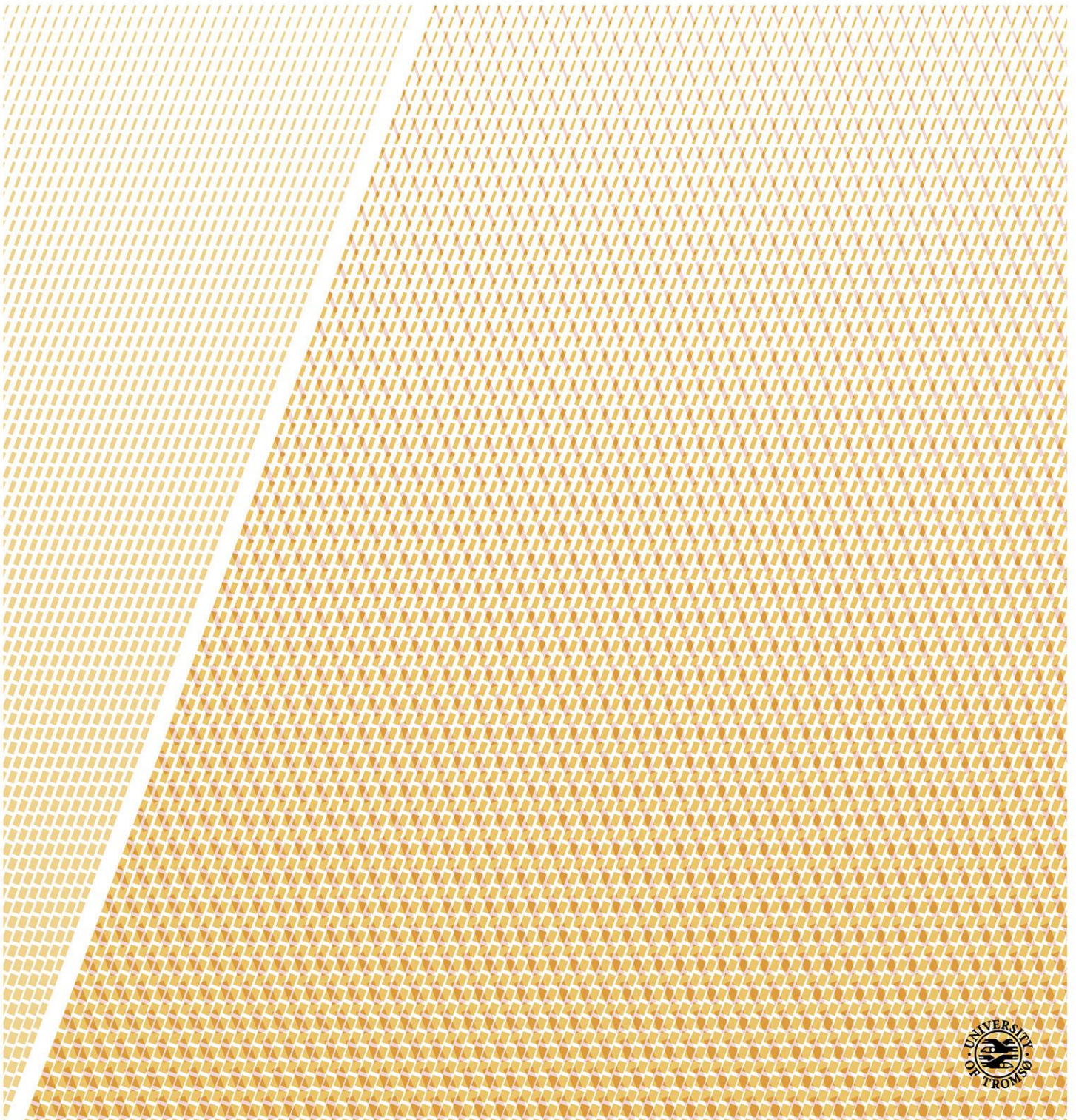


“Breaking the silence”

Interpersonal violence and health among Sami and non-Sami. A population-based study in Mid -and Northern Norway

Astrid M.A Eriksen



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I dedicate this thesis to all Sami victims of violence. I hope this work brings new knowledge to contribute to the understanding of interpersonal violence in Sami communities.

Abstract

This doctoral thesis is based on a sub-study of the SAMINOR 2 questionnaire study. The SAMINOR 2 study is a population based, cross-sectional questionnaire study on health and living conditions in areas with both indigenous Sami and non-Sami settlements in Mid- and Northern Norway. The SAMINOR 2 study was designed as a follow-up study of issues addressed in the original SAMINOR 1 study from 2003-2004, but was expanded to include additional health issues such as interpersonal violence and questions on post-traumatic stress (PTS). All inhabitants aged 18-69 in selected municipalities registered in the Norwegian National Population Register by 1 December 2011 were invited to participate. All data were collected in 2012.

Purpose

Our aims were twofold, namely (1) to investigate the prevalence of lifetime interpersonal violence and its association with socio-economic and demographic factors in two different ethnic groups: the indigenous Sami and non-Sami, and (2) to investigate and compare the association between childhood violence and psychological distress, symptoms of post-traumatic stress, and chronic pain in adulthood in these two groups.

Results

Sami ethnicity was found to be a risk factor for any lifetime interpersonal violence for both genders, except for sexual violence among men. The results remained significant after adjusting for socio-economic and demographic factors, as well as for alcohol consumption. A robust and positive correlation was found between childhood violence and indicators of mental disorders (psychological distress and symptoms of PTS), as well as chronic pain in adulthood, regardless of ethnicity and gender. However, the association between childhood violence and adult chronic pain was weaker and turned out to be non-significant among Sami men. Finally, a higher level of psychological distress and more symptoms of PTS were found among the Sami than the non-Sami. Childhood violence was found to mediate some of these ethnic differences in mental health problems.

Conclusion

The findings indicate that Sami ethnicity is a risk factor for exposure to lifetime interpersonal violence. Moreover, a consistent association between childhood violence and mental health problems and chronic pain in adulthood indicates that childhood violence represents an important risk factor for poorer health in adulthood, irrespective of ethnicity. In clinical practice, addressing childhood violence should be more focused and part of the diagnostic process for patients with adult mental health problems and unexplained chronic pain. Culturally sensitive public health preventive strategies targeting interpersonal violence in communities with both Sami and non-Sami inhabitants are warranted.

Sammendrag

Dette arbeidet er en del av SAMINOR 2 studien. SAMINOR 2 er en populasjonsbasert tversnittsundersøkelse av helse- og levekår i områder med både norsk og samisk bosetning i Midt- og Nord-Norge. SAMINOR 2 er delvis en oppfølging av SAMINOR 1, men ble utvidet til å inkludere flere helserelaterte tema som vold og symptomer på post-traumatisk stress (PTS). I utvalgte områder ble alle innbyggere i alderen 18-69 år og registrert i Folkeregisteret per 1 desember 2011 invitert til å delta. Selve undersøkelsen ble gjennomført i 2012.

Formålet med denne studien var å undersøke forekomsten av vold og sammenhengen med sosio-økonomiske og demografiske faktorer i to etniske grupper med hhv samisk og ikke-samisk befolkning. Formålet var også å undersøke og sammenligne sammenhengen mellom rapportert vold i barndom og mentale plager og kroniske smerter som voksen.

Resultat

Resultatene viser at samisk etnisitet er en risikofaktor for vold, bortsett fra seksuell vold blant menn. Resultatene er signifikante selv etter justering for sosioøkonomiske og demografiske forhold, samt inntak av alkohol. Det er en robust og positiv samvariasjon mellom opplevd vold i barndom og mentale helseplager og kroniske smerter som voksen. Samvariasjonen mellom vold i barndom og kroniske smerter som voksen var derimot svakere for samiske menn. Den samiske befolkningen rapporterte høyere grad av mentale helseplager og flere PTS symptomer enn den ikke-samiske. Vold i barndom kan forklare noe av den etniske forskjellen i mentale helseplager.

Konklusjon

Funnene indikerer at etnisk samisk tilhørighet øker risikoen for å bli utsatt for vold. Uavhengig av etnisk tilhørighet er det å bli utsatt for vold i barndom er en viktig risikofaktor for utvikling av mentale helseplager og kroniske smerter som voksen. I klinisk arbeid bør kartlegging av vold i barndom få økt fokus for pasienter med mentale helseplager og uforklarlig smertemønster. Målrettede kultursensitive helsetiltak mot mellommenneskelig vold i etnisk delte samfunn kan være nyttig.

Abstrákta

Dán oasseguoradallamin lej SAMINOR 2 vuodon. SAMINOR 2 la gasskamærrásasj viesátguoradallam mij gullu varresvuoda- ja iellemdilláj sáme ja dáttja årromsajijn Gasska- ja Nuortta-Vuonan. SAMINOR 2 le muhtem mærráj joarkkem SAMINOR 1 guoradallamis 2003-2004 rájes, valla guoradallam vijdeduváj gábtjåtjit ietjá varresvuoda tiemájt dagu vahágahttem ja dábddomerka vaháguvvamis ávdepájge vásádusájs (PTS). Válljiduvvam guovlojn bivddiduvvin divna viesáda 18 jage rájes gitta 69 jage rádjáj gudi lidjin tjáledum Álmmukláhkuj javllamáno 1. bieje rájes. Guoradallam tjadáduváj jagen 2012.

Ulmme dájna guoradallamijn lej (1) gæhttjat sieradusájt guovte álm mugij gaskan, gánná akta juohkusijs lidjin sáme ja nubbe juohkusin lidjin láddelattja. Muhtem mærráj lej ulmme guoradallat vahágahttemav ja gasskavuodav sosioekonávmasj ja demográfalasj faktávrájt guovte ulmusjtjerdan: sámij ja láttij gaskan. Ja nubbe (2) lej guoradallat ja buohtastattet gasskavuodav vahágisdago vásádusá gaskan mánnávuodan ja psyhkalasj vigij ja guhkálasjvuoda vájvij gaskan álessjattugin.

Báhtusa

Báhtusa vuosedi sáme tjerdalasjvuoha l vádálasj faktávrá vahágahttema hárráj, ietján gá seksuálasj vahágahttem álmáj gaskan. Báhtusa li tjielggasa juska li hiebaduvvam sosioekonomalásj ja demográfalasj faktávráj milta, duodden mij gullu alkohávlá juhkalisvuohatj. Vuojnnet la nanos ja vuogas gasskavuoha vahágisdago vásádusáj gaskan mánnávuodan (PTS) ja psyhkalasj vigij ja guhkálasjvuoda vájvij gaskan álessjattugin. Valla álmáj gaskan mij gullu vahágisdago vásádusájda mánnávuodan ja psyhkalasj varresvuodavávjijda ja guhkálasjvuoda vájvijda álessjattugin, gánná gasskavuoha ij lim nav nanos.

Sáme álm mugin vuojnnet ienebuv vájvástuvvin miellavigijs ja ienebuv vahágisdago vásádusáj mánnávuodan (PTS) láddelattjaj hárráj. Vahágahttem mánnávuodan máhtá muhtem mærráj tjielggit tjerdalasj sieradusáv psyhkalasj álm mukvarresvuodan.

Tjoahkkájgæsos

Gávnadusá vuosedi sáme aktijgullumvuoha

laset vahágahttem vádáv. Berusdahtek gási tjerdalattjat gullu de la vahágahttemvásádus mánnávuodan ájnas vádáfaktávrá psyhkalasj varresvuodavávjijda ja guhkálasjvuoda báktjasijda álessjattugin.

Klinihkalasj bargon bierriji guoradallama mij guoski vahágahttemij mánnávuodan ienebuv tjalmosit, sierraláhkáj pasienta psyhkalasj varresvuodavávjij ja tjielggidahtek báktjasij. Ulmmelasj varresvuoda dájma gánná vieleda kultuvrav máhtá liehket ávkken jus galggap vahágahttemis bessat

List of papers

Paper I:

Eriksen AMA, Hansen KL, Javo C, Schei B. Emotional, physical and sexual violence among Sami and non-Sami population in Norway: The SAMINOR 2 study. *Scand J of Public Health*. 2015 Aug; 43 (6):588-96.

Paper II:

Eriksen AMA, Hansen KL, Schei B, Sørli T, Stigum H, Bjertness E, Javo C. Childhood violence and mental health among indigenous Sami and non-Sami in Norway: the SAMINOR 2 questionnaire study. *BMC Psychiatry*, conditional accepted 25.01.17.

Paper III:

Eriksen AMA, Schei B, Hansen KL Sørli T, Fleten N, Javo C. Childhood violence and adult chronic pain among indigenous Sami and non-Sami in Norway: a SAMINOR 2 questionnaire study. *Int J Circumpolar Health*. 2016, 75:32796-

Abbreviations

CI	Confidence interval
DSM-V	Diagnostic and Statistical Manual of Mental Disorders, 5 th Edition
HSCL-10	The Hopkins Symptom Checklist
OR	Odds Ratio
PTS	Symptoms of post-traumatic stress
PTSD	Post-Traumatic Stress Disorder
SAMINOR 2	Population-based study of health and living conditions in areas with both Sami and Norwegian settlement
SANKS	Sami National Centre for Mental health and Substance Use
WHO	World Health Organisation

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1 Background: Violence as a topic in the Sami community

In Norway, national studies have shown a high prevalence of interpersonal violence (1, 2) and highest in Finnmark (3). However, information on Sami ethnicity was not included. Various initiatives led to the inclusion of questions regarding violence in the SAMINOR 2 study.

