen and the clinicians, without whom this would not have been possible.

Glossary

Word	Definition
Clinician	A medical professional working in the healthcare sector. In this report, the clinicians work as either psychologists or psychiatrists.
Informants	The interviewed clinicians of this Master's Thesis.
In-person meeting	A session where both the clinician and patient are physically in the same room.
Outpatient	A patient connected to an outpatient clinic.
Video consultation (VC)	A virtual contact with a healthcare provider that results in diagnosing or treatment, done via video chat.

1.0 Introduction

In the wake of the corona pandemic, several health services have started using video consultation (VC) either as a replacement or supplement to their normal service. This Master's Thesis intends to gather experiences of the clinical workers (psychologist and psychiatrists) use of VC. In order to gain insight regarding the clinicians' experience with VC, five interviews with clinical workers working at outpatient clinics in North Region Denmark have been conducted. This qualitative empirical gathering is complemented by literature search related to research in both the technological and the field of disease.

The findings from interviews will be presented in the analysis where the most essential themes are explored.

Lastly, the conclusion of the problem statement will be presented.

2.0 Problem analysis

In this chapter we will present our problem analysis. The problem analysis has to be read as a description of which the case of the Master's Thesis takes place.

2.1 COVID-19 in Denmark

At the end of 2019, on December 31st, the COVID-19 virus was first identified in the Chinese Wuhan province where it appeared to remain relatively contained. However it would soon start spreading across the rest of Southeast Asia and from there the first case appeared in Europe in France on January 24th (Santé publique France, 2020). Soon after, cases had been confirmed across the world and it was declared a global pandemic by the World Health Organization (WHO) on March 11th 2020. On the same day, the Danish government, led by Prime Minister Mette Frederiksen, declared a state of national lockdown, effectively shuttering Danish society by closing the majority of all public institutions and encouraging business and the private sector to do the same. This lockdown was at first announced to last for 14 days, but was extended and lasted until June 15th 2020 when the borders were again opened, allowing entry for German, Norwegian and Icelandic tourists as well as spouses and children of Danish citizens. (Tænketanken Europa, 2021)

This opening would last until October 23rd 2020 when the second round of lockdowns was announced, this time lasting until April 6th 2021, when the so called "liberal professions" were again allowed to reopen, followed by a larger reopening of society on the 23rd of April 2021.

For the healthcare sector, the lockdowns manifested themselves in a number of different ways. In the primary sector, the overall number of consultations with physicians increased, from an average of 40.715.493 between 2010 and 2019, to 45.653.002 (Danmarks Statistik 2021), a rather large increase. The use of video consultations remained stable, except for a spike around the time of the first lockdown. Video consultations also saw a large spike in the first weeks of the lockdown, but have since stabilized at a lower level. In the secondary health sector, the total number of referrals to somatic treatment saw a decline when the lockdown began: From 17.377 referrals in week 10 to 7.131 in week 12, but had returned to a level comparable to pre-lockdown during the fall of 2020: with an average of 18.107 between week 37 and week 48. After the new year however, the first two weeks saw a 10 % decrease compared to 2019. Outpatient consultations with a physical presence saw a 20 % decline in the first months of 2021 compared to 2020 and a comparable decline also happened in the psychiatric sector, despite this particular

area being required to provide the same care as before. It is possible that some of this decline can be found in the increase of video consultations for the entire outpatient sector, but unfortunately the ongoing monitoring of activity in the healthcare sector does not yet list video consultations separately for the psychiatric sector and the rest of the outpatient sector. A separation of the two is planned to begin, starting with the next published report. Regardless the total decline in both sectors outpace the increase in video consultations in both, suggesting that there has indeed been a decline in the psychiatric sector (Sundhedsstyrelsen, 2020)3.0

Problem statement

As the COVID-19 virus was considered to pose a significant threat to the health and well being of citizens, on March 11th 2020, the Prime Minister announced what would become the first lockdown effective from March 13th 2020. As a part of this lockdown physical attendance was discouraged in the private sphere and mandated in many parts of the public sphere. As a result of this many public healthcare services began to implement, or expand existing, video consultation programmes. In the primary healthcare sector this was done at the discretion of each practice, as each clinic is responsible for what services are offered. In the secondary sector however, video consultation became mandated in many situations where a clinician had to consult with patients.

In the context of this shift to video consultation, and the extended period in which this has become the norm in terms of day to day work, we would examine how the shift to more online communication has had an effect on the clinical work.

“How has the work done by clinicians in an outpatient setting been affected by lockdowns and how has the transition to video consultations affected the clinical work?”

3.0 The Case

This section will contain a description of the technology and its historical context for the case of this Master’s Thesis. A review of the political will that has pushed towards a more digitalized healthcare sector in Denmark.

3.1 Telemedicine

According to the World Health Organization (WHO) the concept of telemedicine “healing at a distance” was coined in the 1970’s (World Health Organization, 2009). This definition however is rather lacking, so a broader one was needed:

“The delivery of health services, where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of

valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interest of advancing the health individuals and their communities". (World Health Organization, 2009)

The definition of telemedicine thus includes a broad understanding of the exchange of information at a distance via electronic communication equipment with the intention of improving patient health. However, the definition does not describe between which parties that the exchange of information is to take place, but only that the aim is patient health. Communication can thus take place among health professionals themselves, but also between health professionals and patients. Telemedicine is all information exchange of health related data, which aims to eliminate distance as a barrier to collaboration. (Wootton, 2001)

Telemedicine solutions are mainly meant to deliver the technologies to meet the need for either direct or indirect communication between health professionals and patients. The benefits of telemedicine are intended to result in more efficient working hours, fewer admissions and time saved on transport for patients. In addition, these benefits are also intended to address future demographic developments, so that the current level of service in the healthcare sector can be maintained.

3.2 Digitalization of the healthcare sector

Technological advances have historically played a major role in improving people's health. From its beginnings in the 1700's to this day, there has been an enormous development in knowledge and technology within the Danish healthcare sector. One rather recent change in this sector is digitalization. The Danish healthcare has mostly moved away from paper based documentation through the digitization of existing workflows and more recently begun the process of interconnecting the various healthcare databases, so that documents like a patients journal can be accessed everywhere in the country, in both primary and secondary sectors (Fredskild, 2015). The reason for this digitalization and innovation of healthcare is about developing and improving workflows and ensuring that, despite a demographic change, we can maintain the level of welfare that is present today. Innovation has therefore been a top priority in the foundations of successive governments over the last couple of decades. In the government framework of the 2007 VK cabinet, a large part dealt with the necessity of technologic and work advancements in the public sector, and the healthcare sector in particular. In 2011 the new S-R-SF cabinet presented their plans, and again there would be a focus on innovation and cooperation between knowledge institutions and private companies, with the aim of innovation and problem solving through public-private collaboration. And again, the new V cabinet of 2015 focused on innovation to solve upcoming and already existing challenges in healthcare and the

Danish welfare model. Looking to the future, the greatest challenge that these governments were all trying to get out ahead of, is the increasing number of elderly and chronically ill patients, who will put pressure on the healthcare sector. The increased number of elderly and chronically ill is a result of the increased life expectancy due to scientific developments in medicine and IT. It is possible to treat more and more people, and offer more specialized care to a long range of diseases and illnesses. The end-result is an increased demand for healthcare services, which also in the future must live up to current standards. Demands are being made regarding healthcare and its services. Because of this a great emphasis has been put on innovation and effectivization in the current workflows, this is where telemedicine finds its purpose in being a tool which potentially is able to save costs that can be better spent elsewhere in the future. (Dalkjær og Fredskild, 2017)

Being a part of the public healthcare sector, the psychiatric healthcare services are subject to the same digitalization and innovation goals. It is estimated that at any given time, approximately one in ten people residing in Denmark will meet the criteria for a psychiatric diagnosis (Bedre Psykiatri, 2019). In addition one in three Danish residents will at some point in their life start treatment for a psychiatric diagnosis. (Pedersen et al., 2014) The rate at which patients are engaging with the psychiatric sector is rising as well, from 110.000 in 2009 to 141.000 in 2014 (Mikkelsen & Dalkjær, 2015)

These numbers call for the same kind of innovation and digitalization's outlined in the chapter above. In 2018 a financial agreement was conducted by the government, the Danish Regions, and Local Government Denmark (KL), which stated a new strategy for the Danish healthcare sector and a number of initiatives on telehealth and digitalization, with the aim of turning Denmark into a global frontrunner. These initiatives were written down as part of the report "A Coherent and Trustworthy Health Network for All". (Ministry of Health et al., 2018) Within there are 5 outlined areas of focus in the strategy including 27 specific objectives that are expected to be realized by 2022.

