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The association between emotional violence in childhood and the utilization of somatic and psychiatric specialist healthcare in adulthood among Sami and non-Sami population: The SAMINOR 2 questionnaire study

Cross-sectional study from SAMINOR 2

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Abstract

Background: Emotional violence in childhood (EVC) is the most common type of violence in childhood. Due to its subtle and nonverbal nature, researchers have paid less attention to EVC than physical and sexual childhood violence. EVC may be just as detrimental to the developing brain of a child as other forms of childhood violence. Some studies have found that it increases the odds of developing for psychological disorders. Additionally, EVC increases risk factors for stress-related diseases such as chronic disorders and depression. These risk factors include high alcohol consumption, drug and smoke use as well as unsafe intercourse. Globally, stress-related diseases are the leading causes of mortality and morbidity, and they impose significant costs on society. Knowledge regarding the independent long-term impact of EVC on adult specialist healthcare utilization is lacking, especially with regard to the Sami population in Norway. This study's primary objective is to investigate the association between EVC and the utilization of specialist healthcare in adulthood in areas with Sami and non-Sami populations.

Method and material: This cross-sectional study used SAMINO 2 data and included 11,600 male and female participants aged 18 to 69 from areas with Sami and non-Sami populations. For all tests, a 5% level of significance was used. First, descriptive statistics such as frequencies and cross tabulations with percentages were used to describe the sample population. The relationship between ethnicity and the utilization of specialist healthcare among adults was examined using cross-tabulation with Pearson's chi-square. To answer the research question, univariate and multivariate binary logistic regression with odd ratio and 95% confidence interval were performed. Finally, interaction analysis was used to investigate ethnic differences, where interaction between emotional violence in childhood and the ethnicity variable on the specialist healthcare in adulthood was tested.

Results: Seventy six percentage of the participants considered themselves as Norwegian while 18% considered themselves as Sami. There were no association between ethnicity and the use of specialist healthcare. Participants who reported EVC had 23% and 3.75 times more likely to use somatic SHC (Adjusted OR=1.23, 95% CI [1.08-1.40]) and psychiatric SHC (Adjusted OR = 3.75, 95% CI[4.80 – 2.92]) than participant who reported no EVC. EVC found to be significantly associated with the utilization of psychiatric specialist healthcare in

adulthood among Norwegian (Crude OR=5.40 ,95% CI [4.04-7.15]) and Sami (Crude OR=2.25 , 95% CI [1.38-3.71]).

Conclusions: EVC is associated somatic and psychiatric SHC in adulthood among both Sami and Norwegian populations.

Abbreviations

CI	Confidence interval
EPV	Event per variable
EVC	Emotional violence in childhood
GBD	Global burden disease
GP-	General practitioner
NSD	Norwegian Centre Research Data
OR	Odds ratio
REK	Regional Comittes for Medical and Health Reseach Ethics
RHA	Regional Health Authority
SAMINOR	Population-based study of health & conditions in areas with Sami and Norwegian populations
SANKS	the Sami Norwegian National Advisory Unit on Mental Health and Substance Use
SHC	Specialist healthcare
SVC	Sexual violence in childhood
WHO	World Health Organization

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1 Introduction and background

1.1 Emotional violence in childhood

The World Health Organization (WHO) has estimated that 1 in 2, (1 billion), children aged 2-17 years, have experienced childhood violence. Childhood violence is divided into three types: physical, sexual, and emotional (WHO-World Health organization, 2020). These three can occur independently or simultaneously (Chiu et al., 2013). Childhood violence is detrimental to both physical and mental health as well as behavioral outcomes (Annor et al., 2020; Eriksen et al., 2018; Eriksen et al., 2016; Norman et al., 2012). Despite the recognized detrimental long-term impacts of all types of childhood violence (APA-American Psychological Association, 2014; Gama et al., 2021), the majority of studies investigating these impacts have emphasized on the physical and sexual types of childhood violence, with emotional violence receiving less attention (Annor et al., 2020; Sedlak et al., 2010). Knowledge regarding the independent long-term impact of EVC on adult specialist healthcare utilization is lacking, especially with regard to the Sami population in Norway. Therefore, it is essential to investigate the independent impact of EVC on specialist healthcare utilization among Sami and non-Sami populations.

1.1.1 definition

Although there is no widely agreed definition of emotional violence in children, clinicians and researchers have identified the various forms of emotional violence these are the verbal abuse, humiliation, repression, harassment, and rejection (American Psychology Association, 2022). Emotional violence in childhood is characterized as a non-physical and subtle pattern of verbal or behavioral actions that frequently and persistently represses, humiliates, or threatens the child (Annor et al., 2020; Norman et al., 2012). EVC's non-physical and subtle nature makes its wounds hidden, unlike those of sexual and physical child abuse. This makes EVC more harmful than the two other types of childhood violence.

1.1.2 Risk factors

There are several risk factors for emotional violence in childhood. Parental mental health, drug and alcohol use, and low socioeconomic level are among the most important risk factors. The mental and physical health of a child is also a risk factor for emotional violence. The overall stress level of parents or caregivers, whether due to substance addiction or low

socioeconomic status, increases the likelihood of emotional violence in childhood (Stith et al., 2009; WHO, 2020)

1.1.3 Prevalence

Globally, emotional violence in childhood is the most common form of childhood violence (Stoltenborgh et al., 2015; World Health organization, 2020). A global meta-analysis of the prevalence of childhood violence estimates the following rates: 36% for emotional violence, 22.6% for physical violence, and 12.7% for sexual violence (Stoltenborgh et al., 2015).

Several studies have found that the prevalence of childhood violence is higher among indigenous people than among non-indigenous people (Brownridge et al., 2017; Eriksen et al., 2015; Fox, 2003; Larsen & Bjerregaard, 2019). Few international studies compare the prevalence of EVC in indigenous populations to the prevalence of EVC in non-indigenous populations. In Norway, Eriksen et al. (2015) found that the prevalence of childhood violence, including physical, sexual, and emotional violence, is higher among Sami participants than among non-Sami participants, and that emotional violence was the most common form of childhood violence compared with the other two forms. This may suggest that EVC is the most common form of childhood violence worldwide, including among indigenous people.

1.1.4 Long-term consequence of emotional violence in childhood

Emotional violence against children has long-term and short-term negative consequences for the victim and society as a whole (WHO, 2020; World Health organization, 2020). Short-term consequences include a high level of stress, a feeling of being unsafe and unloved. High levels of stress specially during childhood influence the structure and function of the brain, as well as other important body systems (the endocrine, respiratory, and immune systems), resulting long term consequences for health and behavior . In additiona it will place a financial burden on society. Despite of that there are few studies investigating its long-term impacts.

The few studies that have examined the long-term consequences of EVC have shown that EVC is strongly associated with psychological disorders and risky behavior adulthood (Annor et al., 2020; Norman et al., 2012). Norman et al. (2012) conducted a meta-analyses in which they included 124 studies that examined the association between childhood violence, (independently), and range of physical and psychological health outcomes, and behavioral outcomes. According to this meta-analysi, EVC is strongly associated with a variety of

psychological disorders including depression, anxiety, post-traumatic stress disorders (PTSD) and self-harm, as well as risky health behaviors such as excessive alcohol consumption, drug use, and risk sexual behaviors. However, the number and quality of the included studies investigating the relationship between EVC and physical health outcomes were insufficient. This means that long-term consequences of EVC on adult physical health outcomes and healthcare utilization have not been investigated systematically. Therefore, the interest of this current study is to investigate the long-term consequences of EVC on adult somatic and psychiatric specialist healthcare use.

1.2 Norwegian healthcare

Healthcare refers to the societal resources used to protect or, and enhance health through prevention, treatment, care, and rehabilitations (Olsen, 2017, p. 161). Norway has universal coverage which means in theoretical that all Norwegian citizens must have equal access to patient-centered, high-quality somatic and psychiatric care regardless of language, culture, SES, or geographical location. The healthcare services are divided into municipal healthcare services (primary care) and specialist healthcare services (secondary care). At the municipal level, general practitioners (GP) provide primary care, whereas at the regional level, specialists provide specialist care. GPs are viewed as "gatekeepers" for specialist healthcare. They are the gate to access specialist healthcare, except of acute or emergency situations (Sperre Saunes et al., 2020)

1.3 Specialist healthcare

In Norway specialist healthcare refers to all private and public hospitals that provide somatic and psychiatric care. Somatic specialist healthcare refers to hospitals or institutions that provide bodily or physical care, whereas psychiatric SHU refers to hospitals or institutions that provide mentally or psychological care (Felles Nettløsning for spesialisthelsetjenesten, 2022)

There are four Regional Health Authorities (RHA) own by the government, that provide specialist somatic and psychiatric healthcare services to the Norwegian population. These are, Central- (Helse Midt), Northern- (Helse Nord), Southern – Eastern (Helse Sør-Øst) , and Western (Helse Vest) Norway Regional Health Authority. As presented in figure 2, the

authorities operates in separate Norwegian regions. RHAs are responsible for managing the provision of specialist healthcare services in their respective regions(Norwegian government, 2021). Specialist health providers are responsible in providing the public with expert diagnoses and treatments, in addition to performing health research and educating health service providers, patients, and relatives (Braut, 2022; Norwegian government, 2021).

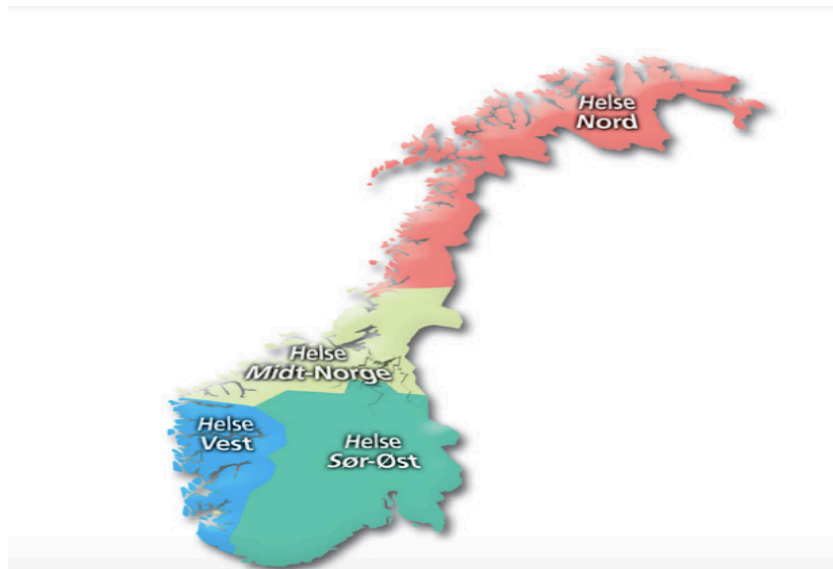


Figure 1 the map for RHA regions

When the RHA is unable to offer a patient with needed public specialized healthcare services in a timely manner due to limitations such as long waiting times or a lack of the required service, the RHA must seek out private hospitals or institutions that can provide these services. This service's cost must also be funded by RHA. However, if the patient chose to seek private specialist healthcare services, he or she is responsible for covering all costs (Health Norway, 2020).

Utilization and quality are two key concepts for specialist healthcare service accessibility. Availability, affordability and acceptability are essential concepts for the utilization and quality of this the specialist healthcare service(Penchansky & Thomas, 1981).

The term "availability" refers to the extent to which services are available for use as well as the quality of such services (Quinn et al., 2016). Barriers related to geographical, the threshold of the service, cultural and linguistic can limit both service

utilization and service quality. Those who live in remote areas may have limited access to specialist healthcare, resulting in less utilization use of these services. Culture and language are important for healthcare. It is widely known that communication is vital in the specialist healthcare profession and profficiency between healthcare practitioners and patients and among healthcare providers themselves. Our desire to express and manner of expression are shaped by the culture to which we belong. Furthermore, language is also a tool for communication. Thus, cultural, linguistic and geographical barriers might limit accessbility to this services, resulting in negative quality outcomes and reduced utilization.

Moreover, affordability may also limit the access of healthcare. High level threshold for services such as long waiting time and difficulties of being referred to the needed care can limit the accessibility. Which can cause that some people purchase this service, while others lack the resources to purchase this service.

Acceptability refers to the attitudes and beliefs of patients toward healthcare providers and healthcare services, as well as the attitudes and beliefs of healthcare providers toward the patient. Negative attitudes and beliefs between the healthcare providers and patienst can lead mistrust between the healthcare providers and patients, resulting in negative quality outcome and reduced utilization. In addition, individuals' attitudes and beliefs towards particular disorders can prevent them from accessing these services.