The Sami Women's Rights Organisation, Norggá Sáráhká, addressed violence against women in 2001 (4). In 2005-2006, incidents of sexual abuse of teenage girls were reported in Kautokeino, a municipality inhabited mainly by Sami people (5). Norggá Sáráhká, arranged a two-day seminar in Kautokeino in 2007 and published a report, in 2011, based on the lectures at this seminar; "The many faces of violence in Sami society" (4). An incident in another Sami municipality (Tysfjord) caught national attention in 2007: A Sami parent sent a letter to the Prime Minister of Norway, begging for external assistance to stop the sexual abuse of Sami children (6). In addition, individual victims of sexual violence with a Sami background reported their stories publicly (7). In response, the Sami National Centre for Mental Health and Substance Use (SANKS) arranged a public meeting in Tysfjord in 2008 to address sexual violence (8).

When the questions for SAMINOR 2 were prepared during 2010-2011, the issue of interpersonal violence was brought onto the agenda. Clinicians from SANKS, voiced stories from their patients that included violence. However, few health surveys in Norway had actually included questions on violence. By the time SAMINOR 2 was planned, the Health Survey in Oslo, HUBRO, had included a few questions on violence (9). The experience from this data collection was brought to the discussion and facilitated the inclusion of questions about interpersonal violence into the SAMINOR 2 study.

After the SAMINOR II study

Our first article (Paper I) that presented the prevalence of interpersonal violence among the Sami and non-Sami in Mid- and Northern Norway was published in 2015, showing a higher prevalence of violence among Sami respondents (10). The study obtained national attention,

and interpersonal violence was discussed in both Sami and national media (11-15). The President of the Sami Parliament, Kestitalo, was interviewed and announced that interpersonal violence would have high priority in the years to come (11). During the period 2015-2016, SANKS, in collaboration with local Sami communities, arranged seminars in various Sami settlements (Snåsa, Tysfjord, Karasjok) addressing interpersonal violence among the Sami. The Sami Medical Association included interpersonal violence as a topic in a larger, regional health seminar, and the Sami Parliament addressed the issue at a United Nation women's conference in New York. Furthermore, the Sami National Theater, *Beaivvas*, held a performance called "Skoavdnji" ("Night Shadow") that addressed interpersonal violence. In 2016, Árran Lulesami Centre in Tysfjord arranged a conference addressing the assimilation policy and health where our research was presented. Last year (2016), the Sami music festival, *Riddu Riddu*, addressed interpersonal violence (16). Furthermore, the largest newspaper in Norway (*Verdens Gang*) published in 2016 11 stories about women and men who had been exposed to childhood sexual abuse, all in Tysfjord (17). The journalists claimed that they had names of a total of 49 Sami victims of sexual abuse. Once again, violence against children in Sami communities became a public, national issue, lasting for weeks. The leaders of the Laestadian church (traditionally the main Sami local church) were criticised for not reporting sexual abuse to the police, and not protecting victims of violence (17). The Laestadian leader's response to these allegations was that it was not their responsibility to report violence and sexual assaults to the police. Hence, the Ministry of Children and Equality in Norway made a statement about the duty of reporting all types of violence against children to the police (18). In the following public discussion about violence within the Sami community, a comment made by the director of the Árran Lulesami Centre in Tysfjord, stood forth: *"As a musician and as a listener I have heard the most beautiful sound of all, the sound of silence that bursts"*. As a Sami woman, I find that his words capture the essence of the past and present situation, and describe my sentiments exactly. Moreover, I believe that, for many Sami, the increased openness about violence came as a relief. Finally, violence and sexual assaults among our people are taken seriously.

2 Introduction

2.1 *Interpersonal violence*

The World Health Organisation (WHO) has recognised interpersonal violence as an important, worldwide public health issue that adversely affects both mental and physical health (19). The magnitude and the pattern of the problem vary among countries, regions, genders and ages. A WHO report states that violence is the predominant cause of injury and death among people aged 15-44 years old (20). Globally, males account for 82% of all homicide victims, highest among those aged 15-29 years. When women are victims, the male partner often is the killer. WHO has estimated that male partners committed 38% of homicides of females, while the corresponding figure for males was 6%. Males represent the majority among victims of violent death and physical injuries treated in emergency departments, whereas women, children and the elderly disproportionately bear the burden of the non-fatal consequences of violence worldwide. Approximately 20% of women and 5–10% of men report childhood sexual abuse. Nearly a quarter of adults (22.6%) suffered physical abuse as a child, and 36.3% suffered emotional abuse (with no significant differences between boys and girls). Furthermore, about 30% of ever-partnered women have experienced physical and/or sexual violence at the hands of an intimate partner (19).

2.1.1 Definition of interpersonal violence

Interpersonal violence is defined as violence that occurs between family members, intimate partners, friends, acquaintances and strangers, and it includes child maltreatment, youth violence, intimate partner violence, and the abuse of elderly people (19). WHO's definition of violence is:

“The intentional use of physical force or power, threatened or actual, against oneself, or against a group or community that either results in or has, a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation” (20).

Moreover, WHO has developed a terminology for violence that characterises its different types. Violence is divided into three broad categories based on the characteristics of who

commits the violent act (Figure 1). First, *self-directed violence* is a type of violence that occurs when an individual harms himself or herself. The second category is *interpersonal violence*, which can be further divided into two subcategories, *family or partner violence* that usually takes place at home and *community violence* that occurs between individuals usually outside the house. Third, *collective violence* occurs when a large group of individuals or a government harms certain groups of people. This type of violence tends to be more organised and motivated by a particular social agenda. Family/partner – and community violence are measured in this thesis, while self-directed- and collective violence are not. The WHO describes this violence to be physical, sexual and psychological and include deprivation or neglect (20). The violence defined in this thesis is interpersonal violence where the setting of the violent act may have a family/partner perspective but also be within the community, with a psychological, physical and sexual character. However, the Sami people as a group have suffered from an austere assimilation policy, which was organised by the Norwegian government, leading to discrimination against the Sami people. The colonisation of the Sami people might be defined as a type of collective violence affecting interpersonal violence at the family/partner and community level. This may also have influenced interpersonal violence against the Sami at an individual level (21). This type of violence is not directly measured in this thesis; however, it may have influenced the level of interpersonal violence measured in our study.

A typology of violence

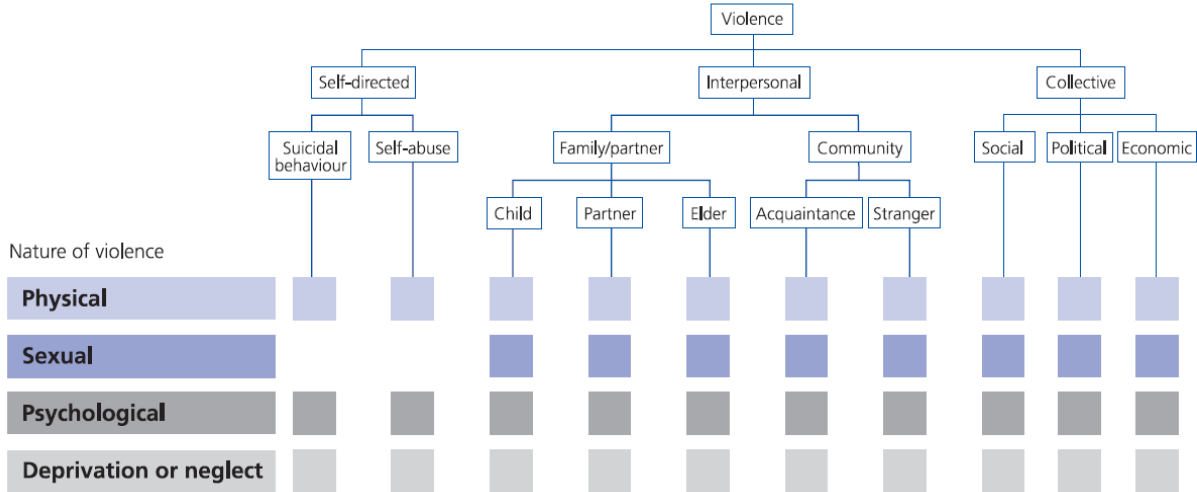


Figure 1 . A typology of violence

2.1.2 The ecological framework for interpersonal violence

Multiple factors contribute to interpersonal violence. According to WHO, there is no single factor that puts an individual or a group at higher risk of interpersonal violence. Rather, there are several factors interacting at different levels with equal importance to the influence of a factor within a single level (20). These levels are divided into *individual, relationships, community and societal* (Fig. 2). At the societal level, factors that influence whether violence is encouraged or inhibited are economic and social policies that sustain inequalities based on socioeconomic issues and the availability of weapons. Further factors that influence violence are social and cultural norms, such as male dominance over women and parental dominance over children. Risk factors at a community level may include the level of unemployment, population density, mobility and the existence of a local drug or gun trade. Personal relationships such as family, friends, intimate partners and peers may influence the risk of becoming a victim or perpetrator of violence. For example, having violent friends may influence whether a young person engages in or becomes a victim of violence.

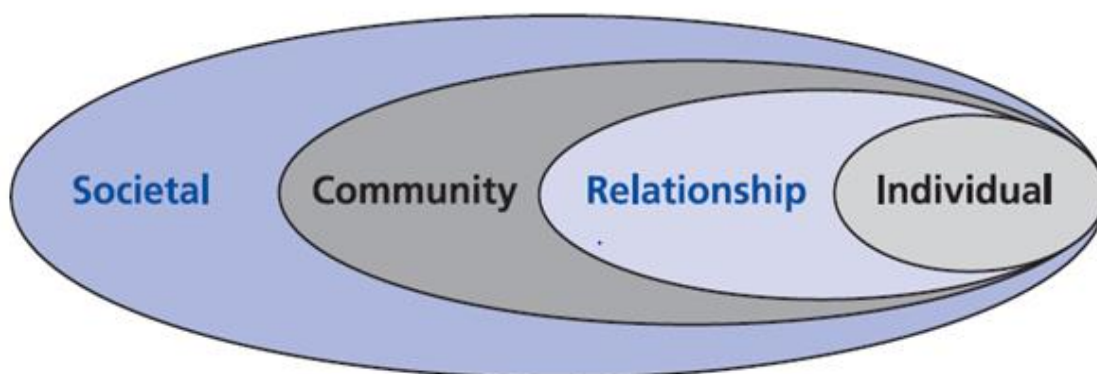


Figure 2 The ecological framework

2.1.3 Violence in indigenous populations

2.1.3.1 The Sami population

The Arctic region is home to different groups of indigenous peoples. They share a history with some common features as they have been subjected to various types of social injustice

and oppression (22-27). Most of the indigenous Sami people live in the Arctic region of the Nordic countries and Russia's Kola Peninsula. They have traditionally been a nomadic people, combining reindeer husbandry with small-scale fishing and agriculture. In Norway, too, they have suffered from an austere assimilation policy, which started around the 1850 (25, 28). This policy had severe implications, such as the prohibition of teaching in the Sami language at school, and the lack of opportunities to preserve and develop their culture and identity (25). As a consequence of the harsh assimilation policy, many Sami abandoned or hid their Sami identity (25). Because of the stringent policy and the fact that ethnic registration is forbidden in Norway, it is difficult to estimate the number of Sami living in Norway. Today, most Sami are engaged in jobs similar to those of the non-Sami, and it is estimated that only 10% are engaged in reindeer husbandry. As for religion, many Sami have an affiliation to Laestadianism (a movement of the Lutheran Church) (29). In recent years, there has been a revitalisation of language and culture in many Sami municipalities, which has promoted cultural self-awareness and strengthened the identity of many Sami (30).

2.1.3.2 Violence in indigenous populations

International studies have indicated a higher prevalence of interpersonal violence in indigenous populations than in non-indigenous populations (10, 31-34). Canadian studies have found indigenous people to be three times more likely to experience violent victimisation (31, 32). In Greenland, a report on the living conditions of young people revealed that violence, including sexual abuse, was a major problem (34). A comparative study of reported violence in Greenland and Denmark found the overall prevalence to be higher in Greenland (35). Interpersonal violence is a significant concern in American Indian and Alaska Natives communities (36-39). Chester et al. (1994) found that, among American Indian and Alaska Natives (AIAN) women, 27% reported physical abuse and 40% reported sexual abuse in childhood. Furthermore, 40% reported sexual assault as adults and 67% reported physical violence from an adult partner (40). A study on urban American Indian and Alaska natives in New York City revealed that over 65% had experienced some form of interpersonal violence: 28% reported childhood physical abuse, 48% reported rape, and 40% reported domestic violence (36). Previous national studies on violence in Norway have not included information on Sami ethnicity (1-3). To date, few studies have been conducted

among the indigenous Sami people, and none among the Sami in Norway. Hence, little is known about the prevalence and health consequences of interpersonal violence in the indigenous Sami.

2.1.3.3 Factors of prevalence of interpersonal violence in indigenous communities

According to the ecological model for understanding violence developed by the WHO, violence is the result of the complex interplay of factors at individual-, interpersonal-, community- and societal levels (20).