The five focus areas are:

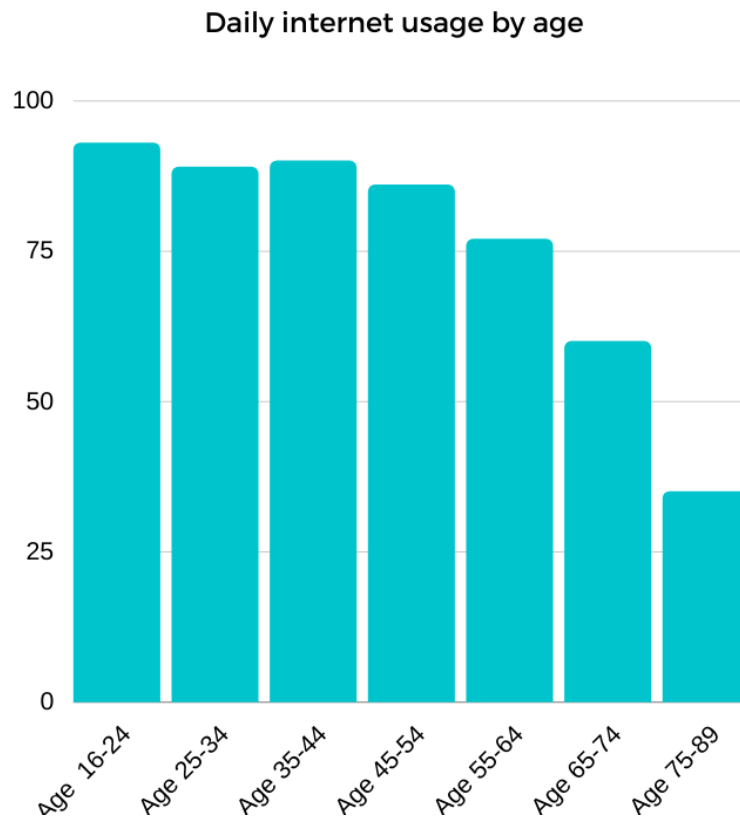
1. The patient as an active partner
2. Knowledge on time
3. Prevention
4. Trustworthy and secure data
5. Progress and common building block (Ministry of Health et al., 2018)

The first focus area specifies how the intention is to make the patient more equipped to be an active partner in their own course of disease and be able to for example manage their own health. Due to the demographic change of more elderly people and more people having a chronic illness, more patients will need to be in contact with the

hospital or healthcare sector in general. To manage resources optimally, the goal is to educate the patients and give them a better insight into their own illness and health data, and this could give the patient a more flexible contact with the healthcare services. A more flexible contact with the healthcare services means more efforts will be moved from the hospital (secondary sector) to the primary sector and more people will experience treatment in outpatient clinics or in their own home via telemedicine technologies.

One of the objectives within this focus area, is a way of creating the intended overview of the patients health services and treatment, a specific tool such as Sundhed.dk is established, to make all information from the hospital, practice sector and municipal health services unified and easy to find for the patient. (Ministry of Health et al., 2018)

A valid concern regarding all this digitalization is the internet skills of the Danish people. According to a yearly report from Statics Denmark "IT-usage by the population 2020" (Danmarks Statistik, 2020), 97 % of all families have an internet connection within their home and 96 % of all households have a mobile phone and 91 % have a PC. Although the use of the internet differs regarding the age of the population. As seen in the graph below, the daily usage of the internet is reduced drastically, when you get older. 93 % from age 16-24 use the internet daily or more and the number drastically declines when you get to the age of 65-74 where the number's 60 % and the latest group of age, the 75-89 years old had a usage of 35 % per day.



Graph 1: Daily internet usage divided by age (Danmarks Statistik, 2020)

Therefore, it is important to keep in mind during the digitalization of the healthcare sector that there's still Danish citizens that don't necessarily have the capacity or willingness to be part of the transition, and it is important to have those citizens in mind when changing the way of how we use the healthcare system.

The second focus area specifies how it's the intention to make the infrastructure of IT-systems and common standard in the healthcare more coordinated, so the healthcare professionals have an easier and better overview of the patient and can get access to the information they specifically need in their plan of treatment.

The third focus area describes how early intervention or disease prevention should be prioritised. This can be done by carrying out some treatment via telemedicine so some of the treatment can happen in the patients home, rather than forcing them to visit the hospital, for example using video call with a specialist if needed.

The fourth focus area is about digital security and how it can be assured that only the necessary professionals have access to the potentially vulnerable health data concerning a patient. The safety standard is based on ISO27001

(Digitaliseringsstyrelsen, n.d.), which is an international safety standard. The reason for this, is so the supplier of a given technology or service can document that they have made the necessary technical and organisational safety measurements, and it's a standard that is demanded for all public authorities to comply.

The fifth focus area concerns how the increased number of patients creates a demand for a more agile and flexible development and implementation of digital tools in the healthcare sector. (Ministry of Health et al., 2018)

3.3 Video consultation in The North Denmark Region

In the North Denmark Region it has been decided that the clinician will use the video consultation platform VideoSamtale. In this section there will be a review of the technology and its use.

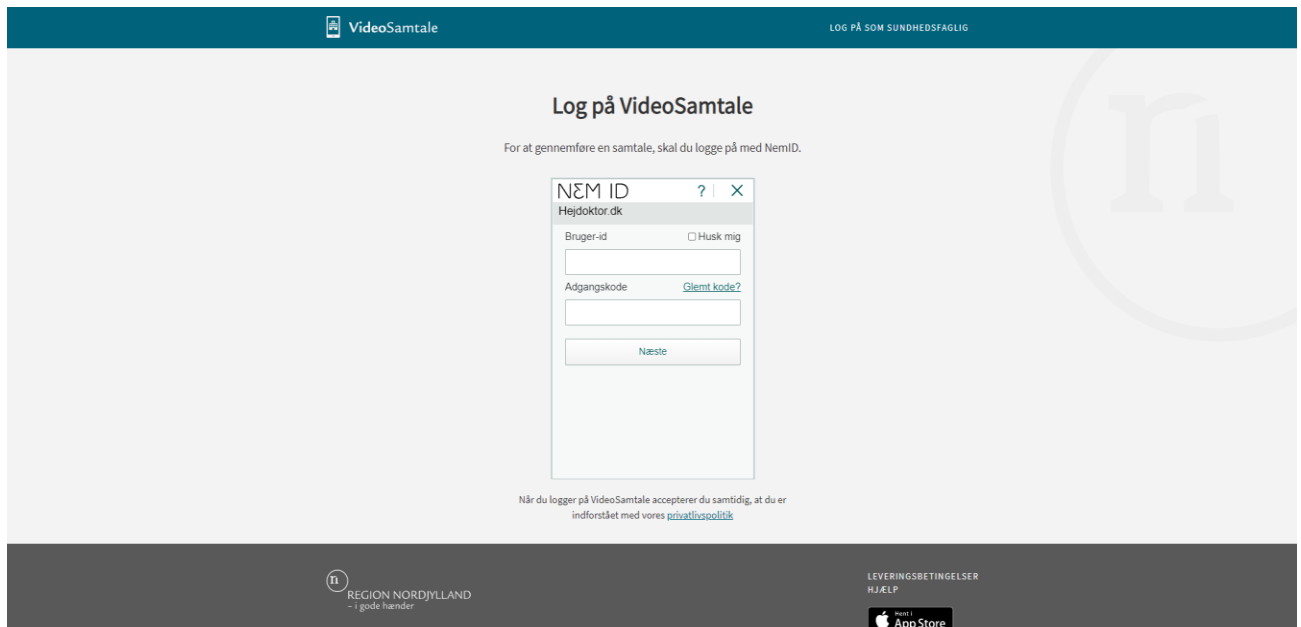
The specific use of video consultation technology in the outpatient clinics in The North Denmark Region is the app VideoSamtale or the website <https://videosamtale.rn.dk>. This app is developed by the North Denmark Region and is only used within the same region. The app is available on Apple's App Store for Apple devices with the newest version of iOS and Google's Play Store for Android devices with Android version 6 or newer.