1.4 Norweginization policy

Similar to other indigenous peoples around the world, the Sami in Norway have a traumatic past (Kirmayer & Brass, 2016; Kirmayer et al., 2014). In 1850, the Norwegian government implemented a Sami-specific Norwegianization policy with the intension of assimilating the Sami into Norwegian society (Minde, 2005). This policy of Norwegianization had both short- and long-term consequences for the majority of the Sami people, including the loss of their culture, language, and Sami identity. Despite being subjected to traumatic policies, the health and social standing of the Sami people of Norway have greatly improved in comparison to other indigenous populations. There are no or only minor variations between Sami and Norwegian in terms of health, socioeconomic status, alcohol consumption, and suicidal behavior

1.4.1 Sami people in Norway

Sami are indigenous people who live in Sweden, Finland, Russia, and Norway. They have their own languages, culture, and history. The majority of Sami people live in Norway. It is estimated that they are around 54 000 (Statistisk sentralbyrå, 2021). They primarily reside in the Northern region of Norway. In some areas, the Sami constitute the majority, while in others areas they are the minority. In administrative areas, both Sami and Norwegian are recognized as official languages (Norwegian Government, 2020) Traditionally, Sami people are nomadic and engaged in reindeer herding and fishing along the coast. Unlike other indigenous people around the world, the differences between Sami and the majority in regarding of health, SES, alcohol consumption and social behavioral are small/ minor (Anderson et al., 2016; Silvikén, 2009)

1.4.2 Specialist health among Sami

The Norwegian government issued a report outlining particular health concerns among the Sami population (NOU1995:6, 1995). This report addressed the need for language- and culture-appropriate healthcare services for Samis. As a result of this, the Sami Norwegian National Advisory Unit on Mental Health and Substance Use (SANKS) was established in 2001. This provides specialist psychiatric healthcare service tailored to the culture and language of the Sami. In 2020, the Sami clinic was established, and SANKS became a part of it. Sami clinic offers services that are tailored to the needs of the Sami population. The Sami Clinic is integrated part of the Finmark hospital which comes under the Helse Nord RHA (Finmark Hospital Trust, 2022).

1.5 Knowledge gap

A population based studies using SAMINOR 2 data has found that childhood violence, particularly emotional violence is more frequent among Sami than non-Sami (Eriksen et al., 2015) and that childhood violence has a positive association with somatic and psychiatric conditions in adulthood (Eriksen et al., 2018; Eriksen et al., 2016).

Another master thesis using data from the SAMINOR 1 found that the primary healthcare services is almost equally used among Sami and Norwegian respondents (Hansen, 2015). A study conducted by Turi et al. (2009) has compared the use of psychiatric specialist healthcare

services among Sami and Norwegians adolences (15- 16 years old). The findings of this study indicates that the overall use of psychaitric specialized healthcare service among Sami and Norwegian adolences did not significantly differ.

Moreover, some research has found an association between childhood violence and the of healthcare services in adulthood. However, there are few issues related to these studies, the first is that these studies are limited to a non-indigenous people, secondly they emphasis more the sexual and physical forms of childhood vioelence, with less emphasis on emotional violence.

However, this indicates that there are lack of population based studies investigatigating the relationship between emotional violence in childhood and the use of somatic and psychiatric specialist healthcare services in adulthood in areas with Sami and non-Sami populations. There are also no population-based studies investigating whether Sami and Norwegian adults utilises specialist healthcare services differently.

1.6 Study objectives

This population-based study aims to investigate the association between emotional violence in childhood and the utilization of somatic and psychiatric specialist healthcare services in adulthood in areas with Sami and Norwegian and, to assess if the utilization of somatic and psychiatric specialist healthcare differs between Sami and Norwegian and if the estimated association is stronger amongst the Sami or Norwegian populations.

1.6.1 Research question

Is there association between emotional violence in childhood and the utilization of somatic and psychiatric specialist healthcare in adulthood among Sami and Norwegian populations?

1.6.2 Objectives

Objective 1: To investigate the association between emotional violence in childhood and the healthcare utilization in adulthood in Sami and Norwegian population.

Objective 2: To assess whether the use of somatic and psychiatric specialist healthcare services differs between Sami and Norwegian respondent.

Objective 3: To assess if the association between emotional violence in childhood and the utilization of somatic and psychiatric specialist amongst the Sami and Norwegian population.

2 Method and material

In this thesis, I will be using quantitative method of collecting data. The reason for the choice of methodology is because it is appropriate for the research question. I will be using a population-based cross-sectional secondary data provided from the SAMINOR 2 study in form of questionnaire.

2.1 Design

Cross-sectional study is type of research design that measures the exposure and the outcome in a particular time point, and where the aim is to either identify a relationship between an exposure and an outcome or to identify the prevalence of disease. (Thelle, 2015, p. 101). Cross sectional study is an appropriate study design for this current master thesis due the nature of the research question.

2.2 The study population

Twenty-five municipalities in Mid-and Northern Norway were targeted in SAMINOR 2, some from districts and others from the entire municipality. The following municipalities were the ones targeted: Varanger, Nesseby, Tana, Lebesby, Karasjok, Porsanger, Kvalsund, Loppa, Alta, Kautokeino, Kvænagen, Ka^o fjord, Storfjord, Lyngen, Lavangen, Ska^o nland, Evenes, Narvik (Vassdalen), Tysfjord, Hattfjelldal (Hattfjelldal), Grane (Majavatn), Namskogen (Trones and Furuly), Røyrvik, Sna^o sa (Vinje) and Røros (Brekken). These areas are visualized in *figure 2* below. The SAMINOR 2 was open to all men and women aged 18-69 who were enrolled in the Norwegian National Population Registry by December 1, 2011 and who also lived in the study's targeted areas. More detail about the study population can be find in (Brustad et al., 2014).

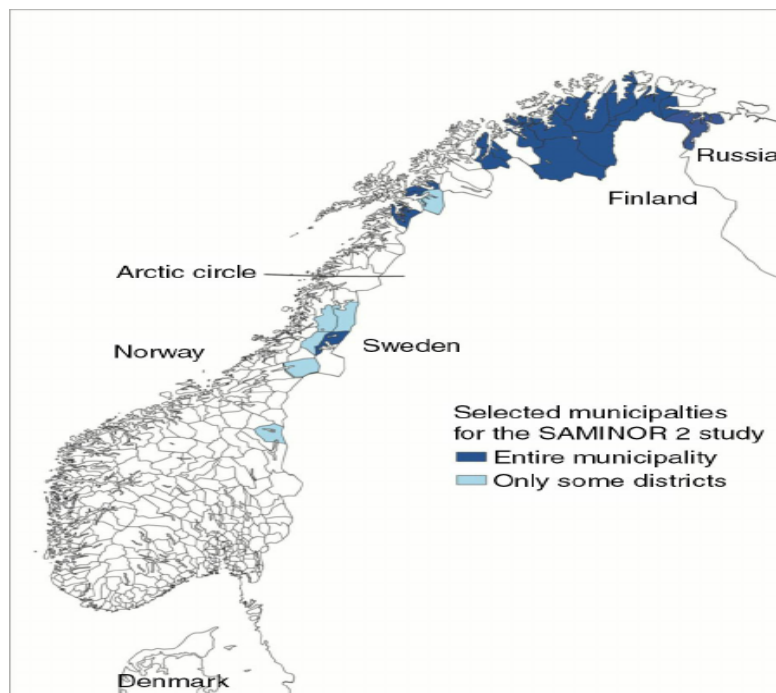


Figure 2 targeted areas for SAMINOR 2

2.3 The SAMINOR 2: Data collection

The SAMINOR study is the first population-based study on health and living conditions in areas with Sami and non-Sami population. Currently, the Centre for Sami Health Research at the Department of Community Medicine and UiT the Arctic University of Norway has conducted two surveys called SAMINOR 1 survey (2004) and SAMINOR 2 survey (2012-24) while SAMINOR 3 survey is in progress. SAMINOR 2 survey have two separate stages, one is a questionnaire survey (2012) and the other one is a clinical survey (2014). The response rate in the SAMINOR 2 was low (27%) specially among male and younger age group. Non-response rate analyses were not applicable due to the limited access for register-based data except for age, gender, and municipalities variables (Brustad et al., 2014). The questionnaire consisted of 97 questions (8 pages). The questionnaires and all related information were written in Norwegian and were translated into three relevant Sami languages: Southern-, Lule-, and Northern Sami. Web-based and paper-based questionnaires were available to the participants hence the participants could choose whichever method they preferred. In the SAMINOR 2 questionnaire study, several approaches are used to contact potential participants such as providing relevant information through mass media and project web. In addition to this, posters with information were distributed to all local councils encouraging people to participate. All the invited individuals were assigned to a unique ID code. Questionnaires were sent out during 9-12 January 2012 by Statistic of Norway and the

deadline was set on 25 October 2012. Two reminders were sent out to non-responders, one after four weeks and the other one after six weeks (Brustad et al., 2014).

SAMINOR 2 enrolled a total of 11.600 participant (refer to figure 3 for more details about the sample proportion) The response rate in the SAMINOR 2 was low (27 %) specially among male and younger age group. Non-response rate analyses were not applicable due to the limited access for register-based data except for age, gender, and municipalities variables.

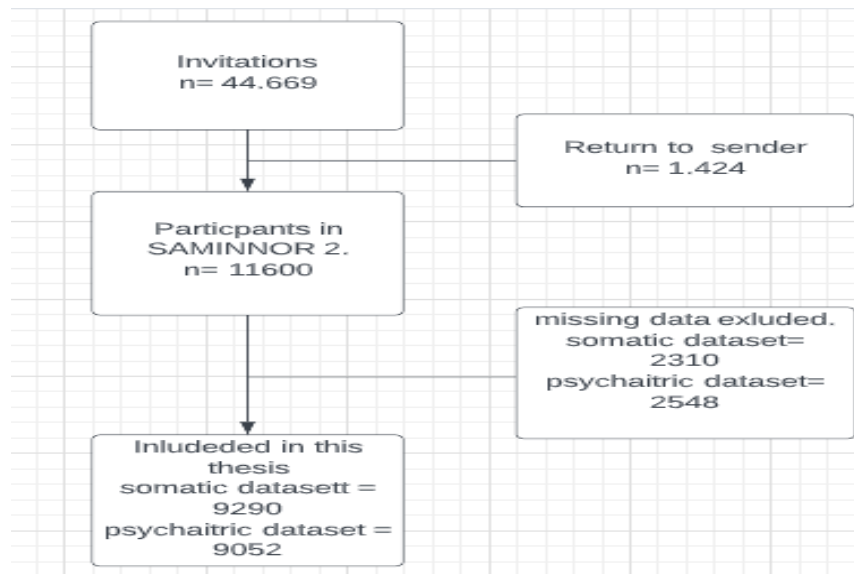


Figure 3 included participants in this thesis

2.4 Variables

To answer the reseach I will be using the following variables: exposure, outcome and covariates variables.

2.4.1 Exposure

One question was used to measure the emotional violence in childhood. Participants answered the following question regarding emotional violence in childhood; “Have you experienced that someone systematically and over time has tried to repress or humiliate you?”.

Participants who responded “ No, never” was categorized as “No” and those who responded “Yes, as a child” was categorized as “ Yes”. Participant who responded “ Yes, as adult”, those who responded “ Yes, for the past 12 months” and those who responded “ Yes” to both childhood and adulthood were excluded.

2.4.2 Outcomes

I examine both utilization in somatic and psychiatric specialist healthcare services.

One question was used to measure the utilization of somatic specialist healthcare. Participants answered the following question regarding somatic specialist healthcare: Have you during the past 12 months been examined or treated for physical pain at ‘‘hospital’’, ‘‘specialist medical center’’, ‘‘private practice specialist’’ and ‘‘none of the above’’. Participants who responded to the three first will be categorized as ‘‘Yes’’ while those who responded to the last one was categorized as ‘‘No’’.

One question was used to measure the utilization of psychiatric specialist health care.

Participants answered the following question regarding psychiatric specialist: Have you during the past 12 months been for examination or treatment for mental health problems at ‘‘psychiatric hospital’’, ‘‘specialist mental health center’’, ‘‘Private practice specialist’’ or ‘‘none of the above’’. Participants who responded to with three first was classified as ‘‘yes’’ while those who responded to the last one was classified as ‘‘no’’.