To explain why indigenous populations are more prone to interpersonal violence, theories have been developed. In what follows, I would like to draw on the colonisation theory described in the article by Daoud et al., published in 2013 (41), and a paper by Kuokkanen published in 2014 (42). In Figure 3, I have used the colonisation theory and added specific factors which are related to the situation for many Sami people in Norway. *The first factor* described in the colonisation theory is the effect of collective violence which leads to structural violence and the violation of human rights. In Norway, the Sami people were subjected to an austere history of forced assimilation/colonisation which indirectly may have led to interpersonal violence. *The second mechanism* described in the colonisation theory is the effect on changing gender roles on interpersonal violence. That is, patriarchal gender roles imposed on indigenous people may have replaced more balanced gender norms, initiating increased violence against women. *The third pathway* which may explain a higher level of interpersonal violence within an indigenous community is related to the assimilation policy. Indigenous children were forced to live in boarding schools during childhood and were not permitted to use their own language. They were also vulnerable to individual abuse within the boarding school and experience daily stress because they were not protected by their own family. All this background affects generations and thus had long-term implications for the level of interpersonal violence in a Sami community. The assimilation policy at a societal level may have affected relationships at a community, relationships and individual level, with implications for extended family and the internal value system within the Sami group.

Furthermore, in a paper by a Sami researcher, Rauna Kuokkanen, the violence against aboriginal women in Canada and Sami women in Scandinavia is discussed (42). Kuokkanen highlights that in contrast to Canada, the Sami parliaments in Norway, Sweden and Finland have not identified violence against Sami women as a serious concern: This is not stated in their strategic plans, like aboriginal organisations in Canada. This considerable difference has effects at a national level, Kuokkanen claims (42). However, at a community level Kuokkanen identifies several similarities in the mechanism that in parts drives normalization of violence. These mechanisms ranges from the internalisation and adoption of patriarchal, colonial norms to the fear of further stigmatisation.

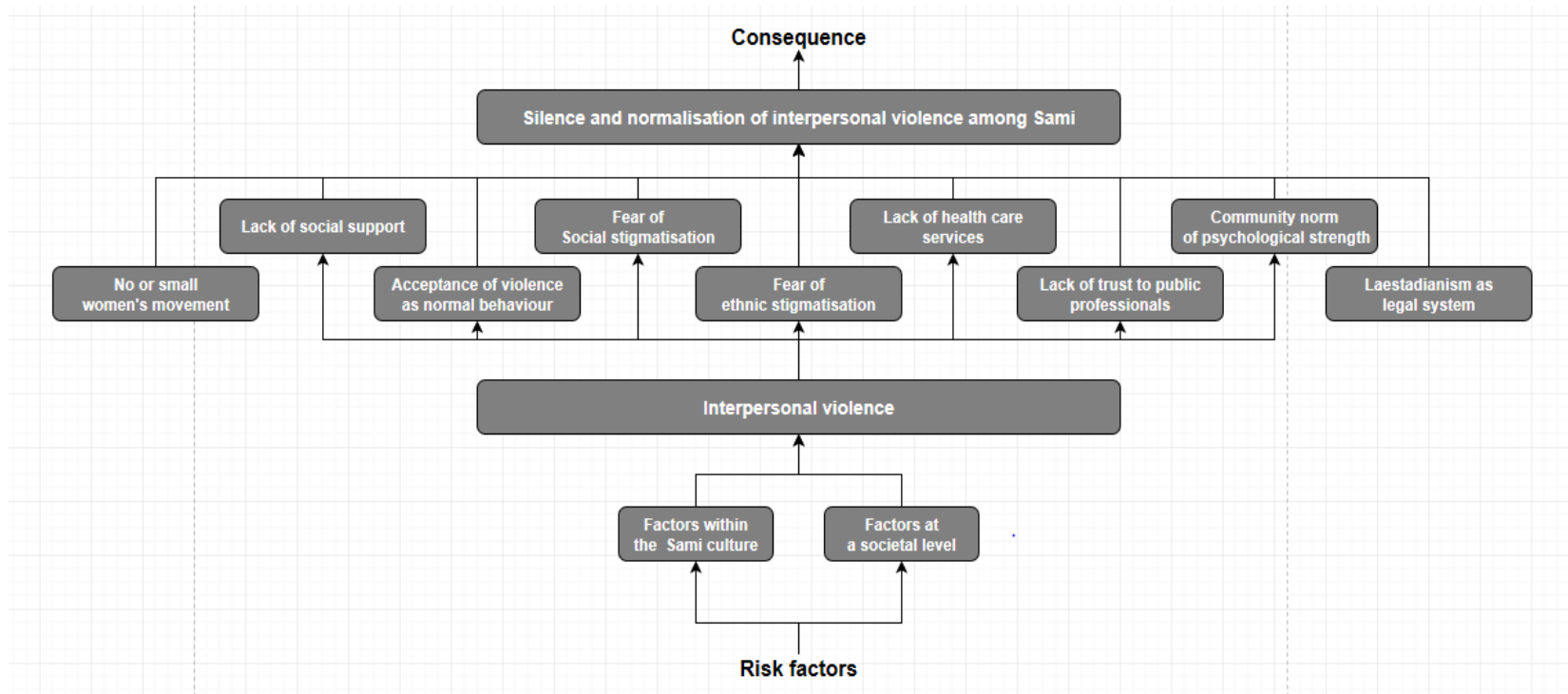


Figure 3 Theoretical framework to understand interpersonal violence among the Sami based on the colonisation theory and a paper by Kuokkanen.

In Norway, many Sami people live in rural communities and there may be pathways related to being a member of small communities. Globally, it is a uniform pattern that interpersonal violence is more common in rural than urban areas (43). In Norway, there have been several incidents of very serious violence against children in both Sami and Norwegian rural areas (e.g. Tysfjord (17), Kautokeino (5), Alvdal, Vågå (44), Austevoll (45)). Shared factors between the Sami and non-Sami living in rural areas (i.e. Christian patriarchal values, limited access to health care services) which may be pathways to higher levels of interpersonal violence are likely to have affected the Sami to a larger extent than Norwegians, due to their ethnic minority status.

Some factors may be unique for the Sami living in rural areas. This may be linked to the Sami being part of communities lacking transparency and hence may decrease the effective protection of potential victims. Examples of such communities include the Laestadian church. Sami people are also more likely compared to the non-Sami to live within an extended family. The extended family plays an important part in the lives of many Sami, and extended family relations enjoy strong loyalty and interdependence (46, 47). This may also be a factor that increases the risk of interpersonal violence from family members, as well as hampers the willingness to report and stop violent acts (17, 46).

2.1.3.4 Identified knowledge gaps

There are a lack of population based studies addressing interpersonal violence among the Sami compared to non-Sami people and dearth of studies addressing associated factors influencing the occurrence of interpersonal violence in areas of mixed populations. There is also a knowledge gap on the association between childhood violence and adult health in the Sami population.

2.2 *Health*

In the following I will present key findings from studies reporting on health related consequences of interpersonal violence in general and childhood violence in particular, including studies on the health consequences of ethnicity. Thereafter, I will sum up where

there is significant knowledge gaps leading to the research questions addressed in the theses.

2.2.1 Health consequences of interpersonal violence

The WHO has listed a range of health risks associated with interpersonal violence (48). These consequences include implications for physical, mental, behavioral and sexual and reproductive health (Figure 4). As for physical health, the consequences of interpersonal violence can be lethal. Severe physical injuries can have long term effects on health and persist long after the violence has stopped. A large range of somatic symptoms have been described as results of interpersonal violence, such as digestive problems, abdominal pain, vaginal infections, pelvic pain, headaches, back pain and chronic neck pain (49, 50). Most of these studies have been conducted among women exposed to current or former partner violence. As for mental health, depression and post-traumatic stress disorders are considered the most prevalent conditions associated with violence and abuse (50-54). In addition, behavioral health consequences like alcohol and drug abuse and smoking are associated with interpersonal violence (48). The lifelong consequences of child maltreatment include impaired physical and mental health, poorer school performance, and job and relationship difficulties (50, 55-57). Ultimately, child maltreatment can contribute to slowing a country's economic and social development (57). A systematic review and meta-analysis of the health consequences of childhood violence found that individuals exposed to childhood physical and emotional violence and neglect had a higher risk of developing depressive and anxiety disorders than non-abused individuals (58). There were significant association between physical abuse and post- traumatic stress disorder (PTSD) and panic disorder diagnoses. There was also a strong association between physical and emotional abuse (and neglect) and an increased risk of eating disorders. Furthermore, physical abuse and neglect were also associated with an increased risk of behavioural and conduct disorders. Alcohol problem drinking was associated with both emotional and physical abuse. All types of violence were associated with suicidal behaviour, and high-risk sexual behaviour. Among Inuit Women in Greenland, being sexually abused in childhood was associated with lifetime problem gambling (59). In addition, the review and meta-analysis identified a positive association between childhood physical abuse and arthritis, ulcers and headache/migraine in

adulthood (58). Exposure to violence has also been shown to be associated with an increased risk of back/and neck pain, headaches, and stomach- and pelvic pain (50, 60-66). Internationally, studies have shown a consistent association between childhood violence and adult chronic pain (56, 57).

Physical	Sexual and reproductive
<ul style="list-style-type: none"> • acute or immediate physical injuries, such as bruises, abrasions, lacerations, punctures, burns and bites, as well as fractures and broken bones or teeth • more serious injuries, which can lead to disabilities, including injuries to the head, eyes, ears, chest and abdomen • gastrointestinal conditions, long-term health problems and poor health status, including chronic pain syndromes • death, including femicide and AIDS-related death 	<ul style="list-style-type: none"> • unintended/unwanted pregnancy • abortion/unsafe abortion • sexually transmitted infections, including HIV • pregnancy complications/miscarriage • vaginal bleeding or infections • chronic pelvic infection • urinary tract infections • fistula (a tear between the vagina and bladder, rectum, or both) • painful sexual intercourse • sexual dysfunction
Mental	Behavioural
<ul style="list-style-type: none"> • depression • sleeping and eating disorders • stress and anxiety disorders (e.g. post-traumatic stress disorder) • self-harm and suicide attempts • poor self-esteem 	<ul style="list-style-type: none"> • harmful alcohol and substance use • multiple sexual partners • choosing abusive partners later in life • lower rates of contraceptive and condom use

Figure 4 Common health consequences of (intimate partner) violence presented by the WHO.

2.2.2 Health consequences of belonging to an indigenous/minority groups

Globally, belonging to an ethnic minority group is in itself recognised as a risk factor for illness (67, 68). Several explanations have been linked to cross ethnical factors associated with poorer health, such low socioeconomic status and reports of risky behaviours like, for example, cigarette smoking and alcohol intake. Other factors are specifically linked to ethnic status, such as being discriminated against and having inadequate access to health care. Health care providers may also demonstrate limited culturale sensitivity, predisposing minority groups to suffer a higher burden of disease (67-70). A recent review in the Lancet,

addressing health among indigenous people in the world, describes a wide range of poor health outcomes like high infant mortality rate and maternal mortality (68).

All over the Arctic region, indigenous peoples have shown to be more prone to various types of mental health problems, such as psychological distress, suicidal ideation and attempts, as well as substance abuse (27, 71-73). A review study revealed a substantially greater burden of PTSD and symptoms of PTS among American Indians and Alaska Natives than their White counterparts (74). PTSD has been described as one of the most serious mental health problems faced by American Indians/Alaska Natives (74). Additionally, ethnic differences in reported chronic pain have been found: Studies from both the UK and the USA have reported chronic pain to be more prevalent among ethnic minority groups (75). Moreover, indigenous populations like American Indians/ Alaska Natives, and Aboriginals in Canada have reported a higher prevalence of chronic pain compared to the majority population (31, 32, 38). Furthermore, indigenous populations, like American Indians/Alaska Natives and Aboriginals in Canada, are found to be more prone to chronic pain conditions, such as rheumatic diseases, headache and low back pain (38, 76, 77).

2.2.3 Significant knowledge gaps

Generally, studies addressing health effects of interpersonal violence do not include information on their status as belonging to an indigenous group- with a few exceptions.

Studies conducted among the Inuit in Greenland, aboriginal peoples in Canada, and the American Indian and Alaska Natives have shown that victims of interpersonal violence reported mental health problems more often than others. Studies on mental health among indigenous people often lack information on interpersonal violence; hence a potential intermediate factor may be overlooked. Mental health indicators are often addressing anxiety and depression. However, post- traumatic stress may be more prevalent among oppressed minority groups such as the Sami, who are more likely to encounter stressful life events, as ethnic discrimination (23). There is a lack of knowledge regarding the prevalence of PTS among the Sami, and sparse research among other indigenous peoples in the Arctic

region. The studies on reported chronic pain among the Sami in Norway are sparse and ambiguous (78-80), and none of the studies includes information on interpersonal violence.