How VideoSamtale works through the smartphone app:

- Open app and log-in via NemID (see picture 1)
- Press "Yes - begin a video call"
- Enter social security number and press "Continue"
- Give permission for the app to use your webcam, microphone and a notification about the clinician calling.
- Afterwards you will be asked if you want to start a consultation. If you press "Continue" you will be put in a queue to a video conversation.
- The clinician will give you a call at the expected time of consultation. If you have your device closed a push-message will appear when the clinician calls. (Region Nordjylland, 2021)

As an alternative to the smartphone app, is it possible to use VideoSamtale via PC in the web browser, where the Region recommends to use the latest version of Google Chrome or Mozilla Firefox (Region Nordjylland, 2021) The log-in process is the same as stated above with the app, but in order to do the VC via the web browser is it important that the PC's monitor won't go to sleep, or else the patient won't receive the call from the clinician.

As seen in picture 1, in the top right corner there's a gateway for clinicians to log-in in order to conduct the VC. The clinicians only use the web browser for the consultations.



Picture 1: Screenshot from videosamtale.rn.dk (Region Nordjylland, 2021)

3.3.1 The informant's area of expertise

In order to be able to understand the complex field of illness our informants work within and the type of patients they have, this section will describe the aetiology of anxiety. This mental illness is the primary disorder that the patients of our informants have.

Anxiety disorders are one of the most common mental illnesses in Europe. Anxiety is an umbrella term describing several psychological diagnoses, among which phobias belong. It falls into the ICD-10 category of “nervous and stress-related disorders”. (World Health Organization, n.d.)

Anxiety is a natural reaction to danger, it's a defence mechanism to ensure survival by making sure we react to danger. Under the umbrella term of anxiety, there are several other conditions, one of them is OCD (Obsessive Compulsive Disorder). (Ströhle et al., 2018) Anxiety reactions are characterized by an emotional discomfort, the intensity of which can vary from a lesser degree of discomfort to an unbearable state of panic in which fear of death may occur. Psychological changes may occur such as palpitations, shaking, sweating and dryness of the mouth. An anxiety reaction can trigger cognitive thought processes about anxiety-provoking situations or consequences feared in the context. In addition, there may be a brief behavioural change in which escape from the situation may be a frequently occurring behaviour. Anxiety or fear is an innate human reaction which from an evolutionary point of view, has a significant impact on the survival of the individual. The purpose of anxiety is to prepare the individual to either fight or flee from the danger in question.

Anxiety can occur in many different mental disorders and in connection with serious somatic illness. Anxiety often occurs as a natural response to changes in the life situation of illness. (Ströhle et al., 2018) It is a relatively unspecified illness characterized by changes in emotions, behaviour and cognition. For anxiety to exist, there must be certain symptoms present. There are two main groups of symptoms associated with anxiety disorder. Those are autonomic and other symptoms. In anxiety there must be at least one autonomic symptom, for example tremor, dry mouth, increased sweating and palpitations or rapid heart rate. In addition, there may be symptoms such as other categories, chest or abdominal pain, tension symptoms, psychological symptoms, general symptoms or non-specific symptoms. (Craske et al., 2009)

3.4 Outpatient clinics

In this chapter the function and statistics of outpatient clinics in general will be presented and furthermore a more specific view on outpatient clinics related to the case of this Master's Thesis.

In today's Denmark there are 54 public hospitals (Patientforeningen, n.d.) , whereas in 1927 there existed 160 hospitals. (Dansk Sygeplejeråd, n.d.) This reduction of the number of hospitals has occurred parallel with the transformation from 14 counties in 1970 to five Regions in 2007 and the merging of municipalities, in 1970 there were 271 and in 2007 about 98 municipalities. (Ministry of Interior and Health, 2005) In 1980 there were 30,967 beds at hospitals, compared to 2006 which only had 18,900 beds. (Almind et al., 2009) There are several reasons for this trend. The technological developments with new options for examination and treatment and financial constraints. Thus there is a trend towards fewer hospitals, greater specialisation and fewer hospital beds. The pressure on the healthcare sector has led to calls for improving efficiency and increased optimal allocation of resources. One of the ways in which pressure on bed places and bed days is minimised is through the establishment of outpatient clinics, as not all patients necessarily need to be in hospital and occupy a bed during a course of treatment. (Dalkjær og Fredskild, 2015)

An outpatient clinic is a place of examination and treatment for patients who are not admitted to a hospital thus they do not admit a hospital bed. The patients of an outpatient clinic will still take up resources such as the hospital's affiliated specialists, who support the out-patients course of treatment. In addition to the function of examination and a place for treatment, the outpatient clinic works as a tool for administration and streamlining hospital resources and helps reduce the number of bed days. (Engelbrecht, n.d.)

The definition of bed days is defined as a single patient's admission to a hospital for one day (Ibid.). The bed days can thus be saved, when a patient is convened for a

preliminary examination, aftercare and regular check-up in the outpatient clinic. The majority of outpatient clinics today are so-called closed outpatient clinics, which means that a physician's referral is required. Open outpatient clinics where a patient without a physician's referral can seek out the outpatient services were formerly known as polyclinics. (Ibid.)

3.4.1 Statistics of outpatient patients and treatments in Denmark

As it can be extracted from Figure 1 from Statistics Denmark, the number of patients in outpatient clinics in general in Denmark has increased since 2006. The definition of an out-patient is “*people who have received outpatient treatment one or more times during a year*”. (Danmarks Statistik, 2018) In the period from 2006-2018 the number of outpatient patients increased from 1.451.419 to 1.829.572, which is an increase of 26.1 %. In the North Denmark Region, the number of patients were in 2006 and 2018, respectively 145.186 and 185.761, an increase of 28 % or 40.575 patients in total, a bit higher than the national increase.

Sex: Total | Key figures: Out-patients | Region:

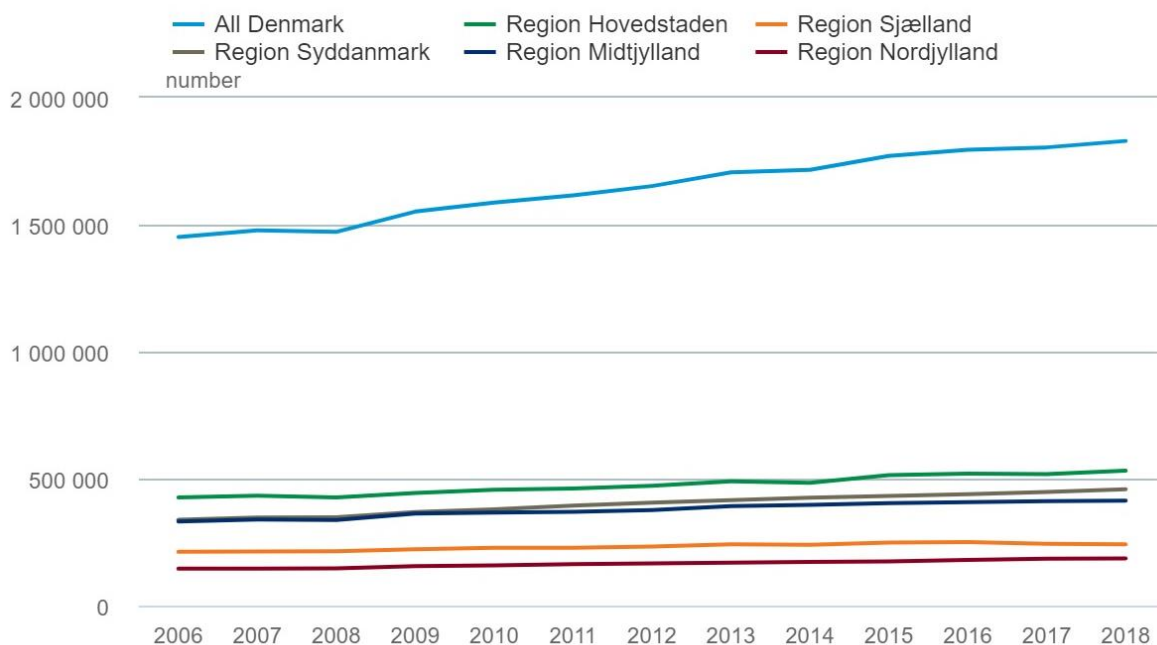


Figure 1: Outpatients from 2006-2018 (Danmarks Statistik a, 2021)

The number of treatments in outpatient clinics has obviously increased as well. As seen at figure 2, the total number of treatments in outpatient clinics at a national level was 5.808.822 in 2006, and 7.984.223 in 2018. This equates to an increase in the number of outpatient treatments of 37.5 % in the 12-year period. In the North Denmark Region the numbers of treatments are 499.978 in 2006 and 747.140 in 2018. An

increase of 49.4 % in the span of 12 years, that's an increase of 11.9 percentage points more than on a national level.