2.4.3 Suspected confounders and interaction terms

Age and gender

Data used to measure age and gender was obtain from Statistics Norway (SSB). Gender was categorized into ‘‘Male’’ or ‘‘Female’’. Age was categorized into the following three groups: (18-39 years), (40-49 years) or (50-69 years).

Ethnicity

One question was used to measure ethnicity. Participants who responded ‘‘Sami’’ to the question ‘‘what do you consider yourself?’’ was categorized as Sami, while participants who responded ‘‘Norwegian’’ was categorized as Norwegians. Participants who have answered ‘‘Kven’’ or ‘‘other’’ was excluded from the analyses.

Education level

One question was used to measure level of education; ‘‘How many years of schooling have you completed?’’ and were categorized into the following four groups: Primary school (≤ 9 years), Upper secondary school (10-12 years), higher university or college (14-15 years) and university education (16 years or more).

Current or former Somatic diseases

One question was used to measure somatic diseases. ‘‘do you have, or have you had any of the following diseases?’’ ‘‘Diabetes’’, ‘‘high blood pressure, angina pectoris, heart

attack, chronic bronchitis/emphysema/chronic obstructive lung disease, asthma, eczema, psoriasis, multiple sclerosis and/or bechterews disease. Responses wascategorized into “no disease”, “one disease”, “two or more diseases”.

Confounder

Due to uncontrolled third variables such as confounding variable, estimated association between an exposure and an outcome may not be true. A confounding variable is a third variable that is related to but not caused by the exposure and may be a risk factor for the outcome variable. Suchvariable must be identified and controlled for in order to estimate the true relationship between an exposure and an outcome (Thelle, 2015, p. 158). Age, gender, education level, and somatic diseases are identified and controlled for as confounding variables in this thesis. Age and gender are both related to but not caused by the exposure and may be risk factors for the outcome variable (Bertakis et al., 2000; Kosterman et al., 2001). It is difficult to identify education level, somatic illnesses, as confounding variables. The standard method for confounding variables may not be appropriate to these variables. However, the educational level and somatic disease state of the participants may be related to the educational level and somatic disease status of their parents . This indicates that if your parents have a low level of education and one or more somatic diseases, the likelihood that you will also have a low level of education and a somatic disease is greater than if your parents have a higher level of education and somatic illnesses. According to studies, education level and somatic diseases are risk factors for the utilization of specialist healthcare services (Fjær et al., 2017; Hopman et al., 2016; Ka Young et al., 2020; Payne et al., 2013). In addition, parental education level and somatic disease status may be associated with but not the cause of emotional violence in childhood. According to prior research, parents with low levels of education and somatic disorders enhance their children's likelihood of being exposed to violence (Felitti et al., 2019). On the basis of this argument, education level and somatic disease variables will be controlled.

2.5 Statistical analysis

IMB SPSS softward version 28 was used to perform all analyses. For all tests, a 5% level of significant was used. Descriptives, such as frequency and cross tabulation with percentages and Pearson’s chi square tests were perform to describe the participants characteristics and to assess the association between ethnicity and specialist healthcare use. Univariate and multivariate binary logistic regression with odds ratio (OR) and 95% Confidence interval

(CI) was used to estimate the association between emotional violence in childhood and the use of specialist healthcare in adulthood.

The association between emotional violence in childhood and the utilization of somatic specialist healthcare in adulthood was adjusted for, ethnicity, gender, age, level of education and current or former somatic disease. The association between emotional violence in childhood and the utilization of psychiatric specialist healthcare in adulthood was adjusted for gender, age and education level due to the few users of psychiatric specialist healthcare. Missing data from emotional violence in childhood and the utilization of psychiatric and somatic specialist variables were excluded.

An interaction variable refers to a variable that has the potential to affect the strength and direction (increase or decrease) of the estimated association between the exposure and outcome (Thelle, 2015, p. 159). To determine whether a variable is an interaction variable, interaction analysis can be done; significant interaction analysis indicates that the variable is an interaction variable, while non-significant interaction analysis indicates otherwise. In this study, to investigate ethnic differences, interaction between emotional violence in childhood and the ethnicity variable on specialist healthcare in adulthood was tested.

Binary logistic regression assumption

In logistic regression, there are four assumptions: first, the dependent variable must be a binary variable (yes/no, present/absent) to meet the first assumption. The second assumption, the observations must be completely independent of one another. Third assumption, the independent variables must have no or minimal multicollinearity. Final assumption, the sample size must be large enough to prevent type 2 error (false negative) setting in reference. In this thesis, the first three assumptions are met. The dependent variable is a binary variable, with yes/no answers for the utilization of somatic/psychiatric specialist healthcare. Furthermore, the observations are totally independent from one another and there are no multicollinearity among the independent variables.

The final assumption is crucial since small sample size can lead to type 2 errors. A small sample size combined with a large number of covariates reduces the model's statistical power and accuracy. There is no standard sample size guideline for logistic regression. Different researchers have proposed different sample size guidelines. According to Peduzzi et al. (1996), the minimum required sample size should be based on the event per variable (EPV) rule.

Two datasets: somatic and psychiatric.

We intended to obtain all the variables in one dataset. However, only 304 people (3.4% of the total) reported to utilize psychiatric specialist healthcare services, while 3905 (42% of the total) reported to utilize somatic specialist healthcare. Because of this small number of psychiatric specialist health utilization, ensuring anonymity and keeping high statistical power has become an issue. To deal with this, we have created two separate datasets, one for psychiatric specialist healthcare utilization and the other for somatic specialist healthcare utilization. In the psychiatric dataset, current or former somatic disease variable were excluded to ensure anonymity, and education level were divided into only two categories (0-12 years and 13 or more) to ensure statistical power.

2.6 Ethics

The SAMINOR 2 has previously been approved by The Regional Committee of Research Ethics (REC) (2011/1840) and Norwegian Centre for Research Data (NDS). A proposal was sent to REC and NCD for this specific project. Prior approval is required for any medical or health research involving humans, human biological material or health data (Helseforskningsloven?). According to REKs evaluations, this specific project does not involve human, human biological material, or health data and hence do not require prior approval (ref. 373706). According to NCD evaluation, this specific project does not involve any direct or indirect personal information that could be used to identify participants, indicating additional assessments are not required (ref.331086).

All participants gave an informed consent to participate in the SAMINOR 2. Any health research, on behalf of the Sami community, must apply for collective consent from the expert committee of the Sami Parliamentary Council (Sakkyndig, komité for samisk helseforskning). This current project received collective consent from this committee (sak 13/21), Appendix 2.

3 Result

This cross-sectional study aimed to assess the association between emotional violence in childhood violence and the utilization of specialist healthcare, as well as to investigate

whether the potential impact of emotional violence differed between the two ethnic groups. It also aimed to investigate ethnic differences in the use specialist healthcare in adulthood.

3.1 Descriptive statistics

In the utilization of somatic SHC analyses, 9290 participants were included. Among these, 42% (n= 3905) have reported using specialist SHC in the last 12 month while 58 % (n= 5385) have reported not using somatic SHC in the last 12 month. The vast majority of this sample considered themselves as Norwegian with 76% reported as Norwegian. Moreover, half of the participants have reported having higher education level (more than 13 year of education) and being older than 50 years of age. 50% of the participants were reported to having zero somatic disease (Table 1).

In the use of psychiatric healthcare services analyses, 9052 participants were included. In total , 3.4% of participants have reported using psychiatric SHC while 96.6% of participants were reported not using psychiatric specialist SHC in last 12 month . For more detail about the participants characteristics in the somatic and psychiatric datesetts refere to table 1

Table 1*The frequency of the variables in the somatic dataset and psychiatric dataset*

Variables	Categories	Somatic SHU dataset, n (%)	Somatic SHU dataset 9052 (n=)
Emotionation violence in childhood	Yes	1196 (13%)	1180 (13%)
	No	8094 (87%)	7872 (87%)
	Missing	0	0
Ethnicity	Norwegian	7046 (76 %)	6852(75.5%)
	Sami	1709 (18 %)	1677 (18.5%)
	Missing	6%	6%
Gender	Female	4966 (45%)	4849 (53.6%)
	Male	4324 (39 %)	4203 (46.4%)
	Missing	0	0
Age	18-39 years	2570 (28%)	2535 (28%)
	40-49 years	2074 (22%)	2021 (22%)
	50-69 years	4646 (50%)	4496 (49.7 %)
	Missing	0	0
Education	0-9 years	13089 (14%)	
	10-12 year	2515 (27%)	
	13-15 years	2449 (26%)	
	16 or more	2895 (31%)	
	missing	1.5%	
	0-12		3706 (40.9%)
	13 or more		5228 (57.8%)
	Missing		1.3 %
Somatic diseases	Zero disease	4672 (50%)	
	One or two	2885 (31%)	
	Two or more	1594 (17%)	
	Missing	2%	

Somatic specialist healthcare

Among those who reported exposure to EVC (n= 1196), 42, (n=553) reported utilizing somatic SHC, while 53,8% (n= 643) reported not utilizing somatic SHC. Thus, 553 participants reported both exposure to EVC and utilization of somatic SHC. Among those who reported both the exposure and the outcome, 26% (n= 154) considered themselves Sami while 12% (n= 371) considered themselves as Norwegian.

Psychiatric specialist healthcare

Among those who reported exposure to EVC (n=1180), 9.4 % (n= 111), reported utilizing psychiatric SHC, while 91.6 % (n= 1069) reported not utilizing. Thus, 111 participants reported both the exposure to EVC and psychaitric. Among those reported being both the exposure and and the outcome, 6 % (n=21) considered themselves as Sami while 11%(n= 82) considered themselves as Norwegians.

The association between ethnicity and the utilization of somatic and psychiatric specialist healthcare

The use of psychiatric specialist healthcare services in adulthood was higher slightly lower among Norwegian (3.2%) compared to Sami (3.6 %). The result of the Chi Square Test of Association (2x2) show that there are no significant association between ethnicity variable and the psychiatric specialist healthcare services variable , $\chi^2(1, 8529) = 0.48, p = .488$. The use of somatic specialist healthcare services in adulthood among Norwegian was (42.4 %) and among Sami (41.8 %). The result of the Chi Square Test of Association (2x2) show that there are no significant association between ethnicity variable and the psychiatric specialist healthcare services variable , $\chi^2(1, 8755) = 0.19, p = .488$

3.2 The association between emotional violence in childhood and utilization of somatic specialist and psychiatric specialist healthcare in adulthood

A binary logistic regression analysis to investigate the association between emotional violence in childhood and the utilization of somatic specialist healthcare services in adulthood was conducted. The independent variable, emotional violence in childhood, in logistic regression analysis was found to be significantly associated with the use of somatic specialist healthcare (Crude OR= 1.22, 95% CI [1.0-1.4]. As shown in table 3, when covariate factors such as ethnicity, gender, age, education level and current or former somatic disease was included in the model, the OR was slighty modified but remained significant. For more detail refer to table 3.

Table 2

Binary logistic regression for the association between emotional violence and the of somatic specialized healthcare

variables	Categories	Fully adjusted model	
		OR	Confidence interval (CI) 95% Upper - lower
Emotional violence in childhood	No	Ref	
	Yes	1.23*	1.40 -1.08
Ethnicity	Norwegian	Ref	
	Sami	0.95	1.06 - 0.85
Gender	Male	Ref	
	Female	1.28*	1.40 -1.17
Age	18-39 years	Ref	
	40-49 years	1.27*	1.44 -1.12
	50-69 years	1.53*	1.70 -1.37
Education level	0-9 years	Ref	
	10-12 years	1.36*	1.58 -1.18
	13-16 years	1.60*	1.86 -1.38
	16 or <	1.55*	1.80 -1.34
Somatic diseases	Zero	Ref	
	One	1.60 *	1.75-1.44
	Two or <	2.22*	2.51-1.96

*Note , * = p-value < 0.05, Model adjusted for, ethnicity, gender, age, education level, and somatic diseases*

3.3 The association between emotional violence in childhood and the utilization of psychiatric specialist healthcare

A logistic regression analysis to investigate the association between emotional violence in childhood and the use of psychiatric specialist healthcare services in adulthood was conducted. The independent variable, emotional violence in childhood, was found to be significantly associated with the use of psychiatric specialist healthcare (Crude OR= 4.13, 95% CI [5.26-3.24]. As shown in table 2, when covariate factors such as gender, age, and education level was included in the model, the OR was slightly modified but remained significant.