3 Aims of the study

The overall aim of this thesis was to provide knowledge about interpersonal violence among the Sami in Norway compared to the non-Sami population in the same geographical area, to measure the association with health indicators, and to explore ethnic differences. More specifically, the objectives were:

1. To estimate the lifetime prevalence of different types of violence among Sami and non-Sami participants
2. To explore whether socioeconomic factors, area of residence (i.e. Sami majority area vs. Sami minority area), religious affiliation, and alcohol intake influenced the estimates
3. To estimate the association between childhood violence and adult mental health problems (psychological distress and symptoms of post-traumatic stress)
4. To investigate whether the potential impact of childhood violence differed in the two ethnic groups
5. To investigate whether childhood violence would be a mediating factor in ethnic difference in mental health problems
6. To investigate the association between childhood violence and adult chronic pain in different sites of the body, as well as the number of pain sites and pain intensity among the Sami and non-Sami, and to explore any ethnic differences in these associations.

4 Materials and methods

4.1 Design

This thesis was based on the SAMINOR 2 questionnaire study, a cross-sectional, population-based data from the second study on health and living conditions in areas with both Sami and Norwegian populations (81).

4.2 The study population

The study population was all inhabitants aged 18-69 in 25 of 428 municipalities in Norway registered in the Norwegian National Population Register by 1 December 2011. The 25 municipalities (of a total of 135 municipalities in Mid-and Northern Norway) were selected based on the 1970 census (82), in which more than 5-10% of the population reported themselves as Sami, and in some cases, only a part of the municipality was included (Table 1)(81). These areas were selected from the same areas where the first SAMINOR study was carried out in 2003-2004, in addition to Sør-Varanger (81).

Table 1 Participants by county, municipality and ethnicity in the SAMINOR 2 questionnaire study.

County	Municipality	Sample	Participants	%	Sami %	non-Sami %
Finnmark	Sør-varanger ^c	6,300	7,731	27.5	8.7	91.3
	Nesseby ^{b,d}	568	151	26.6	53.6	46.4
	Tana ^{b,d}	1,885	544	28.9	48.5	51.5
	Lebesby	856	224	26.2	12.1	87.9
	Karasjok ^{b,d}	1,796	505	28.1	78.6	21.4
	Porsanger ^{b,d}	2,663	690	25.9	25.9	74.1
	Kvalsund	625	169	27.0	13.0	87.0
	Loppa	674	186	27.6	7.0	93.0
	Alta ^c	12,153	3,236	26.6	7.8	92.2
	Kautokeino ^{b,d}	1,875	527	28.1	85.2	14.8
Troms	Kvænangen	810	204	25.2	7.8	92.2
	Kåfjord ^d	1,409	361	25.6	23.8	78.2
	Storfjord	1,240	388	31.3	8.5	91.5
	Lyngen	1,902	534	28.1	5.1	94.9
	Lavangen ^d	609	152	24.9	17.1	82.9
	Skånland	1,937	450	23.2	10.4	89.6
Nordland	Evenes	862	250	29.0	9.6	90.4
	Narvik ^a	1,053	209	19.9	7.2	92.8
	Tysfjord ^d	1,252	245	19.6	25.7	74.3
	Hattfjelldal ^a	656	193	29.4	5.2	94.8
	Grane ^a	52	12	23.1	50.0	50.0
Nord-Trøndelag	Namskogen ^a	532	133	25.0	6.0	94.0
	Røyrvik ^d	313	98	31.3	10.2	89.8
	Snåsa ^{a,d}	820	288	35.1	8.3	91.7
Sør-Trøndelag	Røros ^a	403	116	28.8	9.5	90.5
	Total	43,245	11,600	26.8	19.3	70.7

^aOnly some districts, ^bSami majority area, ^curban area, ^dSami Language Administrative District

Table 1 is adapted from Brustad et al. (81) and gives an overview of the total sample invited to answer the SAMINOR 2 questionnaire study, as well as those who participated by county, municipality and ethnicity.

4.3 Participants

Study participants were Sami and non-Sami women and men aged 18-69 years who responded to a written invitation to participate to this population- based study. Of the 44,669 persons invited, 1,424 questionnaires were returned unopened and hence were classified as technically missing, leaving 43,245 persons eligible for the study. Among these,

11,600 persons consented by returning the completed questionnaire, yielding a participation rate of 27%. In paper I, we excluded 304 participants due to a missing response on ethnicity (n=96) and violence (n=208), leaving 11,296 persons as the study group. In paper II, we excluded 810 persons due to missing information on ethnicity, HSCL-10, symptoms of PTS and interpersonal violence, yielding a study sample of 10790. Most of these (n=567) were excluded due to two or more missing on the HSCL-10 according to the manuscript described by Strand et al. (83). In paper III, we excluded 470 persons due to missing information on ethnicity, chronic pain and interpersonal violence, leaving 11,130 as the study group (Figure 5).

4.4 The SAMINOR 2 questionnaire study

The SAMINOR 2 questionnaire study was a population- based study on health and living conditions in areas with both Sami and Norwegian settlements. The SAMINOR 2 questionnaire study was designed as a follow-up study of issues addressed in the original SAMINOR study from 2003-2004, but it was also expanded to include additional health issues such as interpersonal violence and more questions about global health such as PTS, EQ-SD and WHO-5. The questionnaire was mailed from Statistic Norway during 9-12 January 2012 to 44,669 persons. Two reminders were sent to non-respondents after six weeks and four months. The first questionnaire returned the 12 January and the last the 25 October (final date). The questionnaire and the information material were written in Norwegian, and translated into three relevant Sami languages (Northern, Lule and Southern Sami) by professional translators. The questionnaire contained 97 questions. The participants could alternatively use a web-based questionnaire by logging on to a server administered by Norwegian Social Science Data Services (NSD), using a unique access code assigned to each participant. The content of the web questionnaire corresponded to the paper version, though the layout was different due to limitations in the web design system. The questionnaire is found in Appendix 2.

4.5 Overview papers I- III

An overview of the study group, dependent and independent variables, covariates and statistical analysis in papers I- III is presented in Table 2. The analyses strategy in paper II and III was a controlled cohort design.

Table 2 Sample size, design, measurements and analysis in the papers

	Paper I	Paper II	Paper III
Sample (n)	11296	10790	11130
Design	Cross-sectional	Cross-sectional	Cross-sectional
Dependent variable(s)	Lifetime violence (Emotional, physical and sexual)	HSCL-10, PTS	Chronic pain
Independent variables	Ethnicity	Childhood violence	Childhood violence
Covariates	Sociodemographic characteristics (e.g., age, educational level), living area, laestadian affiliation, and alcohol intake	Sociodemographic characteristics (e.g., age, educational level), living area, laestadian affiliation, ethnicity	Sociodemographic characteristics (e.g., age, educational level), any spesific symptom (physical and psychological), ethnicity
Statistical analysis	Descriptive statistics, Chi-square analysis, Interaction and Binary logistic regression	Descriptive statistics, Chi-square analysis, Interaction and Binary logistic regression	Descriptive statistics, Chi-square analysis, Independent sample t-test, One-way analysis of variance (ANOVA), Interaction, Binary logistic regressions and poisson regression analysis.

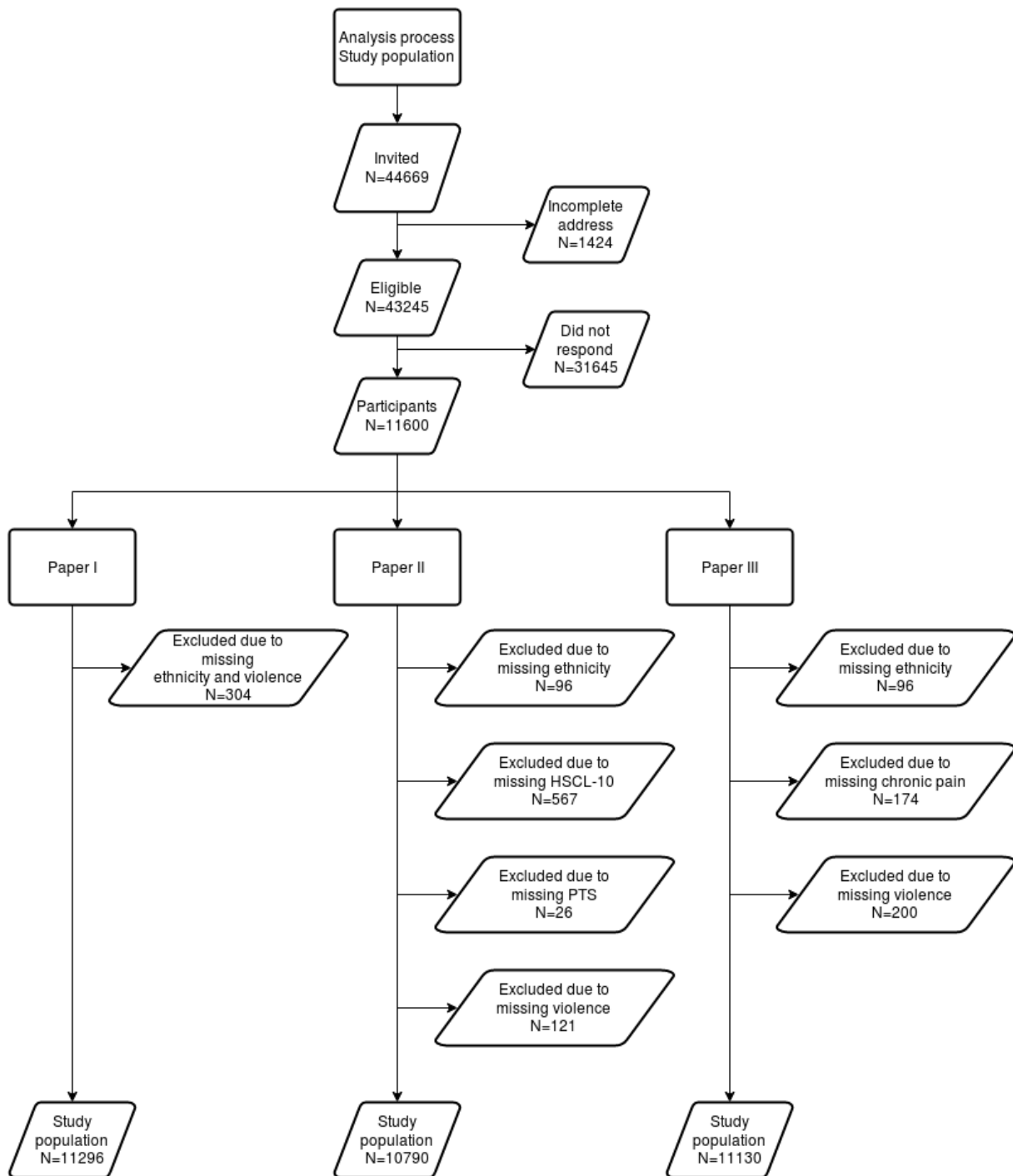


Figure 5 Flow- chart of inclusion in the study population, papers I-III: The SAMINOR 2 questionnaire study, 2012.

4.6 Variables

Interpersonal violence

Three variables collected from the questionnaire assessed experience with emotional, physical and sexual violence. Participants who answered in the affirmation to the question “Have you experienced that someone systematically and over time has tried to repress or humiliate you?” were classified as exposed to emotional violence, and the remaining respondents were classified as non-exposed (Appendix 2, question 48). Participants who answered in the affirmation to the question “Have you been exposed to physical assault/abuse?” were classified as exposed to physical violence and the remaining respondents were classified as non-exposed (Appendix 2, question 49). Participants who answered in the affirmation to the question “Have you been exposed to sexual assault?” were classified as exposed to sexual violence, and the remaining respondents were classified as non-exposed (Appendix 2, question 50). Participants who answered in the affirmation to having experienced any type of violence (sexual, physical and emotional) were defined as “having experienced any violence”, and classified as the exposed group. The remaining respondents were classified as non-exposed. Participants could also indicate whether the violence had occurred in childhood and/or in adulthood, and indicate the perpetrator with the following response options: “Stranger”, “Spouse”, “Family” and/or “Other”. There were several possible answers. Hence, to obtain a picture of the perpetrator, different categories were presented: “Child only”, “Adult only”, “Both in Childhood and as an Adult” and “Past 12 Months”. This categorisation also gave a broad picture of the exposure to violence among the Sami and non-Sami respondents.

Childhood violence

The WHO defines childhood violence as:

“The abuse and neglect of children under 18 years of age. It includes all types of physical and/or emotional maltreatment, sexual abuse, neglect, negligence and commercial or other exploitation, which result in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power” (19).

The definition given above covers a broad spectrum of abuse. The WHO’s definition includes both children and adolescent. Furthermore, WHO defines different types of violence against children by parents or caregivers: The physical abuse of a child is defined as those acts of commission by a caregiver that cause actual physical harm or have the potential for harm. Sexual abuse is defined as those acts where a caregiver uses a child for sexual gratification. Emotional abuse includes the failure of a caregiver to provide an appropriate and supportive environment, and it includes acts that have an adverse effect on the emotional health and development of a child. Such acts include restricting a child’s movements, denigration, ridicule, threats and intimidation, discrimination, rejection and other nonphysical forms of hostile treatment (84). However, in this thesis the perpetrator is not only parents or caregivers, but also all persons in the child’s environment. Children are more likely to experience violence as they have less power and thus are more vulnerable than most adults (19).