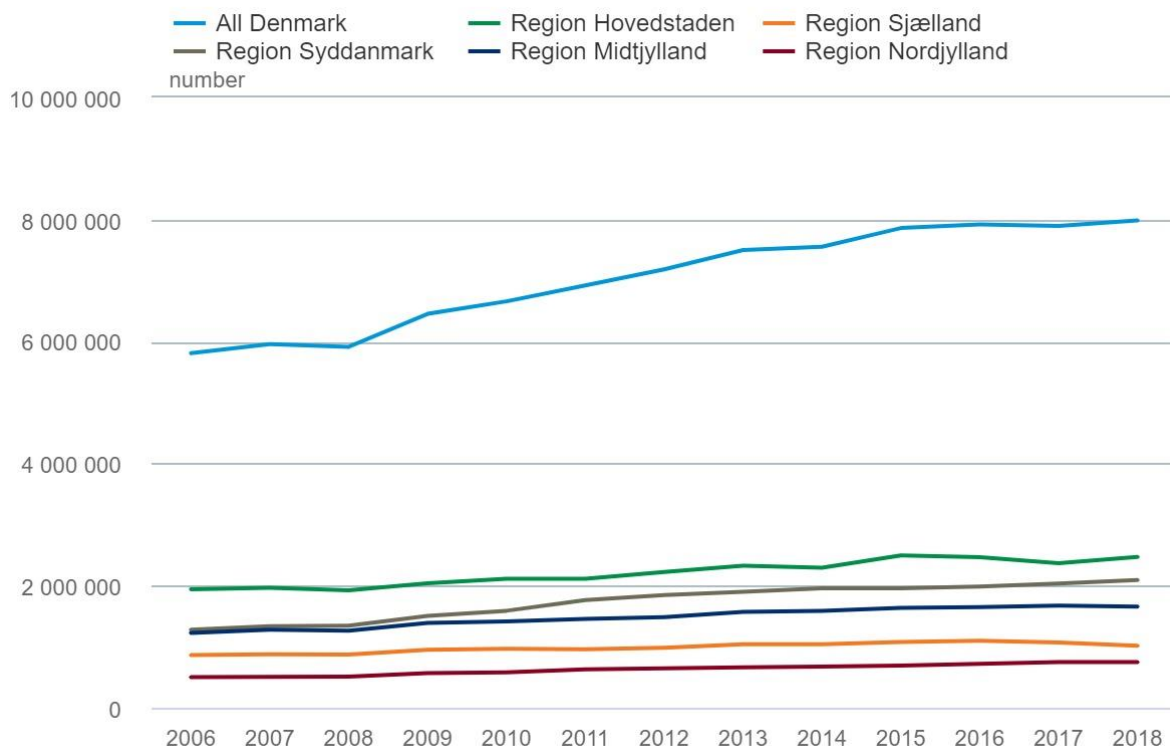


Figure 2: Outpatient treatments from 2006-2018. (Danmarks Statistik b, 2021)

3.4.2. Statistics of outpatient treatments of people with mental disorders

In order to get an understanding of the numbers of outpatient treatments related more specifically to our case of outpatient clinics for people with anxiety and OCD, the following section will give an insight into the number of treatments done with people with mental disorders. The definition of an outpatient treatment is understood as “*an outpatient treatment is done at the hospital during a visit to an outpatient clinic. The type of patient is registered as an outpatient when the patient type is not an admitted patient (or is an emergency room patient - until 2014)*” (Danmarks Statistik, 2018) It must be assumed that this includes when a patient has control visits at the outpatient clinic.

In 2006 the total number of treatments done in Denmark of people with mental disorders were 85.150 and 32.219 in 2018. That's a decrease of 62.3 % in the 12 year period. In the North Denmark Region the number of treatments were 1516 in 2006 and 2507 in 2018. So that's an increase of 991 treatments or 65,4 %.

3.4.3 Innovation and digitalization of the mental health sector

As part of the overall digitalization and innovation of the healthcare sector, of which psychiatry is a part of, it has also been subject to innovation. Approximately 20 percent of Danish citizens are being diagnosed with a mental disorder every year, so it is considered a public disease. The high frequency of diagnosis has led to more people being in touch with the mental health sector. In 2009 the number of patients rose from 11000 to 141000 in 2014. For both men and women, mental diseases account for 25 % of the burden of diseases in Denmark, which makes it the largest burden of disease in Denmark, followed by cancer with 17 % and circulatory diseases at 15.2 %. (Mikkelsen & Dalkjær, 2015)

4.0 Methods

In this chapter we will present the methods that have been applied to answer the problem statement.

Our specific interest in the field of video consultation in psychological outpatient clinics, started with us having worked with the implementation of VC in general practices in a previous semester, and then we came across an article describing how the outpatient clinics in The North Denmark Region had started using VC a lot during the corona lockdown. We then contacted the leader of one of the outpatient clinics to discuss how we could work together on the topic of VC in outpatient clinics. After an initial online meeting, where we had presented ourselves and our skills as Techno-Anthropologists, we discussed how we could contribute with our research and agreed that it would be relevant and also in their interest to conduct a research into how the clinicians have experienced the use of VC in the outpatient clinics. As part of the study we originally intended to include the perspective of the patients, but due to the circumstances of corona and that we work within a very vulnerable group of people, people with various mental disorders, we put that perspective on hold and mainly focused on the clinicians own experience.

4.1 Literature search

A literature search has been used to gain insight into the scientific knowledge about the field of anxiety and furthermore what is emerging within video consultation. We have conducted systematic search strings in primarily the scientific field.

The desire of the literature search was to generate knowledge about health professionals' experiences and experiences using VC, as well as the challenges in this

regard. Additional literature of the patient perspective and their experiences were included, to ensure that important material wasn't excluded. The patient perspective is however not as present in this Master's Thesis, as it is not the focus of the project. The literature search was carried out continuously in line with the delimitation of the project.

An initial and broad literature search was made based on the initiating problem. This was followed by a more systematic and a more specific search in relation to the problem analysis.

Due to the many hits on our first literature search, the abstracts were read in order to be able to assess the relevance of the document. The literature search was conducted in the databases Scopus, PubMed, Google Scholar and AUB. Selected literature was closely examined and included in the project. This literature search cannot be considered exhaustive, but on the number of references contained in the databases, it is considered sufficient for a literature study within the framework of a Master's Thesis.

4.2 Interviews

Our empirical data on which our analysis is based upon, are five interviews with clinicians all working at outpatient clinics for people with anxiety and OCD in North Region Denmark. These interviews were all conducted online through Microsoft Teams, hence the lockdown due to coronavirus made it impossible for us to conduct them in person. We used a semi-structured approach where we had created an interview guide divided with themes and sub-questions related to our research topic. The semi-structured approach made room for the informant to go more in depth naturally with topics that might now have been planned in advance for the interviewer. Furthermore, this gave a better flow during the conversation, which is desirable as it all took place online which sometimes can be a barrier of a free flowing conversation. Both writers were present at all interviews, and one was the main interviewer and was mainly responsible for the interview to flow free, and the other one took notes during the interview and did follow-up questions if necessary. We gave the informant an opportunity to read the interview guide beforehand the interview, and some of them wanted to see it, so they could prepare, and those who did that seemed more depthful in their answers. (Tanggaard & Brinkmann, 2015)

Since we work within an area where vulnerable information regarding patients' health conditions may be shared, we chose to make our informants anonymous, and only refer to their workplace and not them specifically. Although the interviews didn't revolve around any specific patients as it was not our focus in the research question, it was agreed with the informants, also for them to be able to speak less restricted, it was of mutual agreement with them to keep them anonymous in the Master's Thesis.