Table 3

Binary logistic regression for the association between emotional violence in childhood and the use of psychiatric healthcare in adulthood fully adjusted for gender, age and education level

Variables	Categories	Fully adjusted model	
		(OR) p-value	Confidence interval (CI) 95% Upper - lower
Emotional violence in childhood	No	Ref	
	Yes	3.75*	4.80 - 2.92
Gender	Male	Ref	
	Female	1.51*	1.93 - 1.18
Age	18-39 years	Ref	
	40-49 years	0.58*	0.79 - 0.43
	50-60 year	0.35*	0.46 - 0.26
Education level	0-12 years	Ref	
	13 or more	0.89	1.12 - 0.69

Note * = p value<0.05, Adjusted for gender, age, educational level

3.4 Interaction analysis

When the regression analysis was performed within strata defined by ethnicity, the estimated association between emotional violence and the utilization of somatic specialist healthcare services was similar among Sami and Norwegians.

A univariate logistic regression analysis was performed to investigate if the the association between emotional violence in childhood and the utilization of psychaitric specialist healthcare services in adulthood among Norwegians and Sami differs. Emotional violence in childhood found to be significantly associated with the utilization of psychaitric specialist healthcare in adulthood among Norwegian (Crude OR=5.40, 95% CI [7.15 – 4-08]) and Sami (Crude OR=2.25, 95% CI [3.88-1.31]).

4 Discussion

4.1 Summery of the findings.

The results shows that emotional violence is significantly associated with increased somatic SHC in adults. Participant who reported emotional violence in childhood had 23% more likely to use somatic SHC in adulthood than participants who reported no emotional violence in childhood.

Moreover, the results shows that emotional violence in childhood is significantly associated with an increase in psychiatric SHC use in adulthood. Those participants who reported EVC were 3.75 times more likely to use psychiatric SHC in adulthood than participants who reported no EVCwere not exposed.

A univariate subanalyse demonstrated that this estimated association was much stronger among those who identified themselves as Norwegian (OR 5.40) than among those who identified themselves as Sami (OR 2.20).

Finally, the results shows that the association between ethnicity and the use of somatic and psychaitric specialist was not significant.

4.1.1 Existing knowledge

Similar to this study, several studies have found an association between childhood violence and adult specialist healthcare utilization (Bellis et al., 2017; Bonomi et al., 2008; Chartier et al., 2007; Chartier et al., 2010; Hargreaves et al., 2019; Loxton et al., 2019; Quinn et al., 2016). There are however, differences between this current study and the previous studies conducted on the same topic. First, the population study is restricted to specific populations such as female (Bonomi et al., 2008; Loxton et al., 2019) or low income population (Hargreaves et al., 2019). All of these studies are also restricted to non-indigenous people. Secondly, the majority of these studies has either examine the exclusive consequence of either physical and, or sexual childhood violence (Bonomi et al., 2008; Chartier et al., 2010) or the generally childhood stress (Bellis et al., 2017; Hargreaves et al., 2019; Loxton et al., 2019). In these studies, emotional violence has received less attention than the other childhood violence. Chartier et al. (2010) conducted the first population-based study on the association between childhood violence and specialist healthcare utilization. However, only physical and sexual childhood violence were examined in this study; emotional violence was excluded. According to this study, respondents who reported physical and sexual childhood violence had 38% and 39% more likely to use professional healthcare in adulthood than respondents who reported no physical and sexual violence in childhood.

All three types of childhood violence cause stress (Gama et al., 2021), which is damaging to a child's developing body (McEwen et al., 2016). Therefore, the estimated relationship between childhood violence and somatic and psychiatric specialist healthcare utilization in adulthood observed in this study and previous studies can be explained by the chronic stress associated with childhood violence. In the following paragraphs, this topic is discussed further.

4.1.1.1 Potential explanation of the estimated association between emotional violence in childhood and the utilization of somatic and psychiatric specialist healthcare.

Persistence and high levels of stress during childhood may damage brain structure and function (McEwen et al., 2016) , which may explain the estimated relationship between emotional violence in childhood and use of somatic and psychiatric SHC in adulthood. The two brain structures that childhood stress may potentially harm are the amygdala and the prefrontal cortex (McEwen et al., 2016). The function of the amygdala is to identify stressful

events, activate the fight-or-flight response, and transmit stress-related information to the prefrontal cortex for further processing (Fox, 2008, p. 109). The prefrontal cortex controls behaviors such as concentration, decision-making, and social interaction as well evaluating information from the amygdala. When the prefrontal cortex evaluates stress-related information and labels it as a "false alarm," the amygdala cancels the fight-or-flight response gradually (Fox, 2008, p. 105). Therefore, stress response requires the coordination of these two structures.

The fight-or-flight response is a physiological response to a perceived stressful situation in which the amygdala and other organs initiate survival-oriented changes in the body. Under these changes, the body produces stress hormone in readiness for either fight or flight. The stress hormones increase glucose levels in the blood and constrict blood vessels, causing the heart to pump more blood to the muscles and rising blood pressure. Every function of the body, including the immune system, works ceaselessly in response to stress. This is essential for survival (Fox, 2008, p. 33). However, when the amygdala and prefrontal cortex lose their ability to work properly, this physiologic changes can be initiated easily and the prefrontal is unable to inhibit this. As a result of these persistent stress hormones in the body, blood sugar and blood pressure are constantly elevated. Diabetes type 2, cardiovascular disease, obesity, and cancer are chronic diseases for which elevated glucose and blood pressure are known risk factors (McEwen, 2004). A weakened immune system raises the risk of infectious diseases such as sexually transmitted infections and HIV, in addition to chronic disease. Possible underlying explanation for the estimated relationship between EVC and somatic SHC is the higher risk of chronic and infectious diseases associated with childhood stress.

The association between emotional violence in childhood and the utilization of psychiatric specialist healthcare

The result of this current suggests that those who reported being exposed to emotional violence in childhood had 3.75 times more likely to use psychiatric specialist healthcare than those who were not exposed. Studies has found that childhood stress is strongly associated with psychological disorder and risk taking behaviorals (Annor et al., 2020; Norman et al., 2012). The overactivation of the amygdala and the underactivation of the prefrontal cortex can explain the risk-taking behavior such as excessive alcohol intake, drug and unsafe sex and as well as psychological disorders such as depression, PTSD anxiety. The combination of risky behavior and psychological disorder can increase vulnerability to future stress events.

This can contribute to the estimated association between emotional violence in childhood and the use of psychiatric SHC in adulthood.

Childhood stress is not only damaging for the child, in long term it will cost a lot for society as well (World Health organization, 2020). The cost can be estimated from costs associated with the use of healthcare services and the productivity loss due to disease and premature death (Olsen, 2017). According to Global burden disease study GBD (2020) most of global premature deaths and diseases is due to stress-related risk factor such as high blood pressure, high level blood sugar, obesity and and risk behavior such as unhealthy dietay or high alconsumptions. These stress-related risky factors increase the risk of stress-related diseases such as cardiovascular and type 2 diabetes and has contriubuted 10.8 million deaths (19.2% of all death) in 2019. In Europe it is estimated that total Cardiovascular diseases costs 210 billion euros. It is estimated that 53% of the total (111 billion euros) is used to provide healthcare service while 26 % (51 billion euro) was estimated due to productivity loss and 21% (45 billion euros) to care people cardio vascular (Leal et al., 2006; Wilkins et al., 2017). Moreover, the global economic burden of diabetes in adult is account for 180 billion dollars (Bommer et al., 2017; Williams et al., 2020). Psychological disorders are quite expensive for society (Christensen et al., 2020). Each year, 70 million Norwegian kroner are used to combat psychiatric disorders in Norway.

4.1.1.2 Why is the use of somatic specialist healthcare higher than the utilization of psychiatric healthcare

According to the current results of this study, 42% of participants have utilized somatic specialist healthcare services, while only 3.4% have utilized psychiatric specialist healthcare services. The finding of this current study is consistent with Norwegian national findings and international findings. In 2020, 45% of the Norwegian population has contact with somatic SHC while 3.7% of the Norwegian population has contact with the psychaitrich healthcare (Norwegian Health directorate, 2020). In 2014 (the same year that data for this study were collected), over 40 percent (of Norwegian adults had contact with somatic SHC, whereas 4.4% of Norwegian adults had contact with psychiatric SHC (Norwegian Directorate of Health, 2014). According to international research, psychiatric SHC is underutilized (Clement et al., 2015; Doll et al., 2021).

It has long been claimed in Norway that mental health is given a lower priority than somatic health. Since 2016, the Norwegian government has committed to prioritize the psychiatric SHC over the somatic SHC through a political agenda known as "Gylden regelen" This can be evaluated using three criteria. First, psychiatric healthcare cost growth should be greater than that of somatic healthcare. Second, the average wait time for psychiatric patients should be decreased more than that for somatic patients. Third, the number of outpatient contacts and contacts with contract specialists (private specialist healthcare services) for psychiatric should be increased more than for somatic healthcare (Norwegian Ministry of Health and Care Services, 2016).

After five years, the Office of the Auditor General, which oversees the public sector, has concluded in a report that this commitment has not been met (Riksrevisjonen, 2021). Both somatics and psychaitric health care cost have increased during the time, although somatics costs have increased the most. Between 2015 and 2019, the average wait time for somatic and psychiatric SHC decreased for adults, but increased for children and adolescents. As a result of the pandemic, the average wait time for somatic SHC increased in 2020 while it decreased for psychiatric SHC. From 2015 to 2019, the number of outpatient contacts in somatics increased, whereas the number of outpatient contacts in psychaitric health care declined. In their report, the Office of the Auditor General concluded that many individuals with psychiatric needs still lack access to psychiatric healthcare services.

The poor knowledge of psyhaitic disease and the restricted resources available to the psyhaitric SHC may limit access to psychiatric care(Riksrevisjonen, 2021). In Norway, around 72% of specialist healthcare budget was allocated to somatic SHC , whereas less than 20% was dedicated to psychiatric SHC and this was stable between 2008-2020 (Norwegian Health directorate, 2020).

Affordibility may as well limit access for psyhaitric healtcare services. Even if the public of psychiatric services is limited by a long waiting list, it is still possible to purchase these services through private psychiatric healthcare. Those who cannot afford to purchase psychiatric services from private hospitals must wait a considerable amount of time before receiving these services. This is problematic given that people with limited financial resources may be the ones who need this services most.

Another factor that may limit access for psychiatric healthcare is acceptability. People may be reluctant to seek help when they need it due to stigmatization fears. This can contribute to psychiatric healthcare underutilization. Both the treatment and the explanation for the cause can be negatives (Singh et al., 2016). Stigma is beginning to fade as people become more aware of psychological disorders, but it remains a factor in the underutilization of psychiatric healthcare services, particularly among the elderly (Blåka, 2012). In Norway, the underutilization rate is considerably lower among the elderly, which can be explained to the stigma associated with psychiatric problems among the elderly (Norwegian Health directorate, 2020)

4.1.1.3 Sami and Norwegian

According to the results of this study, there was no significant association between ethnicity and utilization of somatic and psychiatric SHC, suggesting that Samis and Norwegians used specialist healthcare services similarly. A population-based master's thesis also found no difference in the utilization of primary health care between Sami and Norwegian adults (Hansen, 2015). Another population-based study demonstrated that there was no difference between Sami and Norwegian adolescents in the utilization of psychiatric health care (Turi et al., 2009). Moreover, according to retrospective studies, admission and length of stay at psychiatric hospitals in northern Norway, as well as access to somatic specialists, were similar for Sami- and non-Sami-speaking municipalities (Norum et al., 2012; Norum & Nieder, 2012). Similarities between Sami and Norwegian healthcare utilization reported in this and previous research may be attributable to the growing emphasis on Sami health and healthcare utilization, as well as the recognition of the importance of cultural and linguistic factors in the utilization of healthcare services.

However, studies indicate that Sami-speaking patients are less satisfied with the services they received from general practitioners and psychiatric hospitals than their Norwegian counterparts due to cultural and linguistic barriers (Nystad et al., 2008; Sørli & Nergård, 2005). Nystad et al. (2008) conducted a study to compare the satisfaction levels of Sami and non-Sami speaking patients with their GP. Sami-speaking patients were less satisfied with the GPs linguistic skills. Additionally, Sørli and Nergård (2005) conducted a study comparing the levels of satisfaction of Sami and non-Sami speaking patients with psychiatric hospitals treatments. Sami patients were less satisfied with all aspects of their treatment, including contact with personnel, treatment alliance, information, and overall treatment. In a qualitative

study, Mehus et al. (2019) found that Sami patients and their families face cultural insecurity when seeking healthcare. In institutions located outside of Sami areas, there were no or very few Sami-speaking healthcare professionals, no interpreters were available when communicating vital information, and Sami cultural objects, art, and music were less visible in the institutions. This has contributed to Sami-speaking patients' feelings of cultural insecurity. The reported dissatisfactoriness among Sami-speaking patients is not surprising given that the Norwegian healthcare system is shaped by Norwegian cultural norms and values as well as Norwegian language.