Participants who responded that the various types of violence (emotional, physical, and sexual) had occurred in childhood were classified as exposed to childhood violence, while the remaining group was classified in the non-exposed group. In this thesis, both children and adolescents are defined as children if they are ≤ 18 years.

Disclosure

Respondents were asked whether they had confided in someone after being exposed to a violent act(s) with the following four response alternatives: “Nobody”, “Someone in the family”, “Friends” and “Professionals”. These alternatives were categorised accordingly (Appendix 2, question 51).

Ethnicity

Variables assessing Sami and non-Sami ethnicity were collected from the questionnaire. When classifying ethnicity, linguistic affiliation by grandparent, parents and the participant, and self-identity were used as criteria. Both criteria are used by the Norwegian Sami Parliament to register voters. The linguistic criterion by the Sami Parliament also reaches back to great grandparents, but was not feasible in the SAMINOR 2 questionnaire. Norwegians, Kvens (descendants of Finnish immigrants) and Others were categorized as non-Sami. The vast majority of this group was ethnic Norwegians (Appendix 2, questions 10-12).

Religious affiliation

Sami may differ regarding their religious affiliation compared to the majority of Norwegians. Laestadianism (a special branch of the Lutheran Church) was established by Lars Levi Laestadius (1800- 1861), and became mainly widespread in the northern parts of Norway, Sweden and Finland, especially among the Sami (29). Affiliation to the Laestadian Church was collected from the questionnaire by the following questions: “Are your grandparents affiliated with the Laestadian church?”, “Is your father affiliated with the Laestadian church?”, “Is your mother affiliated with the Laestadian church?” and “Are you affiliated with the Laestadian church?”. Participants who responded positively to one or more of these options were classified as “Laestadianist”. The argument for reaching so far back in time is that in the Sami culture, family values and traditions are important. In child rearing in particular, extensive contact with relatives, particularly grandparents, is essential (85). Many Sami today are strongly influenced by Laestadianism, and Laestadianism still plays an important role in many Sami families (29). Respondents with no affirmative response

concerning the Laestadian church were classified as “non- Laestadianist” (Appendix 2, question 36).

Psychological distress

Psychological distress is widely used as an indicator of mental health (83). However, there is no generally accepted definition of psychological distress. It is largely defined as a state of emotional suffering characterised by symptoms of depression (worthlessness, self-blame, sleeplessness, sadness, finding everything burdensome, hopelessness) and anxiety (sudden anxiety, anxiousness, dizziness, tension /stress) (86). Mirowsky and Ross defined psychological distress as a subjectively unpleasant circumstance that is perceived by a person (86). Sociodemographic factors like gender, age, socioeconomic status and undesirable/stressful life events (like exposure to interpersonal violence) may affect the level of psychological distress (86). Young age, female gender and low socioeconomic status are considered as risk factors for psychological distress.

Psychological distress was measured using the Hopkins Symptom Checklist (HSCL-10) with a cut-off ≥ 1.85 points, as suggested by Strand et al.(83). The HSCL is one of the most widely used questionnaires for evaluating psychiatric symptoms and deviant behavior. A 10-item version of the HSCL (HSCL-10) was used to measure psychological distress, which is primarily comprised of symptoms of anxiety and depression. The HSCL-10 addresses respondents' experiences during the previous four weeks of: (1) sudden anxiety, (2) anxiousness, (3) dizziness, (4) tension /stress, (5) self-blame, (6) sleeplessness, (7) sadness, (8) worthlessness, (9) finding everything burdensome, and (10) hopelessness. Each item was rated on a 4-point scale, from 1 “Not at all” to 4 “Very often”. In accordance with validation studies, the mean HSCL-10 score was calculated by summing up the scores for each item and dividing the total score by 10. Due to missing information, respondents with missing data on three or more items were excluded from the sample. In the sample, the internal consistency of the scale was high (Cronbach's alpha = .75). Those above the cut- off point of 1.85 were classified as suffering from psychological distress (Appendix 2, question 24).

Symptoms of post-traumatic stress

Historically, stress-related disorders are linked to warfare, and the range of symptoms of anxiety, intense autonomic arousal, reliving, and sensitivity to stimuli that are reminiscent of the original trauma reported by war- veterans. The first Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-I), included a category called *gross stress reaction*, and it was defined as a stress syndrome that is a response to exceptional physical or mental stress, such as a natural catastrophe or battle. Today, the DSM-V identifies the trigger to PTSD as exposure to actual or threatened death, serious injury or sexual violation (87). The exposure must result from one or more of the following scenarios, in which the individual directly experience the traumatic event, witnesses the traumatic event in person, learns that the traumatic event occurred to a close family member or close friend (with the actual or threatened death being either violent or accidental), or experiences first-hand repeated or extreme exposure to aversive details of the traumatic event.

The items used in this thesis are core symptoms included in the criteria for PTSD in the psychiatric diagnostic system of the DSM-V. However, participants were not asked to specify the trigger. Post-traumatic stress symptoms (PTS) during the last 12 months were assessed by posing three questions from the NorVold abuse questionnaire: (1) intrusive memories, (2) avoidance of certain situations and (3) emotional numbness. The four response options were: “No”, “Yes, but rarely”, “Sometimes” and “Often”. Respondents who answered “Sometimes” or “Often” on two or three symptoms were classified as having symptoms of PTS. Respondents who answered “Yes, but rarely” or “Not at all”, or having only one of the three symptoms were defined as having no symptoms of PTS. They were classified in the non-exposed group (Appendix 2, question 26- 28).

Chronic pain

Chronic pain was measured by the question “Have you during the last year been affected with pain and/or stiffness in muscles and/or the skeleton which has lasted for at least three months?”. The response options were “Yes” and “No”. Furthermore, the respondents were asked to indicate which part(s) of the body were affected with the following response

options: “Neck, shoulders”, “Arm, hands”, “Upper part of the back”, “Lumbar/Lower part of the back”, “Hips, legs”, “Head”, “Chest”, “Stomach”, “Pelvic” and “Other places”. Affirmative answer to one or more of the body sites were merged into one category: “Any pain”. For each response option, the respondents were asked to indicate the intensity of the pain with the following response options: “Not affected”, “Somewhat affected” and “Strongly affected”. Those answering “Somewhat affected” and “Strongly affected” were merged into the category: “Yes, affected”, and defined as the chronic pain-group. The remaining study group was defined as the no-chronic pain group. Furthermore, in the logistic regression analysis pain located in the upper- and lower back was merged into one category: “Back pain”. Correspondingly, pains located in the stomach and pelvic were merged into one category: “Stomach/pelvic pain” (Appendix 2, question 4).

Age and gender

Age and gender were derived from Statistics Norway (SSB), and age was grouped into 18- 34, 35- 49, and 50- 69 years.

Socioeconomic status

Level of education was collected from the questionnaire and categorised into the following groups: primary school (≤ 9 years), high school (10- 12 years), higher university or college education (13- 15 years), and university education (≥ 16 years). The level of education was used as a proxy for socio-economic status (Appendix 2, question 16).

Household annual income was collected from the questionnaire and categorised into the following groups: low (<150,000 – 300,000 NOK), medium (301,000- 600,000 NOK), and high (601,000 to > 900,000 NOK) (Appendix 2, question 14).

Living area

The home municipality of participants was provided by Statistics Norway. The 25 municipalities included in the SAMINOR 2 study were selected based on the 1970 census in Norway or other relevant knowledge indicating a significant presence of both Sami and non-Sami populations (88). However, the density of Sami in these municipalities differed (Table

2): Municipalities with a high density of Sami were recoded as “Sami majority area” (Kautokeino, Karasjok, Porsanger, Tana and Nesseby). The Sami majority areas are characterised by having a Sami majority population and long-time proponents of the Sami language, culture and primary industries (including reindeer husbandry). These municipalities make up part of the *Sami Language Administrative District* (Table 1), within which individuals are granted the right to use the Sami language in certain contexts. Areas, in which the Sami people were considered a minority, were categorised as “Sami minority areas”, and included: Røros, Snåsa, Røyrvik, Namskogan, Narvik, Grane, Hattfjelldal, Tysfjord, Evenes, Skånland, Lavangen, Lyngen, Storfjord, Kåfjord, Kvænangen, Alta, Loppa, Kvalsund, Lebesby and Sør-Varanger. These areas were more strongly influenced by the former assimilation policy from the Norwegian state during the time period 1860-1970. Snåsa, Røyrvik, Tysfjord, Lavangen and Kåfjord are also incorporated into the *Sami Language Administrative District*.

Alcohol

Lifestyle factors like alcohol intake are associated with interpersonal violence and were included in paper I. Alcohol intake was collected from the questionnaire. Respondents were asked to indicate how often they had consumed alcohol in the past year: “Never consumed alcohol”, “Have not been drinking alcohol during the last year”, “A few times during the last year”, “About once a month”, “Two or three times per month”, “About once a week”, “Two or three times a week” and “Four to seven times a week”. The three categories that were created were: “Never/rarely” (“Never consumed alcohol”, “Not during the last year” and “A couple of times in the past year”), “Monthly” (“About once a month” and “two or three times a month”), “Weekly” (“About once a week”, and “Four to seven times a week”) (Appendix 2, question 32).

Smoking

Smoking behaviour was collected from the questionnaire. Respondents were asked to indicate smoking habits with the question: “Do you smoke, or have you previously smoked?” The response options were: “Yes, daily”, “Yes, previously”, “Yes, sometimes” and “No,

never". The categories were narrowed down to three: No, never ('No never'), Yes, daily ('Yes, daily') and Yes, previously ('Yes, previously' and 'Yes, sometimes') (Appendix 2, question 30). This was used as a descriptive variable in paper I.

Other specific symptoms

Other specific symptoms were taken from the questionnaire and considered a factor possibly interacting with chronic pain (paper III). "Any specific symptom" was created based on a "yes" response to the question "Do you have, or have you had, diabetes, high blood pressure, angina pectoris (heart cramp), heart attack, psychological problems, chronic bronchitis, asthma, eczema, psoriasis, multiple sclerosis and/or Bechterew's disease?" (Appendix 2, question 3).

4.7 Statistical analysis

Data were analysed using SPSS for Windows Version 22.0 software. All the main analysis was stratified on gender. For all main tests, a p-value of <0.05 was considered statistically significant. Descriptive statistics were used to present the sociodemographic characteristics of the samples in all three papers. Frequencies, cross-tabulations and Pearson's chi-square tests were used to examine ethnic differences in sociodemographic and lifestyle factors, the different types of violence, adult mental health problems and adult chronic pain between the Sami and non-Sami, as well as to compare those exposed to childhood violence with those not exposed to childhood violence. Binary logistic regression analysis with 95% confidence interval (CI) was used to estimate the association between the exposure variable and the outcomes. Logistic regression was used for statistical analyses, and potential confounding factors like age, educational level and other specific symptoms (physical and psychological) were included in the models. To assess the mean number of chronic pain sites, bivariate analyses were conducted and presented by any childhood violence, ethnicity, age- and educational groups. Independent sample t-tests were conducted to explore any differences based on ethnicity and exposure to childhood violence. A one-way analysis of variance (ANOVA) was conducted to explore differences between age- and education groups. To explore any ethnic differences, interactions between childhood violence and

ethnicity on the outcome variable were tested. Stratified Poisson regression analyses by ethnicity and gender were conducted to investigate the association between childhood violence and number of chronic pain sites. Interactions were tested between childhood violence and ethnicity on the number of chronic pain sites. Detailed information regarding the statistical analysis is described in the papers. Furthermore, in paper II, we conducted an additional analysis which is not presented in the paper. There were ethnic differences in mental health problems (psychological distress and PTS). To estimate the mediating proportion of childhood violence on ethnic differences, a mediator analysis was conducted (Figure 6) and described below.

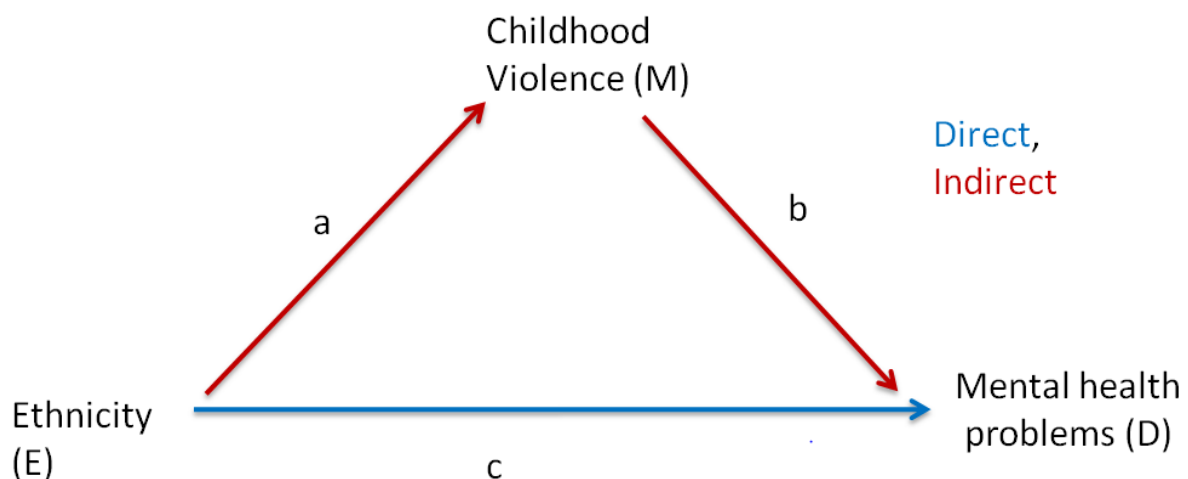


Figure 6 Mediator analysis for ethnic differences in adult mental health problems.