Before all interviews were conducted, we presented them with their rights regarding anonymity and that we will keep the data until the end of our exam in late June 2021, and all data including recorded interviews and transcription of the interviews will be deleted past this. This had already been informed in advance by email, but was repeated before the interview began with an oral approval from the informant.

4.2.1 Transcription

The interviews were conducted in Danish as all the informants were speaking Danish and our transcription were made in Danish as well and are translated to English when referred to in quotes in the Master's Thesis. As we don't feel it adds anything meaningful to the interpretation of the quotes, we have decided to leave out filler-words in our transcription and quotations, so the sentences will stand out as fluent as possible and give the reader a more fluent reading experience. As mentioned above, due to the anonymity of the informants, none of the informants will be referred to by their name, but will be given a 'C' and a number, for example 'C1', so it is possible to distinguish between the informants as we find this of relevance in the analysis.

4.2.2 Coding

As part of working in qualitative research and processing qualitative material such as interviews, it is essential to be able to reduce it and break it down into different segments with a given code or heading. (Brinkmann & Tanggaard, 2015)

Our analysis of the gathered empirical material has been coded via the software tool NVivo. This coding is intended to create an overview of the transcribed interviews and can help to form a structure over the material and provide an overview of which themes recur. The coding was conducted as a systematic review of the transcribed interviews, where headings with the aforementioned recurring themes were established. Subsequently, these passages were divided into different themes and reviewed again, to divide them into several sub-themes to create a more specific section of relevant passages from interviews.

The main themes of the coding process are: "Evaluation", "Organizational", "Relation" and "Non-Verbal". These were selected based on the initial examinations of the transcribed interviews, and the text passages that seemed to fit into their theme were then coded. Subsequently, the coded passages were reviewed again in order to reduce them into sub-themes to refine the codes even more, and make the codes more specific. An example of this sub-theme is under the main theme "Organizational", the sub-themes "Use" and "Before and after lockdown" were made. This way of doing a continuous code on already existing codes is called *coding on*. (Brinkmann & Tanggaard, 2015)

5.0 Theoretical framework

In this chapter, the reader will be introduced to the theory of Jens Müller's technology model TVOP (Technology, Knowledge, Organisation, Product). This theoretical framework will be a supportive framework for the basis of our analysis.

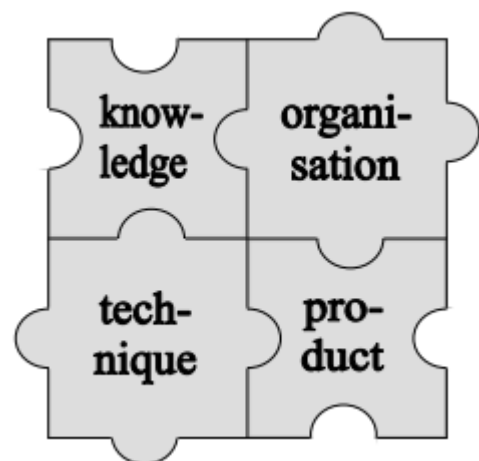
5.1 Conception of technology

As part of the understanding of the examined technology in this Master's Thesis, inspiration has been drawn from the socio-technical theory from Jens Müller (1987), where he has developed a model for what constitutes a technology. According to Müller's conception of a technology, it consists of the four elements, Technique, Knowledge, Organisation and Product, as seen in the picture below. The depiction of the four elements in the figure as connected pieces of a puzzle highlights another dimension to this understanding of technology: It is not possible to separate these elements in a practical sense, as a change in one element will lead to changes in another. It is however possible to analyze and describe each element as it exists in a given situation. (Müller, 2011)

Technique; the merging of work equipment, materials and appliances the workers use as part of the healthcare function. The physical aspects of a technology.

Knowledge; can be found actively among the staff in both the professional knowledge, as well as qualities such as human qualifications, intuition and creativity. Furthermore, is tacit knowledge tied to the use of different types of technique.

Organisation; is the division of labor and the specialized work practices that occur among the personnel. As is often the case, work being done in the healthcare sector is delimited by specialties and hierarchies, which necessitates the communication and dissemination of knowledge across the different groups.



Product; the result of the work process being delivered to the intended recipient. Generally speaking, the healthcare sector does not provide products, but care and treatment. A product, like a specific medicine, might be administered during this process, but it is the care and treatment that is the result of the work process. (Müller, 2011)

The theory has a focus upon the mutual changes that a development of new technology brings. It focuses on both the changes within the specific technology and the people, organizations and society that's affected by the change.

The actors who have the most impact on the decision of technologies are called social carriers of technology and are the societal and social carriers of technology. In the healthcare sector it is the regions that decide which technology to implement through economic and political decisions. (Müller, 2011)

5.2 Technology assessment

We have chosen to incorporate this theoretical framework for our analysis, since the technology within the field is not only already developed, implemented and in use, its use is also mandated and is aiming for a specific level of use. As such, we do not see the possibility of engaging in the development of new technology to replace the existing, but we are rather seeking expertise which can be used in refining the organisational element of the technology.

The purpose of a technology assessment is to clarify the technological innovation process by which new technology is taken from the research to use level. The technology assessment is an attempt to clarify the technological innovation process. This may take the form of a backward-looking assessment, where a technology that is fully developed and is at an operational level is analysed. As it is not possible to affect the development of the technology on the technique level at this stage, this analysis can be used to identify the need for change at the organizational element of the technology. The technology assessment can also take the form of a forward-looking assessment, based on the analysis of problems and needs (Müller, Kjær-Rasmussen and Nøhr, 1988)

The perspective of this thesis is that of a partial assessment, focusing on the analysis of a known technology at the operating and use level.

5.3 Computer Mediated Communication

5.3.1 What is online communication?

Over the last 60 years, the way we as humans facilitate communications over vast distances have drastically changed. Where we used to rely on the postal services, and later telegram and phone lines, to be able to send messages, often with great delay or limited capacity. Today internet based technologies, such as email, instant messaging or video chat and the technologies that they are built upon, allows us to communicate near instantly with anyone anywhere in the world. With the increasing use of video chat as a tool to facilitate contact in the healthcare sector, the question of whether or not we as humans are able to convey the same meaning through these platforms; what is gained and lost, becomes more relevant.

In this chapter, we will first look at the technologies behind video chat, and then take a look at how online communications, and video chat in particular, is the same or differentiated from normal communication.

5.3.2 Video Chat

Video consultation relies on the ability to facilitate and maintain a stable video connection between both parties involved. This process relies both on the actual technical process that makes the transfer possible, as well as communicative processes. In this chapter both of these factors will be presented.

At the most basic level, all online communications rely on the transfer of *data*, units of information that is interpreted and displayed by a computer. When we use a text based, like an instant messenger or email, the text we type on our own screen and send is translated into code that is transmitted and then interpreted and used to display the text on the intended receiver's computer. When we engage in a video chat, the same basic operations happen, but as we are now dealing with significantly more complicated data the processes are now accordingly more complicated. While the actual process involves more steps than this, it can be condensed into the general processes of *capture*, *transfer* and *receiving*.

Capture

Audio and video are captured by the users equipment; the camera and microphone. At this stage the data gathered is simultaneously undergoing *pre-processing*, which is the application of certain algorithms that enhances and cleans up the raw data. After this the data is broken up into *packages*, these are smaller units of data that can be transferred over a network. The purpose of this is to ensure that the user is inconvenienced to the least possible degree by data outages or loss, which manifest on the receiver's end as any number of audiovisual issues. If this was not done, then

missing data would instead manifest as crashes or disconnection from whatever application was used.

Transfer

The data packets prepared in the previous step are given over to the network and transferred to the receiving user's computer. Different video chat applications use different methods of facilitating this transfer, using a variety of different servers, peer-to-peer and protocol technologies.

Receiving

When the data packets reach the user on the other end of the video chat, they undergo a process of being turned back into audiovisual data. This starts with a de-packetization and buffering, where the packets are reordered into the original order and returned to the encoded state they were in before. Next the data is *decoded* into a format that can be seen and heard on the end of the receiving user on their screens and speakers.

5.3.3 Quality

Throughout the many processes that are ongoing in a video chat, there exists the possibility of quality loss, where some part of the experience is less optimal than desired. The concept of quality itself is a subjective matter, regarded as being a construct of the mind. As such, multiple possible definitions of quality exist defined by the context of use. For the purposes of this report, we will be looking at quality as it relates to video chat software.