Culture and language in communication and trust.

To give quality services to their patients as well as to build trust, the provider must have effective communication skills (Hearnden, 2008). Culture influences how we communicate and what is worth communicating about while language is the tool we use to communicate.

Sami and Norwegian communicate and understand sensitive topics such as emotional violence differently. What one culture may view as emotional violence, another may view as appropriate parenting techniques. A study comparing Sami and Norwegian parenting styles showed that Sami and Norwegian have different parenting styles (Javo et al., 2004). Teasing or threatening a child may be considered as emotional violence; however, according to this study, teasing or threatening the child is the Sami way of raising physically and psychologically independent children who are able to face the challenges of life.

Additionally, Sami and Norwegian communicate and understand health and diseases differently. According to the findings of a qualitative study on how Sami understand and communicate about psychiatric diseases, the majority of participants understood psychiatric disorders as supernatural manifestations. Additionally, they said that it is inappropriate to discuss topics over which one has no control, such as illness and health. Moreover, they believed that a sick individual should be able to handle his or her condition without seeking medical help or disclosing it to others. However, family and close friends should offer nonverbal support Bongo (2012). This demonstrated that the Sami people appear to value family. In addition to family, Sami have also deep contact with nature and that it is essential to follow nature's guidance in all aspects of life, including health and diseases. On the other hand study shows that Norwegians are becoming more accepting of mental illness and encouraging others to seek medical treatment Blåka (2012).

Sami people might as well be more open to mental health services if their culture and language were incorporated into medical care. Users' involvement in the therapeutic process must be emphasized. The user has the right to engage in all phases of therapy, and the provider is responsible for ensuring this. If this is not addressed, many users' feelings of helplessness could be exacerbated. A study was conducted to investigate what is essential for Sami mental healthcare users and how they can engage in all phases of treatment. From their perspective, it was crucial for service providers to understand the significance of Sami cultural norms and values, as well as the significance of family and nature (Sørly et al., 2021). The lack of Sami culture and language in the health and social service might even trigger unpleasant memories of a time when the Norwegian government deliberately and systematically ignored Sami culture and language as part of its Norwegianization policy. This may also diminish the Sami patient's trust in the Norwegian healthcare system.

4.1.1.4 Methodological consideration.

It is usually impossible to collect data from the entire population to estimate a prevalence or association. The association can be estimated by selecting a group of people from the population, known as the study sample and collect data from them. The estimated association between the exposure and outcome must be as close as possible to the true association (same result that would be obtained if data would be collected from the entire population) (Thelle, 2015, p. 145). To meet this goal, the estimated association must have high internal and external validity.

External validity refers to what extent the result obtained from the study sample generalized to the study population. Internal validity refers to, how accurate the study sample measures what it intended to measure (Gordis, 2013, p. 263). Errors can compromise the internal and external validity of the estimated association.

There are two types of error (Thelle, 2015, p. 143). These are random errors and systematic errors. Random error occurs when the sample size is small, which can impact the reliability. This type of error can be reduced by including a large sample size into the study. The large sample size included in the SAMINOR 2 can reduce the effect of random errors. On the other hand systematic errors, also known as bias, occurs when errors are made under the

several phases in the study (study design, collecting of information, selecting subjects from the population, assigning subjects into the study groups or analysis). There are three types of bias, selection bias, information bias and confounding bias. Bias must be taken into account because they can compromise the internal and external validity of study. In the following paragraphs, I will examine the effect of bias on this thesis.

4.1.1.5 Selection bias: Low response rate

The SAMINOR 2 response rate was only 27% (Brustad et al., 2014). In the past three decades, national and international studies have uncovered that the response rate of the observational studies is decreasing (Galea & Tracy, 2007; Knudsen et al., 2010; Krokstad et al., 2013; Langhammer et al., 2012). Low response rate causes non-response bias which is a type of selection bias that occurs when certain individuals are more likely to be included in the study sample due to demographic, socioeconomic, cultural, and health status characteristics that differ from those of non-responders (Gordis, 2013, p. 162; Thelle, 2015, p. 145)

Due to the lack of information regarding nonrespondents in SAMINOR 2, it is challenging to determine the influence of nonresponse bias on the estimated association between emotional violence and the use of somatic and psychiatric SHC. Comparing those who participated in SAMINOR 1 but not SAMINOR 2, researchers found that the non-respondents of SAMINOR 2 were younger, less educated, and male (Brustad et al., 2014). In addition, HUNT study (The Trøndelag study-population based study), researchers conducted a follow-up investigation to determine the differences between responders and non-responders. Researchers found that non-responders had a lower socioeconomic class (lower education level), were male, and were younger. In addition, the non-respondent had a higher prevalence of chronic diseases and psychological issues than the respondent (Langhammer et al., 2012). In this current study, those who are more likely to be exposed to be EVC such as people with lower education and people with mental and physical health may be included less in the respondents which indicates that EVC may be underestimated. However, according to a report by the Norwegian government (Norwegian Directorate of Health, 2014), the findings of this study regarding the utilization of somatic and psychiatric specialists were identical to the actual utilization of somatic and psychiatric specialist healthcare in the Norwegian population during the same year. This indicates that the estimated frequency of somatic and psychiatric specialist use was accurate while the emotional violence in childhood may differ between respondent and non-respondent (underestimated). In conclusion, the estimated association between emotional

violence and utilization of somatic and psychiatric may be underestimated. This mean that non-response bias may compromise the internal validity of this study.

4.1.1.6 Information bias: emotional violence in childhood as source of information bias

Participants may provide false information, either because the information they recall is incorrect (recall bias) or because they have a different understanding of the requested information. This called information bias and is divided into differential and non-differential misclassification(Thelle, 2015, p. 149). Differential misclassification bias may emerge when those who utilize specialist healthcare in adulthood remember and report EVC more frequently than those who do not. This form of misclassification may overestimate or underestimate the association between the exposure and the outcome. On the other hand, non-differential misclassification bias may occur when those who use specialist healthcare services in adulthood remember and report the same information as those who did not report using specialist healthcare services in adulthood. This kind of misclassification bias may underestimate the association between the exposure and the outcome (Gordis, 2013, p. 264).

In this thesis, individuals exposed to EVC may have been misclassified as unexposed. Meaning that the misclassification happens within the group that was not exposed. This misclassification may have occurred due to the fact that the exposure occurred during childhood, yet information regarding the exposure was requested during adulthood. This probability increases, given that fifty percent of our participants are above the age of fifty. Moreover, culturally different definitions of emotional violence may have contributed to this misclassification bias. Due to cultural differences, individuals may understand and respond differently to the question *"Have you ever encountered someone who consistently and continuously attempted to oppress or humiliate you?"* Some individuals may respond "yes" and view it as destructive or emotional violence, whereas others may respond "no" and view it as a normal aspect of childrearing (even motivational speech). However, it is questionable whether participants who used specialist healthcare services and those who do not have the same level of misclassification bias.

4.1.1.7 Confounding vs intermediate and interaction term

In this thesis, a set of covariates was selected. Whether these sets of covariates are confounding variables or not is open for discussion. It is crucial to be cautious when deciding if a variable is a confounder or not, as inappropriate adjustments are more likely to introduce new bias into the study. In accordance with existing literature, age and gender can be classified as confounders. It is however difficult/challenging to determine if education level, somatic diseases and ethnicity can be classified as confounding variables. Education level and somatic diseases variables seem not to have an association with the exposure (the education level of a child is irrelevant for the EVC) and may even be a causal pathway (EVC leads to a low level of education and increases the likelihood of the outcome). Based on this argument, both these variables can be classified as mediator variables and it is inappropriate to adjust for them in statistical analyses.

On the other hand, we know that parental education is associated with emotional violence in childhood. A parent's poor education can increase the possibility of being exposed to EVC. In addition, it is more likely that children will attain the same level of education as their parents when they reach adulthood. Education may also be a risky factor for the use of specialist healthcare services (van Nierop et al., 2018). According to this line of reasoning, education level is associated with the exposure and is a risk factor for the outcome. The same reasoning may be applicable to the somatic disease variable. Based on this reasoning, I have chosen to adjust for education level and somatic disease variables by including them into the model.

We examined whether ethnicity is an interaction term in somatic and psychiatric datasets. We have decided to incorporate ethnicity into the model due to the insignificance of interaction analysis in somatic specialist healthcare. Ethnicity was however, the only variable that has not contributed to the model. In contrast, the interaction analysis in the psychiatric dataset was found to be significant; consequently, ethnicity has been stratified. Due to the small number of adults who reported receiving psychiatric specialized care services, the stratification analysis was univariate.

The estimated association between EVC and the use of psychiatric specialized healthcare services in adulthood was stronger than the estimated association between EVC and the use of somatic specialized healthcare services in adulthood, particularly among Norwegians. This may be a result of the small number of observations in certain categories as well as the imbalance between some of the categories.

4.1.1.8 The strength of this study.

The large sample size (n=11,600) is an important strength of the SAMINOR 2 study. This large sample size has allowed me to analyze both the somatic and psychiatric specialized healthcare and at the same time keep statistical power. In the two data sets presented in this thesis, missing data for the exposure and the outcome were excluded because excluding missing data only for the exposure and the outcome and not for the covariates reduces the loss of statistical power in the analysis. The remaining data for the datasets remained large (somatic dataset-9290 participants and psychiatric dataset 9051 participants). In addition, participants who reported emotional violence in adulthood, as well as those who reported emotional abuse in both childhood and adulthood, were excluded. Thus, only individuals who reported being exposed to emotional violence during childhood were included. Due the large sample size, I was able to accomplish this without sacrificing statistical power. In this approach, the impact of emotional violence in adulthood is controlled.

The exposure measurement may achieve high validity and reliability, which can be another strength of this study. Questions used to measure childhood violence was obtain from NorVold Questionnaire (NorAQ) . Based on previous validation studies among males and females, the NorAQ questions has good validity and reliability (Swahnberg & Wijma, 2003; Swahnberg, 2011). For females, a validation study determined that the test-retest reliability was (84-95 percent). The specificity was 98% (Swahnberg & Wijma, 2003). This indicates that NorAQ questions are effective at distinguishing between true negatives and false positives. NorAQ questions will accurately identify 98% of individuals who were not exposed to emotional violence in childhood. The sensitivity was 75%. Seventy-five percent of individuals exposed to childhood violence will be correctly identified by NorAQ questions. This means that false positive answers are possible. This validation study, however, had a small sample size (n=64), which may indicate that the result is inaccurate. For male, test-retest (80-95 percent). The specificity was 72% while the sensitivity was 83% (Swahnberg, 2011). False positive and false negative answers were possible. Overall, the validity and reliability of the NorAQ questions is good to excellent. However, these NorAQ questions were not validated across Sami and non-Sami populations. Due to cultural and linguistic differences, questions may be understood differently, posing a significant threat to the current study's validity. In spite of this, the questions utilized in this study are structured so as to

cover a broad spectrum of childhood violence acts, so minimizing the possibility of misinterpretation due to cultural differences.

4.1.1.9 causality

Cross-sectional studies provide the weakest evidence of a causal relationship between exposure and outcome compared to other observational studies such as case-control and cohort studies and experimental studies . The lack of a time dimension in cross-sectional studies makes it nearly impossible to argue a causal relationship between an observed association between exposure and outcome (Thelle, 2015, p. 101). Due to the lack of a time dimension, it is frequently challenging to determine which comes first, the exposure or the outcome. The exposure of this thesis (emotional violence in childhood) occurred before the the outcome (use of specialized healthcare services in adulthood). This thesis cannot, however, establish a causal relationship between emotional violence in childhood and the use of specialized healthcare services as an adult. The findings of this current cross-sectional study can be used to generate hypotheses for future research.

5 Conclusion

Adult Sami and Norwegian utilization of somatic and psychiatric specialist healthcare does not differ. It seems that some Sami patients were less happy with the healthcare services they received. One explanation can be that Sami and Norwegian have different understandings of EVC and psychaitric disorders. To effectively communicate and build trust with Sami people, it is necessary to understand and respect the significance of Sami cultural norms and values , as well as the Sami perspective on EVC and psychiatric disorders. As SANK's services are adapted to the Sami culture and language, the Sami people who utilize SANK's services may not experience these problems.