Direct effect = c , Indirect effect = $a*b$, Total effect = $a*b+c$, Mediated proportion = $a*b/\text{total}$.

Linear regression analyses was conducted to estimate a , b and c . Two linear regression models were used. The mediator model regressed M on E plus confounders estimating a =coefficient for E . The outcome model regressed D on E and M plus confounders estimating b =coefficient for M and c =coefficient for E . The direct effect is then equal to c , the indirect effect is equal to $a*b$, and the total effect is the sum of $a*b+c$. The mediated proportion is equal to the indirect/total. This approach is valid if there is no E - M interaction in the

outcome model, controlled and natural direct (and indirect) effects coincide in this situation. Our E-M interaction terms were not significant. We did not estimate confidence intervals for the mediated proportions; it is therefore immaterial if we used robust variance estimation for the (linear regression-binary outcome) mediator model.

4.8 Ethical considerations

The data collection and storage of data were approved by the Norwegian Data Protection Authority (Datatilsynet). Written informed consent was attained from all participants. The study was approved by the Regional Committee for Medical and Health Research Ethics of Northern Norway (REK-Nord) and Statistics Norway (SSB). Despite written informed consent, research on minority groups and indigenous populations, as well as classifying people into differential groups, raises important issues about ethics in research (89, 90). Although there was an informed individual consent, there might be the need for a collective consent. Underlying this potential tension between individual and collective consent lies the value of not further stigmatising a vulnerable minority group. Vulnerability is an ethical principle within medical ethics. This principal is discussed in the Declaration of Helsinki (91), the Belmont-report (92), Article 8 of the Universal Declaration on Bioethics and Human Rights (93), and the International Ethical Guidelines of Biomedical Research Involving Human Subjects (94). However, vulnerability and vulnerable groups are much discussed in the literature and the criterions are vague (95-97). Ethical minorities are defined as vulnerable groups in the Belmont Report, while the Declaration of Helsinki and CIOMS define *some* ethnic or racial minority groups as vulnerable. Globally, indigenous people have been exposed to research which has been carried out by colonists, with no benefit to the indigenous communities, often only dehumanisation. The Sami people in Norway have been exposed to racial research, such as skull measurements until the mid- twentieth century; the aim of this research was to prove the underdevelopment of the Sami as a people (25, 90, 98). Today, indigenous communities in Canada have ethical guidelines on research concerning indigenous communities and issues. Ethical aspects related to research on Sami communities and issues, meeting in Karasjok in 2006 discussed this matter, and published a report in 2008 (90). Today, ethical guidelines for research concerning the Sami in Norway are under development and expected to be published in 2017. Further, questions about

interpersonal violence may contribute to negative feelings including self-blame, stigmatisation or humiliation (99). However, studies show that women report meaningfulness about their participation in studies with questions about sensitive topics (100).

5 Results

5.1 *Paper I: Emotional, physical and sexual violence among Sami and non-Sami population in Norway: The SAMINOR 2 study.*

The paper aimed to estimate the prevalence of the different types of violence among Sami women and men compared to non-Sami women and men, as well as to explore whether socioeconomic factors, area of residence, religious affiliation and alcohol intake influenced the estimates. Sami women were significantly younger and had higher educational levels than non-Sami women ($p < .001$), whereas there were no significant ethnic differences in age and educational level among men. The majority of the Sami respondents were from Sami majority area (61.1%), while the majority of the non-Sami respondents were from the Sami minority area (88.9%). Over twice as many Sami (41.8%) reported affiliation to Laestadianism compared to the non-Sami respondents (16.4%). Sami respondents reported less frequently weekly alcohol intake (24.1%) compared to the non-Sami (31.6%). Tables 3- 5 in this chapter presenting lifetime, childhood- and adulthood violence differ in layout only compared to the table presented in paper I.

Any lifetime violence: Almost half of the Sami population, 45% ($n=989$) reported to have been subjected to any type of violence. For the non-Sami population, the figure was 32.6% ($n=3682$). Emotional violence was the most common type of violence, followed by physical and then sexual violence irrespective of ethnicity and gender (Table 3). A significantly higher proportion of the Sami respondents, highest among Sami women, reported emotional, physical and sexual violence compared to the non-Sami, except sexual violence among men.

Table 3 The prevalence of various types of lifetime violence by gender and ethnicity, the SAMINOR 2 questionnaire study.

Lifetime violence	Women (n=6303)			Men (n=4993)		
	Sami n=1242 (%)	non- Sami n=5061 (%)	p.value	Sami n= 955 (%)	non- Sami n=4038 (%)	p.value
Emotional	479 (38.6)	1296 (25.6)	<0.001	303 (31.7)	750 (18.6)	<0.001
Physical	297 (23.9)	863 (17.1)	<0.001	180 (18.8)	385 (9.5)	<0.001
Sexual	271 (21.8)	791 (15.6)	<0.001	48 (5.0)	164 (4.1)	.191
Any	610 (49.1)	1758 (34.7)	<0.001	379 (39.7)	935 (23.2)	<0.001

In statistical analysis, Sami ethnicity was found to be a risk factor for any lifetime interpersonal violence, in both genders. The results remained significant after adjusting for socio-economic and demographic factors, as well as alcohol intake (paper I). Additional analysis on the various types of violence showed the same results (Table 15 and 16).

There was a significant age variation for any violence. Any violence was less reported by respondents in the age-group 50- 69. Stratified analysis by ethnicity and varying types of violence showed that the pattern of age- variation mainly was the same, except among Sami men, where the pattern of violence mainly increased by age (Paper I).

Childhood violence: Among all the respondents, a substantial part reported any childhood violence (25.4%) (Table 4), highest among Sami respondents (36.2%) compared to the non-Sami (22.7%), and highest among Sami women (39.4%) (Table 4). Sami respondents reported almost twice higher prevalence (20.6%) of emotional violence in childhood compared to the non-Sami (12.4%). A higher proportion of the Sami also reported physical violence in childhood (12.6%) compared to the non-Sami (8.4%). The ethnic difference was largest among men: The Sami reported almost twice higher prevalence of physical violence in childhood compared to the non-Sami. There were no significant ethnic differences in sexual violence among men. In addition to emotional violence, Sami women reported a higher prevalence of childhood physical and sexual violence compared to non-Sami women (Table 4).

Table 4 The prevalence of the different types of childhood violence by gender and ethnicity, the SAMINOR 2 questionnaire study.

Childhood violence	Women (n=6303)			Men (n=4993)		
	Sami n=1242 (%)	non- Sami n=5061 (%)	p.value (%)	Sami n= 955 (%)	non- Sami n=4038 (%)	p.value (%)
Emotional	254 (20.5)	635 (12.5)	<0.001	199 (20.8)	489 (12.1)	<0.001
Physical	147 (11.8)	477 (9.4)	.011	129 (13.5)	290 (7.2)	<0.001
Sexual	208 (16.7)	583 (11.5)	<0.001	47 (4.9)	145 (3.6)	.065
Any	489 (39.4)	1339 (26.5)	<0.001	309 (32.4)	728 (18.0)	<0.001

Several types of violence in childhood: Among those who had experiences any childhood violence, over one third (33.7%) had been exposed to two or three types of violence. Among men, this was found to be associated with ethnicity and was highest among non-Sami men (32.7%) compared to Sami men (28.8%). No effect on ethnicity was found among women.

Violence in adulthood: Among all, one in five reported any violence as adults (21.1%) (Table 5). There were significant ethnic differences in reported violence as adults which was highest among Sami respondents (30.4%) compared to the non-Sami (18.9%), and highest among Sami women (37.5%) (Table 5). Among men in both ethnic groups, there were too few answers on sexual violence to perform any statistical analysis. Moreover, as adults, emotional violence was the most frequent type of violence reported regardless of ethnicity and gender. Sami men reported over twice as high prevalence of physical violence compared to non-Sami (Table 5). Sami women reported significantly higher prevalence of all types of violence compared to non-Sami women, and the highest prevalence compared to all groups (Table 5).

Table 5 The prevalence of the different types of violence in adulthood by gender and ethnicity, the SAMINOR 2 questionnaire study.

Violence in adulthood	Women (n=6303)			Men (n=4993)		
	Sami (n=1242) (%)	non- Sami (n=5061) (%)	p.value (%)	Sami (n= 955) (%)	non- Sami (n=4038) (%)	p.value (%)
Emotional	300 (22.2)	824 (16.3)	<0.001	139 (14.6)	331 (8.2)	<0.001
Physical	178 (14.3)	460 (9.1)	<0.001	67 (7.0)	116 (2.9)	<0.001
Sexual	84 (6.8)	244 (4.8)	<0.001	- (0.1)	- (0.4)	-
Any	466 (37.5)	1243 (24.6)	<0.001	202(21.2)	471 (11.7)	<0.001

Several types of violence in adulthood: Among all, almost one third (27.4%) had been exposed to two or three types of violence. There were no significant differences between Sami women (35%) and non-Sami women (34.2%). However, a larger proportion of Sami men reported two or three types of violence compared to non-Sami men (14.7% vs. 7.9%, p. <.001).

Past 12 months: Overall 2.9% of the study population reported that they had been exposed to some type of violence the past 12 months. Sami respondents were nearly twice as likely to report being subjected to violence in the past 12 months compared to non-Sami respondents (4.1% vs. 2.6%).

Revictimisation/both in childhood- and adulthood: Overall 6.3% (n=716) reported any type of violence both in childhood- and adulthood. Sami women reported almost twice higher prevalence (12.5%) compared to non-Sami women (7.2%), which was highest among all groups. Sami men reported twice higher prevalence (6.9%) compared to non-Sami men (3.2%).

Perpetrator(s): Among those reporting any violence, most reported the perpetrator as known. One in five reported the perpetrator to be a stranger.

Conclusion: The finding that almost half of the Sami respondents reported emotional, physical and/or sexual violence compared to one third of the non-Sami population suggests that interpersonal violence is also a significant problem in the Sami population. Sami ethnicity was found to be a risk factor for the exposure to interpersonal violence.

5.2 Paper II: Childhood violence and mental health among indigenous Sami and non-Sami in Norway: the SAMINOR 2 questionnaire study.

The purpose of this study was to assess the association between childhood violence and adult mental health problems, as well as to investigate whether the potential impact of childhood violence differed in the two ethnic groups. We also aimed to investigate any ethnic differences in the prevalence of mental health problems, and explore whether childhood violence had any impact on any ethnic differences. The results showed a strong association between any childhood violence and adult mental health problems regardless of ethnicity. Respondents who reported violence in childhood had more than three times higher odds for suffering from psychological distress (adjusted OR for women=3.7, CI: 3.1-4.3, adjusted OR for men= 3.7, CI: 2.9- 4.6) and symptoms of PTS (adjusted OR for women=3.0 CI: 2.6- 3.5, adjusted OR for men= 3.5, CI: 2.5- 3.5) than respondents who reported no violence in childhood. To assess the association between childhood violence and adult mental health problems, age and education were used as covariates. We also conducted an additional analysis, including living area and Laestadian affiliation in the analysis, and the result remained the same (data not shown). Hence, living in a Sami majority area and an affiliation to Laestadianism did not have a significant impact on the association between childhood violence and adult mental health.

We found ethnic differences in mental health with a significantly higher prevalence of psychological distress among Sami women than non-Sami women (15.8% vs. 13.0%, $p=.010$), likewise among men (11.4% vs. 8.0%, $p=.001$) (Table 6). Differences were also detected in the prevalence of PTS symptoms; 16.2% among Sami women vs. 12.4% among non-Sami women ($p=.001$). Among men, the prevalence was 12.2% among the Sami vs. 9.1% among the non-Sami ($p=.005$) (Table 6).

Table 6 The prevalence of mental health problems, by ethnicity and gender, the SAMINOR 2 questionnaire study.

Mental health	Women (n=6003)			Men (n=4787)		
	Sami n=1195 (%)	non- Sami n=4808 (%)	p.value	Sami n=921 (%)	non- Sami n=3866 (%)	p.value
Psychological distress	189 (15.8)	623 (13.0)	.010	105 (11.4)	308 (8.0)	<0.001
PTS	194(16.2)	598 (12.4)	.001	112 (12.2)	353 (9.1)	.005

When investigating whether childhood violence had an impact on the observed ethnic differences in mental health problems, several models were tested. When adjusting for age, education, living area and Laestadian affiliation, none of these factors had any significant impact on the estimates. However, when childhood violence was included in the models, the association between ethnicity and mental health problems became weaker and no longer significant. In addition to the logistic regression analysis, we conducted mediator analysis using the product of coefficient method to calculate the mediated proportion of childhood violence on the ethnic differences in mental health problems (Fig. 6). A mediator is a variable that lies in a causal path between two variables (101). In this case, exposure to childhood violence is the mediator variable between ethnicity and mental health problems. The results showed that the mediated proportion for psychological distress and men were 47.6% and the figure for women was 64.4%. Two linear regression models were used: a mediator model with childhood violence as the outcome, and ethnicity as the exposure, adjusting for age and education level. The second model was the outcome model with mental health problems as the outcome and ethnicity as the exposure. The results showed that about half of the effect of ethnicity on psychological distress for men was mediated through childhood violence (the mediated proportion were 47.6%), and the figure for women was 64.4%. The mediated proportion for PTS and men was 57.2% and 85.0% for women in adjusted analysis.