In "Audiovisual Quality Assessment and Prediction for Videotelephony", B. Belmudez outlines three key characteristics of quality as it relates to videotelephony:

1. It is judged by the user or customer of a service (depending on the context of use),
2. It proceeds of a comparative analysis of a multidimensional entity,
3. (...) It aims at reflecting a "*degree of excellence*" (...) it's "*ability to (...) fulfill requirements*" results from the comparison of the perceived features (or characteristics) to the desired (or expected) features.

Quality then, is something that is dependent on the individual in the specific context the communication takes place in.

5.3.4 Computer Mediated Communication

When we communicate online, the process we are engaging in can be referred to as *computer mediated communication* (CMC). Technically speaking, the label of CMC would cover *any* form of human interaction that is in some way mediated by computer technology. In this broad usage of the term, we can use the following definition from G. Santoro:

“At its broadest, CMC can encompass virtually all computer uses including such diverse applications as statistical analysis programs, remote-sensing systems, and financial modelling programs, all fit within the concept of human communication.” (Santoro, 1995)

As this is a definition that is meant to encompass the term at its broadest, it includes many possible uses that fall outside the bounds of person to person interaction that we are examining. Therefore, we will be using a more specific definition that explicitly centers the idea of human interaction. The definition that we will be using when referring to CMC in this report will be the one formulated by J. December:

“Computer Mediated Communication is a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes.” (December, 1997)

CMC can be further seen as two distinguished categories: synchronous and asynchronous. These categories define how the interaction between the users is mediated in time e.g. communication that takes place in real-time, such as instant messaging or video chat, or communication that does not require the users to engage simultaneously, such as email or forums. Video chat, being synchronous, is dependent on the delivery of the audio-visual signal in a manner that meets the expectations of the user. If this is not the case the perceived quality of the experience degrades and the user might become frustrated by the whole technology, rather than having a satisfactory experience. In video chat, such degradation of the experience happens within the capture, transfer and receiving processes and results in various audio eg. *robotting*, and visual e.g. *freezing or tearing*, degradations (Belmudez, 2015).

The result of this is that, at the base level of conversation; the ability to see and hear the one you are communicating with, the video chat differs from face to face conversation. In addition to this many of the non-verbal signals we normally use become hard or impossible to transfer to the video chat setting. One such signal is eye contact, which becomes impossible to maintain for both parties without specialized equipment. Usually when engaging in video chat, people tend to stare at the person they are talking to, i.e. into their screens and not into the webcam, which would allow at least one party to have some semblance of eye contact. The lack of eye contact has the potential to disrupt the normal flow of conversation, by missing out on

important feedback from the other party. One result of this is that the turn taking which takes place in normal conversation becomes more difficult, and those engaging in conversation are more likely to talk over or past each other. To avoid this people will take longer pauses at the end of sentences, which again disrupts conversation. This again leads to conversations via video chat needing more time to convey the same information than it would in a normal face to face conversation.

These are by no means an exhaustive list of problems that can be experienced during video chat, but they indicate that the mediated conversation differs from the face to face conversation in rather impactful ways, and that anyone using this for professional purposes need to be aware of this and be ready to compensate. Still video chat is more able to convey meaning than text or audio only and as such is able to facilitate more effective communication when needed. (Bitti & Garotti, 2011)

6.0 Analysis

The table shows the five informants who were interviewed as part of the empirical data gathering. All the informants work within psychiatric ambulatory clinics in the North Denmark Region. Four of the informants work as psychologists, while informant C4 works as a psychiatrist. As all informants are anonymized, they will be referred to as shown in the table.

Informants	Occupation
C1	Psychologist
C2	Psychologist
C3	Psychologist
C4	Psychiatrist
C5	Psychologist

6.1 Evaluation

The fact that clinicians had to adapt to the use of VC as part of their treatment offers, was not something self-chosen internally in the outpatient clinics. It happened abruptly due to the situation of corona. Therefore, we thought it was relevant to ask them about evaluation of the technology and whether it is something that they have done. This section is divided into two sub-themes: Internal Evaluation and Patient Evaluation.

6.1.1 Internal Evaluation

When C4 is asked about how they have evaluated the use of VC in the outpatient clinic, she responds that it is not really something they have formally done. It has mainly just been a bit of talking here and there among the clinicians.

“I wouldn't say there was such a formal plan, it was just such a collegial talk about how these video consultations are going, so in that way, mostly you focused on the practical stuff.” (Translated transcription, C4)

C5 and her workplace have had some more formal conversation about the evaluation of VC. They had a meeting in their respective working groups they're organized in at the outpatient clinic and shared their experiences, which were then written down and handed to the managers.

“(...) Well, we simply had some meetings with the different teams and also differences in how, because they work differently and with different methods, and some you work mostly individually and with others it's groups and so on. So it's just been with the different teams.” (Translated transcription, C5)

C5 mentions how she would have liked to see some form of training or education in the use of VC. As the use of technology has come almost overnight, thus there hasn't been much time for introduction of training in how to use it appropriately. She feels that this lack of training prevents her from doing her job as a psychologist optimally.

“(...) I think we need some courses or some workshops or something, where maybe someone who had some experience with this could come and teach us something and inspire us, so that we could move a step forward with these virtual solutions, because I think there is definitely a lot that could be better if we became better at knowing this medium and could use it in a therapeutically more appropriate way. I'm sure it would be improved by that, yes.” (Translated transcription, C5)

The lack of training in the use of VC is something that is common among the five clinicians. None of the five clinicians has been distributed any training or education regarding the use of VC. C2 describes how it is not challenges with the technical aspects that have caused her problems, which she has sought out herself by being curious, and has acquired tips such as elevating the computer by stacking it on books, in order to make the camera angle better suited for VC, and how it can be a good idea to look alternately into the camera and at the patient to make some sort of illusion of eye contact.

“(...) how to achieve good contact via digital media, because the technical stuff I haven't really needed that much, because it's quite intuitive, it's just about pressing some buttons and figuring it out. I can imagine that some older colleagues might have needed some technical introduction as well, but it's more this thing of how do I make good contact, and also, well, I've read up on all sorts of things, like you can stack the computer up on some books to get the right height, and it's a good idea to alternately look into the camera and at the picture, and that's to make good contact, or to create the illusion of good contact. And I could have imagined that I wouldn't have had to come up with that myself, and it hasn't been in the context of psychotherapy, it's been in the context of "the good meeting", for example.” (Translated transcription, C2)

6.1.2 Patient Evaluation

All informants have made their own experiences with patients about the use of VC. It is their firm perception that not all patients are suitable for a consultation via VC. There may be several reasons for this, a recurring cause is the diagnosis of some patients, where it would be inappropriate to consult them via VC due to their condition. C5 talks about how she has experienced that some patients even ask if it's possible to come in physically at the next consultation, since they didn't think that they got enough out of the therapy conducted online.

“Well, about my patients, it has also been a little different, so some have found that it actually works very well, but I can say a little that some have lacked that to come in and be together in a room. And sometimes, well, someone who I continued to have virtually, who asked "may I please come in? Because it's different when I'm in there, I get more out of it.” (Translated transcription, C5)

One of the more positive aspects mentioned by several of the informants, it that the consultation becomes more accessible for some patients. There may be cases where patients having a pressured every day, partly because of their diagnosis. They may not have as many resources and it may be a big expense for them to have to take public transport such as bus or train to attend a physical meeting. With VC, they avoid this and can practically sit at home in their bed and attend the meeting. As C1 talks about in the quote below, some patients also experience it as a less impactful experience, they may not need to be as present and invest as much as it normally takes to be part of the consultation. For some it might be good, but for others it can be a bad experience as they can feel disconnected to the clinician.

“In different ways. And then there are some who also think it's really nice that they don't have to spend money to come here by bus. It's just so practical and a lot of our patients are also financially challenged, so they think it's great. I think there are also some who think it's nice that it's a little more emotionally distant. So that way, you get

to talk a little more with your head, and not so much with your heart and body. And for some that can be very nice, and for others it can be very provocative. That they don't feel that you're really listening, or really understanding them.” (Translated transcription, C1)

Furthermore, C1 mentions how she has never experienced a more stable psychoeducation team, than after they moved it to video. The biggest challenge in this regard is it requires a bit more from her hand to make the patients participate more actively than usual, because sometimes it takes a little incentive for the patients to unmute themselves.