Somatic SHC use is higher than psychiatric SHC use. Access to psychiatric SHC is more challenging than access to somatic SHC due to the limited availability, affordability, and acceptability of psychiatric SHC.

EVC is associated somatic and psychiatric SHC in adulthood among both Sami and Norwegian populations.

EVC increases the odds of stress-related diseases such as chronic diseases and psychological disorders as well as their risk factors such as alcohol consumption, drugs and smoke use as well as unsafe intercourse. These in turn increase the odds of needing somatic and psychiatric SHC in adulthood. The specialist health care services are extremely complex and costly. Therefore, it is necessary to reduce the population's needs for these services by preventing risk factors associated with an increase in the use of SHC.

The way in which stress affects the developing brain makes it more difficult for an exposed child to make good decisions as an adult, which increases disease susceptibility and, thus, the need for specialist healthcare services in adulthood. All children must be provided with a stress-free and healthy childhood in order to prevent abnormal brain development. As a result, the use of specialist health care as an adult may be decreased, and a significant number of children will be spared from suffering. Every child deserves a good start in life.

6 Appendix

Appendix 1 Approval from SAMINOR



UiT Norges arktiske universitet

Sámi dearvvašvuođadutkama guovddáš/
Senter for samisk helseforskning,
Det helsevitenskapelige fakultet,
UiT Norges arktiske universitet
Deres ref.:
Vår ref.:
Dato: 16.09.2021

Til prosjektleder Anja Davis Norbye og prosjektmedarbeidere.

The association between Emotional violence in childhood and the utilization of specialist healthcare in adults among Sami and non-Sami population: The SAMINOR 2 Questionnaire Survey.

Vi viser til deres søknad 10.09.2021 om bruk av data fra SAMINOR 2 – spørreskjemaundersøkelsen til master-prosjektet "The association between Emotional violence in childhood and the utilization of specialist healthcare in adults among Sami and non-Sami population: The SAMINOR 2 questionnaire survey." Søknaden ble behandlet av SAMINORs prosjektstyre 15.09.2021.

Om prosjektet

Prosjektet er et masterprosjekt for student Farhiyo Ahmed Osman, med Anja Davis Norbye som hovedveileder og Astrid M. A. Eriksen som biveileder.

Prosjektets formål er å undersøke om det er en sammenheng mellom emosjonell vold i barndommen og bruk av spesialisthelsetjenester i voksen alder i samisk og ikke-samisk populasjon. Det søkes om en anonym datafil med 8 variabler fra SAMINOR 2 – spørreskjemaundersøkelsen. Etnisitet måles ved spørsmålet om hva man selv regner seg som. Prosjektet vil be om samisk kollektivt samtykke gjennom søknad til Sakkyndig etisk komité for samisk helseforskning.

Prosjektstyrets vurdering

Dette er et spennende prosjekt tematisk, som bygger på Astrid Eriksens funn av høy forekomst av emosjonell vold i barndommen i denne populasjonen. Søkerne berømmes for å ha avgrenset problemstillingen og variabler. Prosjektets målsetning vurderes å være innenfor SAMINORs formål, og SAMINOR-data anses som velegnet til å besvare forskningsspørsmålene.

I henhold til prosjektbeskrivelse og variabelliste, skal deltakere som regner seg som kvener ekskluderes. Vi ber om en avklaring på om dette også gjelder deltakere som regner seg som både samisk og kvensk, eller om disse skal beholdes i samisk gruppe.

Antallet som har mottatt hjelp fra spesialisthelsetjenesten for psykiske plager er relativt lavt. Dersom det viser seg umulig å oppnå et anonymt datasett, vil det bli utarbeidet en datafil der spesialisthelsetjenester for fysiske og psykiske plager slås sammen til én variabel. Det kan også bli behov for en grovere kategorisering av andre variabler. Dette vil i så fall bli gjort i dialog med prosjektleder.

Vedtak

Søknaden godkjennes med forbehold om at det innhentes samisk kollektivt samtykke fra Sakkyndig etisk komité for samisk helseforskning. Avtale om bruk av data fra SAMINOR vil bli utarbeidet når det kollektive samtykket foreligger.

Senter for samisk helseforskning ser fram til et godt samarbeid og ønsker lykke til med prosjektet.

Vennlig hilsen,
på vegne av SAMINORs prosjektstyre,



Marita Melhus
Administrator og databaseansvarlig SAMINOR

marita.melhus@uit.no
telefonnummer 7764 6226

Appendix 2 Approval from Samisk kollektivt samtykk

Sámi dearvvašvuodadutkama áššedovdi etihkalaš lávdegoddi
Sakkyndig etisk komité for samisk helseforskning

Poastačujuhuse/adresse Tel: 78 47 40 00
Poastaboksa/postboks 3 Org.nr: 974 760 347
9735 Kárásjohka/Karasjok samedlggi@samedlggi.no
Áššemeannudeadji/ Bent Martin Ellassen
Saksbehandler

ÁŠŠI/SAK

MIN ČUJ./VÅR REF.

DIN ČUJ./DERES REF.

BEAIVI/DATO
23.11.21

13/21

Sak 13/21. Søknad om samisk kollektivt samtykke: 'The association between emotional violence in childhood and the utilization of specialist healthcare in adults among Sami and non-Sami population: The SAMINOR 2 questionnaire survey', v/stipendiat Anja Davis Norbye – SMT166-1086178

Att.: Anja D. Norbye

Det vises til din søknad vedrørende søknad om samisk kollektivt samtykke. Komitéen fattet følgende vedtak i sak 13/21 i møtet den 28. oktober 2021:

«Et samisk kollektivt samtykke gis til prosjektet 'The association between emotional violence in childhood and the utilization of specialist healthcare in adults among Sami and non-Sami population', v/Anja Davis Norbye. Vedtaket gjelder t.o.m. oppgitt prosjektslutt».

Fra søknaden: It has recently been acknowledged that adverse childhood experiences (ACEs) may increase the risk of developing physical and mental diseases in adulthood. Physical and mental diseases are associated with higher use of specialist (physical and mental) healthcare services. Previous studies have indicated that ACEs are more prevalent in indigenous populations compared to non-indigenous populations. However, there are lack of studies investigating the direct link between ACEs and use of healthcare (mental and physical) services in adulthood among Sami and non-Sami population. This master thesis aims to investigate the link between ACEs and use of specialist health services in adulthood among Sami and non-Sami. Data used in this thesis is from the SAMINOR 2 questionnaire study: A population based, cross-sectional study on the health and living conditions in areas with both Sami indigenous and non-Sami population. The population of SAMINOR 2 includes all inhabitants aged 18–69 registered in the Norwegian National Population Register by 1 December 2011 in different municipalities. All data were collected in 2012 from 25 municipalities.

Vurdering

Prosjektet er godt begrunnet og vil bidra med ny kunnskap om den samiske folkehelse og helsetjenestebruk i denne befolkninga.

Sámi dearvvašvuodadutkama áššedovdi etihkalaš lávdegoddi
Sakkyndig etisk komité for samisk helseforskning

Poastačujuhus/adresse Tel: 78 47 40 00
Poastaboksa/postboks 3 Org.nr: 974 760 347
9735 Kárášjohka/Karasjok samediggi@samediggi.no
Áššemeannudeadji/ Bent Martin Eliassen
Saksbehandler

Prosjektleder viser i søknadsskjemaet god kunnskap om de etiske retningslinjene og de særlige etiske hensyn som må tas ved samisk helseforskning. Biveileder Astrid Eriksen er samisk og postdoktor ved Senter for samisk helseforskning. Hun har god kunnskap om samiske samfunnsforhold og om forskningstemaet, som bidrar til å sikre kulturell trygg forskning.

For master- og bachelorprosjekter er adekvat refleksjon rundt og drøfting av de etiske retningslinjene tilstrekkelig når det gjelder å ivareta disse. Hva gjelder partnerskap med det samiske samfunnet (se retningslinjene side 2–3), slik det forventes i ph.d.- og andre forskningsprosjekter, er dette åpenbart ikke mulig å gjennomføre i studentprosjekter på lavere nivå.

Det er av søknaden likevel vanskelig å vurdere studentens refleksjon rundt temaet. Forskningsetikk er ikke berørt som tema overhodet i prosjektbeskrivelsen. Komitéen forutsetter at studenten ivaretas godt av veilederne, som sikrer tilstrekkelig veiledning også på dette punktet når masteroppgaven skal skrives.

Votering

Komitéen var fulltallig og vedtaket enstemmig.

Dearvvuodaiguin/Med hilsen

Anne Lene Turi
Komitémedlem,
for jođiheadđji/leder

Bent Martin Eliassen
Lávdegottičálli/komitésekretær

Forespørsel om deltakelse i forskningsprosjektet SAMINOR 2

Bakgrunn og hensikt

Dette er et spørsmål til deg om å delta i et forskningsprosjekt for å få mer kunnskap om helse, sykdom og levekår i områder med samisk og norsk bosetting. Du som deltar i denne undersøkelsen vil bli bedt om å svare på et spørreskjema om helse og levekår.

Du er invitert til å være med i denne studien fordi du er i alderen 18-69 år og bosatt i en av kommunene som er valgt ut til å inngå i undersøkelsen. Studien utføres av Senter for samisk helseforskning ved Universitetet i Tromsø.

Det overordnede målet med SAMINOR 2 helseundersøkelsen er å få mer kunnskap om forekomst av både risikofaktorer og ulike sykdommer samt deres mulige årsaksforhold.

Hva innebærer studien?

I undersøkelsen vil du bli invitert til å svare på vedlagte spørreskjema og sende det tilbake til oss eller benytte vår nettbaserte spørreskjemaløsning. Dersom du velger nettbasert løsning framfor spørreskjemaet går du til <http://saminor.uit.no> og benytter følgende brukernavn og passord:

Hva skjer med den innsamlede informasjonen om deg?

Informasjonen som registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Alle opplysningene vil bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjenneriske opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste. Det betyr at opplysningene er aidentifisert. Det er kun autorisert personell knyttet til prosjektet som har adgang til navnelisten og som kan finne tilbake til deg. Etter godkjenning fra Datatilsynet kan opplysningene dine settes sammen med opplysninger fra andre registre for forskningsformål. I alle disse tilfellene blir navnet og personnummeret fjernet. Dette kan være registre om trygd, sykdom, inntekt, utdanning, yrke og opplysninger fra tidligere SAMINOR- eller andre helseundersøkelser (både spørreskjema og blodprøver). Aktuelle registre er Krefregisteret, Dødsårsaksregisteret, Reindriftsforvaltningens database, Folkeregisteret og folketellinger. Forsikringsselskaper eller andre kommersielle institusjoner vil ikke få tilgang til dataene. All videre behandling av helseopplysninger skjer etter godkjenning av Regional komité for medisinsk og helsefaglig forskningsetikk.

Det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres. Du kan seinere bli kontaktet med forespørsel om du vil svare på tilleggsspørreskjema eller vil delta i en klinisk helseundersøkelse. Prosjektstutt er satt til 31.12.2067. Etter dette vil dataene slettes eller anonymiseres.

Frivillig deltakelse

Det er frivillig å delta i studien. Ved å svare på skjemaet og returnere det per post eller svare på nettbasert skjema samtykker du i deltakelse i studien. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke til å delta i studien. Du har rett til å få innsyn i hvilke opplysninger som er registrert om deg. Du har videre rett til å få korrigert eventuelle feil i de opplysningene vi har registrert. Dersom du trekker deg fra studien, kan du kreve å få slettet opplysninger, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner.

Dersom du senere ønsker å trekke deg eller har spørsmål til studien, kan du kontakte Anne Karen Hætta tlf. 404 90 467 eller Ketil Lenert Hansen tlf. 907 91 116, ved Senter for samisk helseforskning, Universitetet i Tromsø. Du kan bli kontaktet igjen per post med invitasjon om å delta i SAMINORs kliniske helseundersøkelse og nye spørreskjemaundersøkelser.

Økonomi

Studien er finansiert gjennom forskningsmidler fra de tre nordligste fylkeskommunene, Helse Nord, Samisk nasjonalt kompetansesenter, psykisk helsevern (SANKS), Sametinget, Universitetet i Tromsø og Helse og omsorgsdepartementet. Ingen av disse instansene har interessekonflikter i undersøkelsen.

Informasjon om utfallet av studien

Resultater av undersøkelsen vil publiseres i internasjonale og nasjonale vitenskapelige tidsskrifter i tillegg til ulike populærvitenskapelige kanaler og media.