Disclosure: Among those exposed to childhood violence, a higher proportion of women, irrespective of ethnic group, reported that they had confided in professionals after an assault compared to men (26.8% vs. 10.1%, $p < 0.001$). There were no significant ethnic differences between the Sami and non-Sami women in this respect (28.1% vs. 26.4%, $p = .530$). However, fewer Sami men than non-Sami men had confided in professionals (6.1% vs. 11.7%, $p = .012$).

Conclusion: Childhood violence was a significant risk factor for adult mental health problems regardless of ethnicity. Exposure to childhood violence may explain some of the higher prevalence of adult mental health problems found among the Sami compared to the non-Sami.

5.3 Paper III: Childhood violence and adult chronic pain among indigenous Sami and non-Sami in Norway: a SAMINOR 2 questionnaire study.

The aims of this study were to investigate the association between childhood violence and adult chronic pain, as well as to explore any ethnic differences in this association. The bivariate analysis, stratified by ethnicity and gender, showed that those who reported childhood violence also reported significantly more pain in all pain sites compared to those not reporting any childhood violence (Table 7 and 8). However, among Sami men, the only significant association was between childhood violence and pain located in the back, hips/legs and chest (Table 8). Furthermore, the logistic regression analysis showed a strong positive association between any childhood violence and adult chronic pain in all pain sites. Respondents who reported violence in childhood had more 1.5 times higher the odds for adult chronic pain in one or several pain sites of the body (adjusted OR 1.5, CI: 1.3- 1.7).

Stratified analysis by ethnicity and gender showed an increased number of pain sites and more intense pain among those exposed to childhood violence compared to those not exposed to childhood violence. However, in the adjusted model, this association turned out to be non-significant for Sami men. There were no ethnic differences in the mean number of pain sites; however, the mean number of chronic pain sites increased by age and education level.

Among all respondents, 51.8% (n=5760) reported any chronic pain with no significant ethnic difference (table 7 and 8). Compared to the non-Sami, stomach- and pelvic pain were significant more frequently reported among Sami women and chest- and stomach pain among Sami men. A higher prevalence of stomach pain among the Sami compared to the majority population has in other studies been linked to a higher lactose intolerance among the Sami (102-104). A study by Eliassen et al. found a higher prevalence of angina pectoris

(heart cramp) among the Sami compared to the non-Sami (105), and hence might explain some of the differences in chest pain. Pelvic pain is associated with childhood sexual abuse in several studies (106-109). Whether childhood violence might explain some of the ethnic differences found in our study was out of the scope of paper III. Additional logistic regression analysis showed that when adjusting for age and educational level, none of these factors had any significant impact on the estimate. However, when adding childhood violence to the model, the result fell below the level of significance (data not shown). Hence, some of the ethnic differences in pelvic pain among women might be mediated through childhood violence.

Table 7 Respondents reporting chronic pain by childhood violence and total among Sami and non-Sami women.

Chronic pain	Sami women (n=1,226)			Non-Sami women (n=4,984)			All Women (n=6,210)				
	Any childhood violence		p.value ^a	Any childhood violence		p.value ^a	Sami (n=1,226)	%	Non-Sami (n=4,984)	%	P.value
	Yes (n=382) n (%)	No (n=844) n (%)		Yes (n=1,072) n (%)	No (n=3,912) n (%)						
Any pain	236 (61.8)	411 (48.7)	<0.001	666 (62.1)	2081 (53.2)	<0.001	647	52.8	2747	55.1	.140
Neck, shoulders	196 (51.3)	308 (36.5)	<0.001	515 (48.0)	1588 (40.6)	<0.001	504	41.1	2103	42.2	.490
Arms	138 (36.1)	228 (27.0)	.001	384 (35.8)	1111 (28.4)	<0.001	366	29.9	1495	30.0	.922
Back	117 (30.6)	166 (19.7)	<0.001	334 (31.2)	856 (21.9)	<0.001	283	23.1	1190	23.9	.559
Lumbar	152 (39.8)	218 (25.8)	<0.001	434 (40.5)	1165 (29.8)	<0.001	370	30.2	1599	32.1	.200
Hips,leg	151 (39.5)	253 (30.0)	.001	449 (41.9)	1277 (32.6)	<0.001	404	33.0	1726	34.6	.267
Head	87 (22.8)	115 (13.6)	<0.001	249 (23.2)	573 (14.6)	<0.001	202	16.5	822	15.6	.989
Chest	51 (13.4)	69 (8.2)	.005	133 (12.4)	271 (6.9)	<0.001	120	9.8	404	8.1	.058
Stomach	89 (23.3)	125 (14.8)	<0.001	192 (17.9)	407 (10.4)	<0.001	214	17.5	599	12.0	<0.001
Pelvic	52 (13.6)	56 (6.6)	<0.001	124 (11.6)	217 (5.5)	<0.001	108	8.8	341	6.8	.017
Other	25 (6.5)	28 (3.3)	.010	74 (6.9)	130 (3.3)	<0.001	53	4.3	204	4.1	.717

^a Comparing childhood violence by Pearson chi-squared test.

Table 8 Respondents reporting chronic pain by childhood violence and total among Sami and non-Sami men.

Chronic pain	Sami men (n=941)			Non-Sami men (n=3979)			All men (n=4920)				
	Any childhood violence		p.value	Any childhood violence		p.value	Sami (n=941)	%	Non-Sami (n=3979)	%	P.value
	Yes (n=264) n (%)	No (n=677) n (%)		Yes (n=639) n (%)	No (n=3340) n (%)						
Any pain	136 (51.5)	320 (47.3)	.136	370 (57.9)	1540 (46.1)	<0.001	456	48.5	1910	48.0	.801
Neck, shoulders	93 (35.2)	226 (33.4)	.322	273 (42.7)	1053 (31.5)	<0.001	319	33.9	1326	33.3	.737
Arms	72 (27.3)	166 (24.5)	.214	198 (31.0)	715 (21.4)	<0.001	238	25.3	913	22.9	.126
Back	54 (20.5)	103 (15.2)	.053	124 (19.4)	443 (13.3)	<0.001	157	16.7	567	14.2	.058
Lumbar	82 (31.1)	195 (28.8)	.272	218 (34.1)	847 (25.4)	<0.001	277	29.4	1065	26.8	.098
Hips, leg	84 (31.8)	178 (26.3)	.089	226 (35.4)	827 (24.8)	<0.001	262	27.8	1053	26.5	.390
Head	25 (9.5)	52 (7.7)	.220	94 (14.7)	235 (7.0)	<0.001	77	8.2	329	8.3	.932
Chest	31 (11.7)	58 (8.6)	.087	67 (10.5)	195 (5.8)	<0.001	89	9.5	262	6.6	.002
Stomach	30 (11.4)	70 (10.3)	.362	82 (12.8)	243 (7.3)	<0.001	100	10.6	325	8.2	.016
Pelvic	16 (6.1)	37 (5.5)	.414	52 (8.1)	130 (3.9)	<0.001	53	5.6	182	4.6	.171
Other	12 (4.5)	33 (4.9)	.492	48 (7.5)	103 (3.1)	<0.001	45	4.8	151	3.8	.164

^a Comparing childhood violence history by Pearson chi-squared test.

Conclusion: Respondents who reported exposure to childhood violence also reported more chronic pain, more pain sites and intense pain than respondents who reported no childhood violence. However, the association between childhood violence and adult chronic pain among Sami men was vaguer, and insignificant. Cultural differences in childrearing might explain the different pattern among Sami men.

6 General discussion

In epidemiological studies, conclusions about an entire population are drawn based on a subsample of the same population. In the present thesis, we seek to identify traits and characteristics of the Sami women and men compared with the Norwegian majority population living in the same geographical area. However, epidemiologic studies are often influenced by two types of biases: random and systematic errors (110). This will be further discussed.

6.1 *Random errors*

Random errors deal with statistical issues in epidemiological studies and are reduced when the study size is increased (111). The sample size is a major determinant of the degree to which chance affects the findings in a study (111). The SAMINOR 2 questionnaire study was designed to address several research questions. Hence, the size of the population included was based on geographic and ethnic consideration. To assess whether key issues could be addressed in the given population, an a priori power calculation was performed (Table 9).

The power calculation was based on the estimated prevalence of interpersonal violence in the HUBRO study which had included similar questions on intimate partner violence. Since HUBRO only included questions on interpersonal violence among women, the power calculation was conducted for women only. The estimated proportion of persons classified as Sami is based on the SAMINOR I study (2003- 2004). The power calculation was based on the following research question: Do the proportion of persons identifying themselves as Sami differ as to their reporting of intimate partner violence? The research protocol included the numbers presented in the table below (Table 9) and showed that our study had the statistical strength to detect relatively small differences in the risk of intimate partner violence between divergent groups of women based on ethnicity.

Table 9 The power-calculation from the research protocol.

Type of violence	Ever (%)	Sami I n=685 (10%)	Sami total n=161 (32%)
Emotional	824 (13)	1.5	1.3
Physical	887 (14)	1.5	1.3
Sexual	697 (11)	1.6	1.2

Power calculation; $\alpha = 0.05$ (two sides), $\beta = 0.20$ for women.

Estimated percentages of various types of intimate partner violence based on HUBRO were applied to the number participating in SAMINOR I (N=6,340 women). The lowest estimated OR of intimate partner violence in subgroups of women was based on ethnicity (SAMINOR I). Two examples of classification are as follows: For the *Sami I*: respondent, parents and grandparents use the Sámi language at home. The *Sami Total* also includes respondents reporting one or/both grandparents as Sami. However, since the SAMNOR 2 study also included men, among whom a lower percentage is likely to report violence, a larger difference is needed to detect significant variations. Therefore, when assessing the subgroup of violence among men, (i.e. sexual violence), the lack of statistical significance may be due to type II errors. Sampling errors may result in both type I error (rejecting the null hypothesis when it is true) and type II error (accepting the null hypothesis when it is false). The observed lack of statistical significance when assessing the associations between having experienced any violence and potential outcomes, is thus unlikely to be due to type II errors. For the main analysis, in which we used total numbers within exposure groups and outcomes, random errors are considered to be of minor importance.

The level of significance in statistical analysis is also a factor influencing random errors (type I error). In our analysis, we have conducted multiple comparisons and used $P < 0.05$ as the level of significance for the chance of rejecting the null hypothesis when it is true. However, a more restricted level of significance like $P < .001$ in the analysis may have resulted in no significant results (no differences between the ethnic groups). Therefore, we conducted multiple comparisons and used $P < .001$ as the level of significance for the main analysis in paper I- III. The results remained the same (data not shown). For instance, the result at a 1% significance level for ethnic differences in emotional, physical and any childhood violence was $P < .001$ among men. Among women the figures were $P < .001$ for emotional, sexual and

any childhood violence, and $p=.011$ for physical violence in childhood. Hence, we may conclude that random errors probably are not influencing our result to a major degree.

6.2 *Systematic errors*

There are various types of systematic errors (110, 111). These are related to the design of the study, the way information is collected, how potential exposure and outcomes are measured and whether the results are influenced by confounders and interactions. Some of these errors may be controlled in statistical analysis to an acceptable level, whereas others cannot be handled in statistical analysis. Based on whether variables may be included in statistical models to reduce biases, these potential errors may be further divided into confounders and interaction on one side, and biases like selection- interaction-and information bias on the other hand. The three most discussed biases in epidemiology research are selection- and information bias, as well as confounding and interaction (110, 111). These will be discussed further.

6.2.1 Information bias

Bias can arise because the information collected from the questionnaire is erroneous. This may lead to the issue of a respondent being placed in an incorrect category (for instance, a respondent exposed to violence is placed in the non-exposed group), and is referred to as *misclassification*. Misclassification can be *differential* or *non-differential* (110). Furthermore, studies have suggested that individuals with painful medical conditions might tend to perceive and report interpersonal violence and abuse (112, 113). This kind of misclassification may overestimate the prevalence of interpersonal violence and hence magnify the association between childhood violence and the outcome variables. This type of misclassification is differential because interpersonal violence is misclassified differentially for those with or without health problems. Recall bias regarding the exposure variable/interpersonal violence, it is considered equally distributed in the two ethnic groups. However, a higher proportion among the Sami reported mental health problems. This may have influenced the tendency to report interpersonal violence in the Sami group, hence inflating the ethnic differences in the prevalence estimate of interpersonal violence.

6.2.1.1 Differential information bias

Differential information bias may have occurred if respondents with mental health problems remembered and reported interpersonal violence more frequently than those without mental health problems. To reduce this type of bias, a sensitivity analysis excluding respondents with mental health problems was conducted, and the ethnic differences were significant, with a higher proportion of the Sami reporting all types of violence, except no significant ethnic differences in sexual violence among men (Table 10).