“So on the positive side, we can actually see that these are the most stable psychoeducation teams we've ever had. That's really good. There's been full attendance every time, and there usually isn't. And I think it's about the fact that it's also a bit easier to connect from home.” (Translated transcription, C1)

6.2 Organizational

The way in which outpatient clinics organize themselves has been affected by corona and the sudden introduction of VC. This theme looks at the change this has brought, with the sub-themes “impact of lockdown”, “use” regarding the use of technology within the outpatient clinics and “patient framing” which refer to how the framing of consultation has been significantly different.

6.2.1 Impact of lockdown

Before corona lockdown the use of VC was barely used or used at all in the outpatient clinics. One of the clinician describes how they first started using it, after the lockdown began. With the sudden restriction of in-person meetings at the clinics, they had to seek alternatives to how they could continue doing therapy with patients, as the outpatient clinic is part of the hospital system and therefore is a critical function.

“(…) there wasn't really anything called video [consultation] before corona. As far as I know, not at all regarding the patients at least. Well there was once in a while feedback through the phone. But there was nothing called video at all. And that changed then, well, in March, when the country shut down. Because then we had to continue to function as before in terms of seeing our patients, because we are part of the hospital system, and were deemed a critical function. But had to convert as much as possible to video, and that meant that within a week, I think almost, all of a sudden we got laptops and this video call app was launched, which we then suddenly learned to use.” (Translated transcription, C3)

The clinicians were introduced to the online platform VideoSamtale (described in chapter 4.3), and they started using that for the patients that were eligible for VC. Due to the condition of some of the patients, video consultations weren't feasible for every patients, so at first it was only 40 % of the patients that were consulted online according to C2.

“But there were also many who still had to show up, so I think there at first I had maybe half of those I usually see, it was over video approximately. As little as 40 %, yes” (Translated transcription, C2)

6.2.2 Use

As mentioned above, VC isn't feasible for all patient cases or situations. A common theme among the clinicians is that VC is more applicable for patients they already have established a relation with, and C4, the psychiatrist prefers to use VC for medical conversations, status regarding blood tests or follow up in general. Very rarely does C4 use it for therapy and only if she already has a good rapport with the patient.

“Because as I said, it can't be used for everything, and it can't be used primarily for a patient that we've never seen here. That's the first thing. "What do I use it for?" Usually I use it for some short medical conversations, such as if they're starting medication or following up on medication, following up on blood tests, for some status, how it's going and what's happened. And in very rare cases, if I know the patient really well and I can't find the time physically, then I might have therapy conversations” (Translated transcription, C4)

The work as a clinician since the introduction of VC has changed a bit. It can seem exhausting for clinicians to have to sit in front of a monitor for a long-time conducting VC when they are used to in-person sessions where they can “feel” the presence of the patient. In order to avoid or reduce that, they try to organize themselves so that they alternate between online and physical meetings if possible. However, in some situations when working from home a full day of online consultations is inevitable. This phenomenon of getting fatigued during a long day of video calling has in popular terms called “Zoom fatigue”, and can be caused due to an overload of non-verbal cues (Bailenson, 2021)

“I think we're trying to see if we can spread it out a bit with these virtual solutions [video consultation], because it's actually really hard to sit this way. It's really demanding, and I think that's one of the things we've found out, that it's really very tiring to sit at a screen like that and be very preoccupied with whether you're in contact with the patient, and it is on the phone, so I think that most people try to spread it out a bit, and

then of course it can be that if you have a home working day, you have to take it all together. So I think we probably think a little bit differently when we plan.” (Translated transcription, C5)

6.2.3 Patient framing

The transition into VC has been a massive change, not only for the clinicians, but for the patients as well and how they're used to receive therapy and what role they have. It has taken some time for the patient to get used to, and according to the clinicians, it hasn't always been an easy task to make them feel comfortable during a VC. For example in the citation below, C5 talks about how it was necessary to talk with the patient about the importance of being present and not having a lot of distraction going on, for the session to proceed appropriately, so the patient doesn't get a subpar therapy session. Normally an in-person meeting is being conducted in a closed therapy room, where only the clinician and patient are present, so the risk of getting interrupted by the surroundings is at a minimum. This new way of conducting therapy requires adaptation from both parties, and one of the clinicians mentioned how a “new culture” must be built regarding a VC. This new culture refers to a set of rules and a framework for what is a good online consultation, an example of this could be it is important to agree that the consultation is a closed room, where only the patient and clinician takes part, and family members or anything like that aren't able to interfere during the consultation unless otherwise agreed.

“Well, I would say that it can be really important to have a talk with the patient about the need for calm, and that's perhaps one of the really big challenges we've had, is that the patient also needs to get used to what this solution is. This medium, how can it be used? Because sometimes we have experienced that suddenly a dog or a cat comes in, or across the keyboard, or the boyfriend comes in and says something, or the patient says, "I have to go out, there are some children in here", so all this that can disturb you, you have to be prepared for that, and we don't have that problem when you are sitting here in an office.” (Translated transcription, C5)

6.3 Relation

The relation between clinician and patient is something that has been researched upon a lot. The quality of the relation is to be considered of high importance regarding the quality of the therapy treatment. In this theme an introduction to literature regarding the relation and its importance will be presented.

6.3.1 Clinician-Patient relation

The clinician-patient relation is an important perspective in therapy and an essential part of the patient-centered concept. The clinician-patient relation goes beyond the consultation and represents a general relationship that can be compared to any relation between two people. It is also a complex subject whose meaning differs between different people. This relationship is something all the informants mention as an important aspect in the therapy and can affect the quality of the output of their therapy.

“(...) It sometimes becomes more about, "oh now I didn't hear you again", there are so many things that can make me feel like a poorer therapist and I think that becomes stressful, or kind of becomes burdensome. And it becomes stressful that you can't trust it [the technology]. And it gets frustrating too with the less contact with colleagues. I think there are several things where it affects the work environment.” (Translated transcription, C3)

This understanding is something that is in line with the research on the matter. According to research, a correlation can be seen between how good the relationship is between patient and clinician and the quality of care the patient receives, regardless of therapy type (Knobloch-Fedders, 2008). This good relationship is also called “a therapeutic alliance”. According to Bordin (1979) the therapeutic alliance consists of three elements. The first element is agreement on the goals of the therapy. For example, psychodynamic psychotherapy is often focused on how the patient becomes affected by his or her thoughts and feelings. The next element of the therapeutic alliance is that the clinician and patient agree on the tasks that they each have, an example of this is the clinician as a listener, while the patient reveals what is on the mind. An important aspect of the alliance is that the patient is stable and attends to the agreed therapy sessions. In addition, the therapeutic alliance consists of the bond and strengthening of the relationship between clinician and patient. A bond that they must develop together during the therapy. It is important that the clinician is in possession of some competences called “non-specific factors” (Chatoor & Krupnick, 2001) which include the ability of the clinician to be emphatic, committed, positively appreciative and to demonstrate an unconditional acceptance of the patient. (Bordin, 1979) (Johnson & Wright, 2014)

“(...) That's where it gets really difficult, because you need this relationship where you're sitting in the same room and you can relate to each other. Therapeutically, not quite the same thing happens in these virtual rooms as when you are sitting in the same room and can get to know each other better. (...) So there are many factors here, both relational and technical, and I think there's also a kind of security that can be hard

to find in a virtual space, it's not quite the same. And people can sit and cuddle a bit, so it's a bit more difficult when you're sitting together.” (Translated transcription, C5)

In the quote above, the clinician emphasizes that the relational aspect is lacking during a video consultation. She states how it is not possible to really get to know the patient through the screen, when compared to a conventional therapy session where both parties are physically present. This makes her feel like some of the therapeutic quality is being lost. The loss of therapeutic quality is also due to the technical aspect, where if this causes the screen to and sound to lag, it can create frustrations for both clinician and patient.

“But I actually find that as soon as, well, if only the relationship was established between me and the patient, and that takes varying amounts of time, but let's say it takes six months. So, the ones I've had in treatment for so long that the relationship is kind of established, the relationship could bear it and they could still benefit from having the conversations over video.” (Translated transcription, C2)

C2 emphasizes how VC could work well for her as a substitute for physical attendance for those patients with whom she had already established a good relational connection with. She explains how she therefore offered patients she already had established a good relationship with the option of having their consultation through VC rather than physical attendance, which have been very accommodating during the corona times.