Hilsen fra


Magritt Brustad
Professor Dr. Scient.


Ragnhild Vassvik Kalstad
Avdelingsleder

Appendix 4 REK Apraisal



Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK nord	Ragnhild Hageberg	77646140	02.11.2021	374706

Anja Davis Norbye

Fremleggingsvurdering: Finnes det assosjoner mellom emosjonell vold i barndommen og bruk av spesialisthelsetjeneste: En spørreskjemaundersøkelse fra SAMINOR 2.

Søknadsnummer: 374706

Forskningsansvarlig institusjon: UiT Norges arktiske universitet

Prosjektet vurderes som ikke fremleggingspliktig

Søkers beskrivelse

Tidligere forskning har vist at vold i barndommen har sammenheng med psykiske og somatisk sykdommer. Det er derimot mindre kjent om emosjonell vold i barndom øker helsetjenesteforbruk i voksen alder. Tidligere studier indikerer at urfolk i større grad enn majoritetsbefolkningen bruker spesialisthelsetjenester. I Norge har vi lite informasjon om helsetjenestebruk i spesialisthelsetjenesten i vår populasjon. Vi ønsker derfor å undersøke om en eventuell sammenheng mellom emosjonell vold i barndom og spesialisthelsetjenestebruk er ulik blant samer og ikke-samer. For å undersøke denne sammenhengen skal vi bruke data fra befolkningsundersøkelsen SAMINOR 2 – en spørreundersøkelse fra 2012 der innbyggere fra 25 kommuner i Nord- og Midt-Norge med samisk og ikke-samisk bakgrunn ble invitert til å delta. Spørreskjemaet inkluderer mange ulike spørsmål, som både omhandler sosioøkonomiske og demografiske spørsmål, helserelaterte spørsmål og spørsmål om sosiale forhold. I denne studien vil vi bruke deltakernes svar om etnisitet, vold og ulik helsetjenestebruk. Totalt har 11 600 deltakere besvart spørreskjemaet. I tillegg til å undersøke om det er etniske forskjeller i bruk i spesialisthelsetjenester, ønsker vi også å undersøke om sammenhengen er ulik mellom bruk av somatisk og psykiatrisk spesialisthelsetjeneste.

Vi viser til forespørsel om fremleggingsvurdering for ovennevnte forskningsprosjekt. Forespørselen er behandlet av sekretariatet i REK nord på delegert fullmakt fra komiteen, med hjemmel i forskningsetikkforskriften § 7, første ledd, tredje punktum. Forespørselen er vurdert med hjemmel i helseforskningsloven § 10.

REKs vurdering

De prosjektene som skal framlegges for REK er prosjekt som dreier seg om «*medisinsk og helsefaglig forskning på mennesker, humant biologisk materiale eller helseopplysninger*», jf. helseforskningsloven § 2. «*Medisinsk og helsefaglig forskning*» er i § 4 a), definert som

REK nord

Besøksadresse: MH-2, 12. etasje, UiT Norges arktiske universitet, Tromsø

Telefon: 77 64 61 40 | E-post: rek-nord@asp.uit.no

Web: <https://rekportalen.no>

«*virksomhet som utføres med vitenskapelig metodikk for å skaffe til veie ny kunnskap om helse og sykdom*». Det er altså formålet med studien som avgjør om et prosjekt skal anses som framleggelsespliktig for REK eller ikke.

Formålet med denne studien er å undersøke om det er en sammenheng mellom emosjonell vold i barndommen og bruk av spesialisthelsetjeneste. Selv om funnene i studien indirekte vil kunne gi en helsemessig gevinst fremstår prosjektet som helsetjenesteforskning som ikke skal vurderes av REK etter helseforskningsloven.

Prosjekter som faller utenfor helseforskningslovens virkeområde, kan gjennomføres uten godkjenning av REK. Av forskrift om befolkningsbaserte helseundersøkelser § 4-1 fremgår det at helseopplysninger i befolkningsbaserte helseundersøkelser skal behandles i samsvar med personvernforordningen, personopplysningsloven og de alminnelige vilkårene i helseregisterloven § 6 og reglene om taushetsplikt i helseregisterloven § 17, jf. helsepersonelloven §§ 21 flg.

Konklusjon

Etter søknaden fremstår prosjektet ikke som et medisinsk og helsefaglig forskningsprosjekt som faller innenfor helseforskningsloven. Prosjektet er ikke framleggingspliktig, jf. helseforskningsloven § 2.

Vi gjør oppmerksom på at etter personopplysningsloven må det foreligge et behandlingsgrunnlag etter personvernforordningen. Dette må forankres i egen institusjon.

Vi gjør videre oppmerksom på at vurderingen og konklusjonen er å anse som veiledende, jf. forvaltningsloven § 11.

Med vennlig hilsen

May Britt Rossvoll
sekretariatsleder

Ragnhild Hageberg
seniorrådgiver

Kopi til:
UiT Norges arktiske universitet

Survey on health and living conditions



1. I consent to participating in this survey in accordance with the information provided in the information letter..... Yes

+

Personal health

2. How is your current state of health? (Put one cross only)
 Poor Not so good Good Very good

3. Do you have, or have you ever had, any of the following?

	Yes	No	Age at onset
Diabetes.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
High blood pressure.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Angina pectoris (stable angina).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Myocardial infarction (heart attack).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Psychological problems for which you have sought help.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Chronic bronchitis, emphysema, COPD.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Asthma.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Eczema.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Psoriasis.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Multiple sclerosis (MS).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Bechterew's disease.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

4. In the last year, have you suffered from pains and/or stiffness in muscles and joints that have lasted for 3 months or more? Yes No

+

If yes, what was the degree of pain in different parts of your body? (Put one cross per line)

	No pain	Some pain	Strong pain
Neck, shoulders.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arms, hands.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upper back.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower back.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hips, legs, feet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Head.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chest area.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stomach area.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Genitals.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other areas.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. In the last 4 weeks, how often have you used the following medications? (Put one cross per line)

	Not used for the last 4 weeks	Less than every week	Every week, but not daily	Daily
Sleeping pills.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tranquilizers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antidepressants.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+

6. In each of the following cases, which statement best describes your health condition today?

Walking

- I have no problems walking
- I have some problems walking
- I am bedridden

Personal hygiene

- I have no problems with personal hygiene
- I have some problems with hygiene and getting dressed
- I am not able to clean myself

Usual activities (e.g. work, studies, house chores, family or leisure activities)

- I have no problems performing my usual activities
- I have some problems performing my usual activities
- I am unable to perform my usual activities

Pain and discomfort

- I have no pain or discomfort
- I have moderate pain or discomfort
- I have strong pain or discomfort

Anxiety and depression

- I am not anxious or depressed
- I am somewhat anxious or depressed
- I am very anxious or depressed

+

7. How much do you weigh? (in whole kg).....

8. How tall are you? (in whole cm).....

9. We will now ask you to state your physical activity on a scale from very low to very high. The scale below runs from 1 to 10. Physical activity includes both housework and activity at work, as well as exercise and other physical activities such as walking, etc. Mark the number that best matches your level of activity:

1 2 3 4 5 6 7 8 9 10

Very low Very high

Family and linguistic background

People of different ethnic backgrounds live in Northern Norway. That is, they have different languages and cultures. Examples of ethnic backgrounds, or ethnic groups, are Norwegian, Sami and Kven.

10. What language(s) do/did you, your parents and your grandparents speak at home? (Put one or more crosses)

Norwegian Sami Kven Other, describe:

Mother's father _____
 Mother's mother _____
 Father's father _____
 Father's mother _____
 Father _____
 Mother _____
 Myself _____

11. What ethnic backgrounds do you, your father and your mother have? (Put one or more crosses)

Norwegian Sami Kven Other, describe:

My ethnic background is _____
 My father's ethnic background is _____
 My mother's ethnic background is _____

12. What do you consider yourself to be? (Put one or more crosses)

Norwegian Sami Kven Other, describe:

13. How would you assess your skills in understanding, speaking, reading and writing the Sami language?

Very well Fairly well With difficulty A few words None at all

Understand
 Speak
 Read
 Write

Employment, benefits and economy

14. What is your family's/household's gross income per year?

Less than NOK 150,000 NOK 150,000–300,000
 NOK 301,000–450,000 NOK 451,000–600,000
 NOK 601,000–750,000 NOK 751,000–900,000
 More than NOK 900,000

15. How many people live in your household? Number of people:

16. How many years of education have you completed? (Include all years you have attended school or studied):

17. Did you attend boarding school (either state or private) when you were in elementary/middle school? Yes No

18. What have been your main sources of income in the last year? (Put one or more crosses)

Employed work: Full-time Part-time Seasonal
 Self-employed work: Full-time Part-time Seasonal
 Age pension/contractual pension
 Cash benefit/transition benefit/parental benefit
 Unemployment benefit
 Sick pay
 Work assessment allowance
 Disability pension
 Social benefits
 Support from spouse/parents/siblings/children
 Loans/student loans and allowance
 Other (saved means/inheritance, etc.)

19. Do you worry you may lose your current job or income in the next 2 years? Yes No

20. Would you consider moving from your current municipality if you were offered work elsewhere? Yes Only seasonally No Don't know

21. If you are employed, how happy are you in your current job/industry? Very happy Satisfied Not satisfied Very unhappy

22. Based on your health and work experience, how likely are you to continue in employed work/industry until the following ages?

	Very likely	Likely	Not very likely	Very unlikely
62 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Older than 70 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. If you are self-employed, what type of industry do you work in? (Put one or more crosses)

Reindeer husbandry Fishing
 Farming Forest farming
 Business Other

Psychological health

24. Below is a list of various problems. Have you experienced any of these in the last 4 weeks? (Put one cross for each problem)

	Not affected	Slightly affected	Affected quite a bit	Severely affected
Suddenly scared for no reason	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling fearful or anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faintness or dizziness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling tense or keyed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blaming yourself for things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insomnia/sleeplessness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling blue/melancholic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling of worthlessness/of little value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling everything is an effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling hopeless about future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. The questions below relates to how you have been feeling over the last week. For each statement, please indicate which is closest to how you have been feeling. How often in the last week have you felt the following? (Put one cross on each line in the box with the most applicable answer)

	All the time	Almost all the time	Often	Some times	A few times	Not at all
I have felt cheerful and in good spirits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have felt calm and relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have felt active and vigorous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have felt fresh and rested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My daily life has been filled with things that interest me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. In the last 12 months, have you experienced uncomfortable memories that have disturbed you, without being able to do anything about them? No Yes, but rarely Sometimes Often

27. In the last 12 months, have you consciously avoided situations to avoid uncomfortable memories or feelings, in a way that stopped you from doing what you wanted to do? No Yes, but rarely Sometimes Often

28. In the last 12 months, have you been unable to react emotionally to situations where most people react? No Yes, but rarely Sometimes Often

29. Indicate how well the following statements describe you and your family:

	Does not fit	Fits well
I fully trust my own assessments and decisions	<input type="checkbox"/>	<input type="checkbox"/>
I am happiest in the company of others	<input type="checkbox"/>	<input type="checkbox"/>
I am very happy with my family	<input type="checkbox"/>	<input type="checkbox"/>
My self-confidence gets me through difficult periods	<input type="checkbox"/>	<input type="checkbox"/>
I make new friends easily	<input type="checkbox"/>	<input type="checkbox"/>
There is a high level of unity within my family	<input type="checkbox"/>	<input type="checkbox"/>
I use times of adversity as an opportunity to grow	<input type="checkbox"/>	<input type="checkbox"/>
I easily connect with new people	<input type="checkbox"/>	<input type="checkbox"/>
My family is positive about the future even in difficult periods	<input type="checkbox"/>	<input type="checkbox"/>
I accept events in my life that are impossible to change	<input type="checkbox"/>	<input type="checkbox"/>
It is easy for me to find something interesting to talk about	<input type="checkbox"/>	<input type="checkbox"/>
In my family, we are loyal to each other	<input type="checkbox"/>	<input type="checkbox"/>

Tobacco and drug use

30. Do you smoke, or have you smoked previously? Yes, daily Yes, previously Yes, sometimes No, never

How many cigarettes do you usually smoke per day?

How old were you when you started to smoke daily? Age in years

31. Do you use, or have you previously used, snus? Yes, daily Yes, previously Yes, sometimes No, never

If you use snus daily, how many portions do you use per day?

If you use snus occasionally, how many portions do you usually use per week?

If yes, how old were you when you started to use snus daily? Age in years

32. How often in the last year have you consumed alcohol? (Light and alcohol-free beer should not be included)

- Never consumed alcohol
- Not had alcohol in the last year
- A few times in the last year
- Approximately once per month
- 2-3 times per month
- Approximately once per week
- 2-3 times per week
- 4-7 times per week

33. Have you consumed alcohol in the last 4 weeks? Yes No

If yes, have you had so much that you have felt strongly intoxicated (drunk)?

- No
- Yes, 1-2 times
- Yes, 3 times or more

34. Would you describe your alcohol consumption or drinking pattern as periodic (drinking often and a lot in periods, to then have longer periods with no alcohol consumption)? (Put one or more crosses)

- Yes, in the last 12 months
- Yes, previously
- No

35. Have you ever used narcotic drugs? (Put one or more crosses)

- Weed/marijuana (cannabis) Yes, in last year Yes, previously No
- Other drugs such as LSD, amphetamines, ecstasy, cocaine, heroin, GHB, etc. Yes, in last year Yes, previously No

Religion and beliefs

36. Are you, your parents or your grandparents affiliated with any of the following religious organizations? (Put one or more crosses)

- | | | | | |
|----------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Me | Mother | Father | Grand-parents |
| The state church | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Laestadian congregation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other religious organization/community | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please state which one: _____

Non-religious life-stance organization/community Yes No

Please state which one: _____

Not member of any religious/life-stance organization Yes No

37. What is your view on religion?

- I am a Christian (practicing Christian)
- I think there is a God, but religion doesn't mean that much to me in my daily life
- Unsure
- I don't think there is a God

38. In the last 6 months, how often have you been to: (Put one cross per line)

- | | | | | |
|------------------------------|-----------------------------|--------------------------|----------------------------|--------------------------|
| | More than 3 times per month | 1-3 times per month | 1-6 times in last 6 months | Never |
| Church | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A conjugation building | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| A Humanist Association event | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Another religious building | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Experienced discrimination

Discrimination occurs when a person or group of people are treated less favorably than others because of, for example, their ethnicity, religion, faith, disability, age or sexual orientation.

39. Have you experienced discrimination?

- Yes, in the last 2 years
- Yes, previously
- No
- Don't know

If you answered "Yes" to the last question, answer questions 40-47. If you answered "No", go to question 48.

40. If you have experienced discrimination, how often does/did it happen?

- Very often
- Sometimes
- Rarely

41. Why do you think you are/were discriminated against? (Put one or more crosses)

- Physical disability
- Learning disability
- Religion or faith
- Ethnicity
- Age
- Other reasons, specify: _____
- Sexual orientation
- Gender
- Nationality
- Geographical provenance
- Illness
- Don't know

42. Where did the discrimination occur? (Put one or more crosses)

- On the internet
- At school/education
- In the workplace
- In connection with a job application
- In voluntary/organizational work
- When dealing with the government
- Among family/relatives
- While renting/buying a property
- While applying for a bank loan
- In connection with medical treatment
- In a shop or restaurant
- In your local community
- Other, please specify: _____

43. Who discriminates/discriminated against you? (Put one or more crosses)

- A government employee
- Someone not known to me
- Work colleagues
- One or more people from my ethnic group.
- One or more people from another ethnic group.
- Co-students
- Teachers/staff
- Other

44. Did you actively do anything to end the discrimination? Yes No

45. Have you ever been in contact with the Equality and Anti-Discrimination Ombudsman for advice or help with discrimination?

- Yes
- No
- I don't remember

46. How much does/did the discrimination affect you?

- Not at all
- A bit
- Somewhat
- A lot

47. Have you ever been discriminated against for being Sami?

- Yes
- No
- Don't know
- I'm not Sami

Violence and abuse

48. Has anyone ever systematically and over a longer period tried to subdue, degrade, or humiliate you? (Put one or more crosses)

- No, never
- Yes, as a child (under 18)
- Yes, as an adult (18 or older)
- Yes, in the last 12 months

If yes, who?

- A stranger
- Family/a relative
- A spouse/partner
- An acquaintance

49. Have you experienced physical attacks/abuse? (Put one or more crosses)

- No, never
- Yes, as a child (under 18)
- Yes, as an adult (18 or older)
- Yes, in the last 12 months

If yes, by whom?

- A stranger
- Family/a relative
- A spouse/partner
- An acquaintance

50. Have you been sexually abused? (Put one or more crosses)

- No, never
- Yes, as a child (under 18)
- Yes, as an adult (18 or older)
- Yes, in the last 12 months

If yes, by whom?

- A stranger
- Family/a relative
- A spouse/partner
- An acquaintance

51. If you have experienced any kind of abuse, have you confided in anyone? (Put one or more crosses)

- No
- Someone in my family
- Friends
- Professionals

Dental health

52. How is your dental health?

- Poor
- Not very good
- Good
- Very good

53. Do you have dentures? Yes No

54. Do you use any of the following, and if so, how often?

- | | Regularly/
daily | Not regularly/
a few times per week | Not regularly/
a few times per month | Less/
never |
|---------------------|--------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| Toothbrush | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fluoride toothpaste | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dental floss | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Toothpicks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fluoride tablets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mouth wash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Denture brush | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

55. When did you last see a dentist or dental nurse?

- Less than a year ago
- 1-2 years ago
- 3-5 years ago
- More than 5 years ago

56. If more than 2 years ago, what is the reason? (Put one or more crosses)

- The dentist didn't send me notice of any appointment
- There is a long wait at the dentist
- I haven't had time
- Financial reasons
- I have not needed dental treatment
- I am scared of going to the dentist
- Other reasons: _____

57. How do you access dental services? (Put one or more crosses)

Regularly get an appointment with dentist or dental nurse

Regularly request an appointment

Request an appointment when I'm in pain or have lost a filling

I don't go to the dentist that often

58. In the last 2 years, have you been given one or more of these diagnoses by a dentist?

	Yes	No	Don't know
Serious gum disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mild gum disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mouth dryness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cavities in one tooth or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other diagnoses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

59. Are you satisfied with your teeth or prosthetics? Indicate the answer below where 1 is very dissatisfied and 5 is very satisfied.

	1	2	3	4	5
Very dissatisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very satisfied					<input type="checkbox"/>

60. How often did you brush your teeth as a 10-year-old?

Once per day or more

Sometimes

Rarely or never

61. How often did your parents or guardians check that you had brushed your teeth when you were 10 years old?

Often (almost daily)

Sometimes

Never

62. If a child younger than 6 years old is living with you, how often do you help them to brush their teeth or check that they have brushed their teeth?

Often (almost daily)

Sometimes

Never

63. If a child between 6 and 12 years old is living with you, how often do you help them to brush their teeth or check that they have brushed their teeth?

Often (almost daily)

Sometimes

Never

64. If you have a child between 0 and 12 years old living with you, do you have set rules for the children for eating chocolate and other sweets?

Yes

No

65. How satisfied are you with the dental health care offered in your municipality?

Very dissatisfied	Very satisfied	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Suicide and suicidal behavior

66. Have you lost anyone close to you through suicide? Yes No

67. Have you ever thought about committing suicide

Yes, in the last year

Yes, previously

No, never

68. Have you ever tried to commit suicide?

Yes, in the last year

Yes, previously

No, never

69. Have you ever hurt yourself on purpose?

Yes, in the last year

Yes, previously

No, never

If you have tried to commit suicide, please answer the following questions. If you answered "No" to question 68, please go to question 76.

70. How did you try to commit suicide? (Put one or more crosses)

<input type="checkbox"/> Hanging	<input type="checkbox"/> A gun
<input type="checkbox"/> Sharp object	<input type="checkbox"/> Overdose of pills/medicines
<input type="checkbox"/> Another way	

71. Why did you try to commit suicide?

A clear desire to die Yes No

The situation felt intolerable Yes No

I wanted help from somebody Yes No

72. Were you intoxicated/high when you tried to commit suicide? Yes No

73. How old were you the first time you tried to commit suicide?

74. How many times have you tried to commit suicide?

75. Did you tell anyone about the suicide attempt(s)? (Put one or more crosses)

No

Someone in my family

Friends

Professionals

Gambling

76. Have you ever felt a need to gamble for more and more money? (Put one or more crosses)

Yes, in the last year

Yes, previously

No

77. Have you ever lied to people who are important to you about how much you gamble? (Put one or more crosses)

Yes, in the last year

Yes, previously

No

78. Have you ever had periods where you, having lost money on gambling one day, returned to win it back another day? (Put one or more crosses)

Yes, in the last year

Yes, previously

No

Don't know/don't remember

79. Have you played role-playing games online in the last year?

Yes, daily

Yes, weekly

Yes, monthly or less frequently

No

Experience and use of health services

80. Who is the doctor you normally use

Your GP

Another doctor

81. How long have you had your current GP?

Less than 6 months

6 to 11 months

12 to 24 months

More than 2 years

82. In the last 12 months, have you contacted your doctor for help or advice for yourself? Yes No

If yes, did you get the help you asked for?

Never

Sometimes

Usually

Always

83. How satisfied are you with the following aspects of the doctor's service (regular GP scheme)?

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	Don't know
The doctor's accessibility on the phone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The waiting time for an appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time with the doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The doctor's understanding of your problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Their information about your health issues, examination and treatment plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In total, how satisfied are you with the municipal health service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specialized health service refers to hospitals, district psychiatric centers (DPS), specialized doctors services and individual specialists.

84. In the last 12 months, have you been for examination or treatment for physical problems to the following?

The hospital

Specialist medical center

Private specialist

None of these

85. In the last 12 months, have you been for examination or treatment for psychological problems to the following?

Psychiatric hospital

District psychiatric center

Private specialist

None of these

86. If you have been for treatment with a specialist for physical or psychological problems in the last 12 months, answer the following questions. Answer on a scale from 0 to 10, where 0 = to a small extent, 10 = to a large extent.

Did you get a chance to say what you felt was important about your condition?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did the doctors speak to you in a way you understood?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did you feel you got to help make decisions about your treatment?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did the treatment help you improve?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you trust the hospital or specialist who saw you?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All in all, how satisfied are you with the care and treatment you eventually received?

	0	1	2	3	4	5	6	7	8	9	10
Physical issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychological issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Experiences with referrals

87. In the last 12 months, have you wanted to be referred to a specialist, but been refused?

For physical problems

- No, never Yes, once
 Yes, many times Not relevant

For psychological problems

- No, never Yes, once
 Yes, many times Not relevant

88. In the last 12 months, have you wanted to be referred to a physiotherapist, chiropractor, or similar, but been refused?

- No, never Yes, once
 Yes, many times Not relevant

89. If you were referred, how long did you wait for an appointment?

Number of weeks

90. Have you requested free hospital choice on referral to specialized treatment?

- Yes No Not relevant

Language during doctors visits

91. Last time you visited your doctor, what language did you speak?

- | | Norwegian | Sami | Other, describe: |
|------------------|--------------------------|--------------------------|--------------------------------|
| I spoke | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The doctor spoke | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

92. Last time you were at the hospital/with a specialist, what language did you speak?

- | | Norwegian | Sami | Other, describe: |
|------------------|--------------------------|--------------------------|--------------------------------|
| I spoke | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The doctor spoke | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

93. In what language(s) do you primarily want to talk to health personnel? (Put one or more crosses)

- Norwegian Sami Other, describe:

Use of interpreter

94. If you have answered "Sami" but were not offered a Sami-speaking doctor at your last doctors visit, did they offer you an interpreter?

- With your general practitioner:
 Yes No
 I do not want an interpreter Not relevant

In the hospital/with a specialist:

- Yes No
 I do not want an interpreter Not relevant

95. If a Sami-speaking interpreter was offered at the last doctors visit, who was the interpreter?

- With your general practitioner:
 A government interpreter Family
 An employee at the office Other

In the hospital/with a specialist:

- A government interpreter Family
 Another hospital employee Other

96. If you have ever been to a doctors appointment or treatment where a Sami-speaking interpreter was used, how satisfied were you with the communication/conversation between you and the doctor/health professional?

- With your general practitioner:
 Very satisfied Satisfied
 Dissatisfied Very dissatisfied
 Don't know

In the hospital/with a specialist:

- Very satisfied Satisfied
 Dissatisfied Very dissatisfied
 Don't know

97. Have you ever experienced not receiving Norwegian/Sami interpretation assistance even though you asked for it?

- Yes, I have asked for an interpreter but not received one
 No, I have always had an interpreter if I asked for one
 I have never asked for an interpreter

Thank you for participating in the survey!



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