6.4 Non-Verbal Communication

In this theme the non-verbal communication will be presented, which is considered to be an essential factor in the meeting between clinician and patient.

Many of the interviewed clinicians felt that some parts of the VC resulted in them not having a conversation of the same quality that they would have had face to face. Among the clinicians these issues would stem from technical issues as the primary reason why communication was less effective through VC. Clinician C3 explains it like this:

“(...) there is something (...) about non-verbal communication and the timing of a conversation that can be lost if the video isn't working at its best. And it can also cause a lot of frustration if [the therapist] who is the most important person to [the patient] and [to] who they almost don't dare to say [something] out loud, and you have to say "hey, try repeating that, I can see you're crying, but try saying that again", where it can come across as almost unprofessional when obviously it's because of the video.” (Translated transcription, C3)

Another issue is seen concerning the ability to interpret body language by the clinician C5:

“Well, I think first of all it's all those outages that come. And then you lose contact (...) with the patient. And it's really also about when you (...) have a conversation, you want to look as much for bodily behaviour and find out what symptoms might be hiding behind that bodily behaviour, body language says a lot.” (Translated transcription, C5)

For the clinicians the breakdowns in video quality becomes more than just an inconvenience like it would for most people in other circumstances, it is the potential of missing non-verbal communication and signals that they would normally be able to see in a face-to-face setting:

“Well, I actually feel that as a psychologist I'm doing a worse job because I'm so limited in what information I get because it's mostly verbal and there can be noise on the line, there can be delays, which I've also talked about in relation to this timing and non-verbal communication.” (Translated transcription, C3)

“I would say that this relationship with patients and these other non-verbal cues, some of them, I would imagine would be lost there. And they're very important in such a therapy conversation. So that's why I'm so overworked, where I just have to catch it all, the non-verbal communicators.” (Translated transcription, C4)

The format of VC itself was met with some consideration from all of the interviewed, as they all felt certain aspects of the therapeutic conversation became more difficult because non-verbal communication became harder to interpret and convey.

7.0 Discussion

In this chapter, the discussion will be presented. The discussion will start with a summary of the main points from analysis, and selected points from the themes from the analysis will be discussed.

The first theme in the analysis was “Evaluation”, which addressed informants' evaluation of VC both internally at the outpatient clinic and evaluation with the patients. This was not really something that had been done by any of the clinicians at the outpatient clinics. It had only been done ad-hoc and not as part of the meetings between clinicians. Lack of evaluation may have led to experience in the use of VC not being shared among the clinician. Knowledge sharing that can potentially be a contributing factor for the technology to be implemented more easily.

The second theme was “Organizational” that refers to how they organize themselves within the outpatient clinics and how the clinician individually organizes their work. A lot changed in the mist of COVID-19. From one day to the next, everything had to change from in-person meetings to video consultations. None of the clinician had any prior experience in the use of VC, so that had to learn along the way.

The introduction of VC for the patients has had a massive impact as well. The therapeutic sphere seems to be fragmented for some patients. The way of conducting a consultation has been spread across different media, such as telephone-, email- and video consultations, and it’s now possible for a consultation to take place on a computer. To examine the impact, it has had on a patient's experience of changes to the therapeutic space, it would be beneficial to conduct interviews with patients. The understanding of patients’ situation is therefore only based on clinicians' perception of the change it has had for their patients.

The third theme in the analysis was “Relation”. The clinician-patient relationship is crucial for the quality of therapy. There has been considerable research on this particularly regarding the relationship between clinician and patient. One term derives from this; therapeutic alliance. (Bordin, 1979) This alliance is also present in informants' experience regarding the use of VC. If they didn’t have a good alliance beforehand, VC didn’t work out for them in most cases.

Even though the aforementioned alliance was important, the analysis showed, there were situations where the use of VC had its work, for example when the relation between clinician and patient were well established. Another example was the psycho-educational team that never had such a high participation as after they only did it online. Perhaps video consultations aren’t to be seen as an isolated entity but are part of a larger pattern of communication between clinician and patient. Perhaps the difference between conventional physical therapy and VC shouldn’t be compared but seen as two types of consultations that can complement each other instead of replacing. This understanding is important for both the clinicians and patients' use and experience of video consultation.

The fourth theme “Non-Verbal Communication” can be several things, including body language, which can be difficult to interpret through video. In this case, where body signs and language are very important and tells a lot about the patients state of mind, it is an essential factor to consider, when examining the use of VC. As the use of VC is still in its initial implementation, clinicians may learn what cues to look for instead, in order to compensate for the lack of body language.

8.0 Conclusion

In this chapter the conclusion of our problem statement will be presented.

This project has illuminated how COVID-19 has affected the organization of clinicians in outpatient clinics, and how they have experienced the sudden introduction of video consultation. The study is based upon relevant literature search and five interviews of clinicians working at outpatient clinics for patients with mental disorders. Thus, we can conclude on our problem statement, which states as follows:

“How has the work done by clinicians in an outpatient setting been affected by lockdowns and how has the transition to video consultations affected the clinical work?”

It is clear among all informants how VC has been a major shift in the way of doing consultations. Findings from the analysis showed how no one had prior knowledge of use, so clinicians had to learn along the way and make their own experiences. One essential aspect in the use of VC, is the relation to the patient. The general experience among the clinician were, that a well-established relation prior to the patient, is crucial for the quality of the consultation. This view is further supported by the literature regarding the clinician-patient relations and the therapeutic quality.

Beside allowing the clinician to continuing their function when during the lockdown, However, there were some aspects where the technology made the workflow better for some clinicians.

9.0 References

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Appendix

Appendix 1

Indledende

Vi vil gøre det klart, at interviews vil blive optaget og behandlet i overensstemmelse med GDPR og at alle navne og personlige identificerende detaljer vil blive skjult eller ændret i den endelige rapport. Optagelserne vil blive gemt indtil efter den endelige eksamen, ultimo juni, og derefter slettet.

Organisering - spørgsmål der har til formål at udforske klinikerens praktiske erfaring med videokonsultation (VC); før og efter corona. Spørgsmålene skal udforske de ændringer der er sket i organisationen omkring klinikerens.

Brug af VC i marts 2020 (lockdown 1) ift. brug i efteråret (lockdown 2)

- Brug af VC før corona?
- Har brugen af VC haft en indflydelse på hvordan du tilrettelægger dit arbejde?
- Beskriv en arbejdsdag før corona; hvad har været de største ændringer efter corona?

App/platform

- Hvordan fungerer brugen af VC i praksis;
 - Er der nogle basale elementer ved samtalen der ændres?
 - Hvor benytter du VC?
 - Arbejds miljø; Hvordan bliver dit arbejde påvirket af at skulle bruge VC?

Evaluering af VC - Hvad er klinikerens overordnede erfaring med VC?

- Hvordan har du løbende evalueret brugen af VC?
 - Har du evalueret med patienter?
 - Har du oplevet at måtte stoppe en konsultation via VC?

Ekstra uddannelse - har klinikerens modtaget eller efterspurgt træning i VC?

- Har du modtaget særskilt træning/ uddannelse i at benytte VC?
- Har du gjort dig nogle erfaringer der?

Selvforståelse; hvordan har brugen af VC indflydelse på klinikerens egen opfattelse af sig selv som behandler.

- Er der elementer af dit arbejde/ hverv som bliver besværliggjort eller umuliggjort af VC?
 - Mister du noget professionelt ved at benytte VC?
- Er der tilsvarende elementer der bliver nemmere eller forbedret af at bruge VC?
 - Vinder du noget professionelt af at bruge VC?
- Kan der opstå en form for træthed ved længere tids skærm konsultation?

Behandlingens kvalitet - spørgsmål der har til formål at udforske videokonsultation i et patientperspektiv, set fra klinikerens synsvinkel.

Modtagelse af VC af patienter

- Hvordan oplever du at patienterne har taget imod VC?
- Har der været nogle specifikke udfordringer du har mødt sammen med dine patienter?

Patientgrupper

- Er der en bestemt patientgruppe(r) der egner sig bedst til VC?

Behandlingsformer og VC.

- I din erfaring, er der nogle typer af behandling der gør sig bedre/ dårlige egnede til VC?
- Gruppeterapi med VC
 - Er det noget du har gjort brug af?
 - Hvilke udfordringer oplevede du?