Table 10 The prevalence of the different types of violence excluding respondents with mental health problems by ethnicity and gender, the SAMINOR 2 questionnaire study 2012.

Lifetime violence	Women (n=4093)			Men (n=3697)		
	Sami n=761 (%)	non- Sami n=3332 (%)	p.value	Sami n= 682 (%)	non- Sami n=3015 (%)	p.value
Emotional	215 (28.3)	623 (18.7)	<0.001	171 (25.1)	414 (13.7)	<0.001
Physical	122 (16.0)	402 (12.1)	.003	99 (14.5)	199 (6.6)	<0.001
Sexual	116 (15.2)	366 (11.0)	.001	25 (3.7)	82 (2.7)	.183
Any	298 (39.2)	908 (27.3)	<0.001	225 (33.0)	528 (17.5)	<0.001

Recall bias is always a challenge when measuring interpersonal violence retrospectively, especially in childhood. In both ethnic groups, the underreporting of physical and sexual violence is more likely than over-reporting. Underreporting may cause a misclassification of those exposed in the non-exposed group, leading to a lower prevalence estimate and hence diminishing the association between childhood violence and the outcome variables. The tendency to underreport interpersonal violence is considered equally distributed in the two ethnic groups. These types of misclassification tend to be a non-differential rather than a differential misclassification. However, there are ways of reducing recall bias in research. One way is to make questions more detailed regarding the exposure of the violent episode(s). This may help to attain a more accurate recall. In this study, interpersonal violence was measured by only three items. Hence, to strengthen the validity, future research on interpersonal violence should include more detailed questions to reduce this type of bias.

Recall bias on the outcome variables may also have been present. However, the respondents were asked about recent mental health problems and recent chronic pain, reducing the

likelihood of recall bias. Thus, recall bias regarding outcome variables is considered of minor importance, and to be equally distributed in the two ethnic groups. In addition, since there are no ethnic differences in the effect estimate, any differential classification bias on the effect estimate between childhood violence and adult mental health problems seems unlikely.

6.2.1.2 The reliability and validity of the measurements in the SAMINOR 2 questionnaire study

Ethnicity: When classifying ethnicity, linguistic affiliation and self-identity were used as criteria. Both criteria are used by the Norwegian Sami Parliament to register voters. Hence, differential misclassifications of respondents regarding their ethnicity may be regarded as minor. However, using ethnicity as a variable within research has been much discussed (89, 114-116). The key question is how to define *ethnicity* and an *ethnic group*. In past decades, an increasing number of studies have improved the knowledge of the health and living conditions of the Sami people (22, 102, 105, 117, 118). However, various definitions and inclusion criteria of the Sami group have been used. This makes it difficult to compare results. The challenge of how to define the Sami has been posed by several researchers (98, 114, 115, 119). It has been recommended a census regarding how to define the Sami ethnicity to be able to compare research (119). Furthermore, studies based on data from the SAMINOR 1 and SAMINOR 2 questionnaire have posited various definitions of the Sami group, that is, one mark for the Sami language by grandparents, one's parent and one selves, language affiliation in a combination with ethnic background and/or self-identity (115). The variety of definitions of Sami ethnicity is thoroughly discussed in a recent thesis by Pettersen (115). However the author gives no further recommendation for a definition of a Sami group. Further, Pettersen has shown in a study that a connection to the Sami language does not automatically result in self-identification as Sami (115). The self-identification criteria seem to be the most complex and challenging measure. This implies that an answer to this question is the answer a person has at any one time, and the answer may change in time. However, Pettersen found that Sami self-identification is shown to be relatively stable (115). Self-identification seems to be the most valid criterion for belonging to an ethnic group (89, 116). In this thesis, only 77 respondents identified themselves as Sami without a linguistic affiliation. This indicates that Sami self-identification is a relatively valid criterion.

Other studies have previously used different definitions of the Sami group (71, 105). A fundamental question is whether the results change with different definitions of the Sami group. To answer some of the questions regarding varying definitions and potentially divergent outcomes, additional analyses have been conducted. To investigate whether the prevalence estimate of any lifetime violence changed with different definitions of the Sami, we conducted additional analyses (Table 11 and 12). Definition II was a broader definition than we have used. In addition to our definition, it includes an affirmative response to the question “my ethnic background is Sami”. This definition is used in several papers utilising data from the SAMINOR 1 questionnaire study (120, 121). Definition III, which is also used in other studies (122), Sami ethnicity was defined by Sami being the home language of grandparents, parents and respondents. As shown in Table 11 and 12 varying definitions for the Sami do not change the ethnic differences in the prevalence of any lifetime violence. In regression analyses adjusting for age and education, Sami ethnicity remains a risk factor for lifetime interpersonal violence for all three definitions of the Sami group. Stratifying the different types of violence, the pattern remained the same, except no ethnic differences in sexual violence among women and Sami ethnicity III (data not shown). However, additional analysis on the different types of violence and whether it had occurred in childhood- and/or in adulthood might have identified special sub-groups at risk. This is recommended for future research. Further, due to the harsh assimilation policy, many Sami may have aboded and denied their Sami ethnicity. Hence, a potential misclassification of Sami in the non-Sami group might be in operation. Therefore, the ethnic differences found in our study may be conservative.

Table 11 The prevalence, crude and adjusted odds ratio (OR) for any lifetime violence by different ethnic definitions among women.

Any lifetime violence	n=	%	p.value	Crude OR	CI	Adjusted OR	CI
Definition I (paper I)							
Ethnicity			<.001				
Sami (n=1242)	610	49.1		1.8	1.6-2.1	1.6	1.3-1.8
non-Sami (n=5061)	1758	34.7		1		1	
Definition II							
Ethnicity			<.001				
Sami (n=1450)	717	49.4		1.9	1.7-2.1	1.9 ^b	1.7-2.1
non-Sami (n=4853)	1651	34.0		1		1	
Definition III							
Ethnicity			<.001				
Sami (n=582)	275	47.3		1.3	1.3-1.8	1.6 ^b	1.4-1.9
non-Sami (n=5721)	2093	36.6		1		1	

Definition I: Sami language + self-definition. Definition II: + ethnic Sami. Definition III: Sami home language for grandparents, parents and respondents) adjusted for age and education.

Table 12 The prevalence, crude and adjusted odds ratio (OR) for any lifetime violence by different ethnic definitions among men.

Any lifetime violence	n=	% with any violence	P	Crude OR	CI	Adjusted OR	CI
Definition I (paper I)							
Ethnicity			<.001				
Sami (n=955)	379	39.7		2.2	1.9-2.5	1.9	1.6-2.3
Non-Sami (n=4038)	935	23.2		1		1	
Definition II							
Ethnicity			<.001				
Sami (n=1104)	425	38.5		2.1	1.8-2.4	2.1 ^b	1.9-2.5
non-Sami (n=3889)	889	22.9		1		1	
Definition III							
Ethnicity			<.001				
Sami (n=450)	179	39.8		2.0	1.6-2.4	2.0 ^b	1.7-2.5
non-Sami (n=4543)	1135	25.0		1		1	

Definition I: Sami language + self-definition. Definition II: + ethnic Sami. Definition III: Sami home language for grandparents, parents and respondents. b) Adjusted for age and education.

Interpersonal violence: The questions that were used to assess interpersonal violence were taken from the NorVold Abuse Questionnaire (NorAQ). A previous validation study among women showed that the abuse variables in the NorAQ showed good test-retest reliability (84-95%) (123). Specificity was 98 % for all types of abuse except physical (85%). The authors explain the lower specificity for physical abuse by the way that mild physical abuse was defined. "Smacking someone's face" is defined as mild physical abuse. However in Sweden where the validation study was performed; smacking your child did not become an unlawful act until the 1970s. Therefore, the authors argue, women who had been smacked and

agreed on that item in NorAQ might not have considered it abuse in the interview. Sensitivity ranged from 75% (emotional) to 96% (physical) (123). False negative answers were found concerning emotional abuse (sensitivity 75%). False negative answers were expected to be more common than false positive answers. However, this validation study had a small sample (n=64) in the interview, and the results also showed wide confidence intervals. This indicates uncertainty in the measurement's accuracy. Overall, this validation study among women showed that the NorAQ had good reliability and validity (124). The validation study for men (m-NorAQ) showed good to excellent concurrent validity for the different types of abuse and excellent reliability for all questions about abuse (125). In this study, the test-retest reliability for emotional abuse was 80% to 95%, for physical abuse 77%- 88%, and for sexual abuse 91% to 100%. The ability to distinguish true positive answers was most accurate for emotional abuse (83%), while the ability to distinguish true negative answers was most accurate for physical abuse (92%) and sexual abuse (99%). In testing the instruments reliability, testing was performed for both internal consistency, stability or test-retest, as well as inter-related-reliability. Based on the results from these two studies among women and men, NorAQ and m-NorAQ could be the firsthand choice when measuring emotional, physical and sexual abuse. However, the questions used in this thesis were a modified version of the NorAQ. A modified version of the NorAQ was later used in a survey on health and living conditions in Oslo in 2000-2001 (the HUBRO study) (9). However, these questions have not been validated in the Sami population or among the non-Sami in Norway. Differences in cultural and lingual interpretations may have influenced the observed differences between the two groups. This may represent a challenge and hence affect the validity of this study. However, the questions on violence were formulated rather widely, covering a broad spectrum of violent acts. This might reduce potential biases based of cultural differences. Furthermore, there might be age- related variations in how the violent act(s) is interpreted. An increased openness in society in general, laws that criminalise violence and the establishment of various health facilities addressing interpersonal violence may also have resulted in the observed differences in the prevalence of violence between the oldest and younger age groups in this study. This may represent a major challenge when discussing selection bias and, hence evaluate the external validity of the study. Moreover, differences in openness about the topic in varying cultures might also

affect the results. Furthermore, there were relatively few missing on the three items measuring interpersonal violence (n=200), with no significant difference between the Sami and non-Sami respondents. This indicates low level of differential item functioning (DIF) between the two ethnic groups.

Psychological distress: HSCL-10 is widely considered a reliable and valid instrument to measure psychological distress (83). Strand et al. have investigated the correlation, the reliability, the sensitivity, and the specificity, and they calculated the area under receiving operating characteristics (ROC) curves for the HSCL-10 in Norway (83). They concluded that the shorter version of the HSCL performed almost as well as the full version in measuring mental distress and predicting mental disorders, and they established a cut-off score. In the total sample, the internal consistency of the scale was high (Cronbach's alpha = .90) and remained high for both the Sami and non-Sami (Cronbach's alpha = .90). However, even though the Cronbach's alpha is similar, the phenomenon might be different between Sami and non-Sami.

Symptoms of post- traumatic stress: The questions measuring post-traumatic stress symptoms (PTS) only contain three items. The items are core symptoms (Intrusive memories, avoidance of certain situations and emotional numbness) included in the criteria for post-traumatic stress disorders (PTSD) in the psychiatric diagnostic system DSM-V, but they are not sufficient to meet all the DSM- V criteria for a PTSD diagnosis (87). A major limitation is that the PTS questions are generic and not asked in response to a specific stressor. Hence, we do not know whether the reported exposure is a traumatic event according to the criteria in the DSM-V for the PTSD diagnosis. However, we have highlighted that this is only *symptoms of PTS*, and we are not able to assess a PTSD diagnosis according to the DSM-V. Although this is a major limitation, it has been previously been used in other studies as a non-specific indication of post-traumatic stress (3, 126). The internal consistency of these items was acceptable (Cronbach's alpha 0.75) for both ethnic groups, strengthening both the reliability and the validity of the measurement. However, more items measuring symptoms of PTS would strengthen the validity of this instrument. We found no study on the prevalence on the PTSD diagnosis in Norway. Hence, we are not able to compare our results to any study in Norway. This is a major limitation. However, we performed several

classifications of PTS symptoms. The first definition included a positive response to one of the three questions, which gave a prevalence of 25.3% with a significantly higher prevalence among the Sami respondents (29.3%) compared to the non-Sami (24.3%, $p = <.001$). The second included a positive response to two or three questions, which we have used in paper II. The third definition included a positive response on all three questions and gave a prevalence of 3.6% with a significantly higher prevalence among the Sami respondent (4.9%) compared to the non-Sami (3.3%, $p = <.001$). The first classification was interpreted as too wide a definition, while the third was interpreted as too narrow.

Chronic pain: The question measuring chronic pain is consistent with the International Association for the Study of Pain (IASAP) definition of chronic pain: i.e. pain that has lasted for ≥ 3 months. The respondents were further asked to specify the location and intensity of pain. The questions used to specify the different pain sites of the body are not a validated instrument. However, specifying which parts of the body that is affected increases the accuracy of the answer(s) and hence reduces (recall) bias. Pain intensity was assessed by three items: “not affected”, “somewhat affected” and “strongly affected”. This is not a validated instrument and no previously validated pain instruments were available in Norwegian. However, items that assessed the duration, location and intensity of pain were chosen from other instruments, and experts in pain management evaluated the validity of the instrument used in the questionnaire. This strengthened the validity of the instrument. The pain questions gave information about pain located in various parts of the body, number of pain sites, as well as pain intensity. This gives a broad picture of chronic pain among the Sami and non-Sami. The internal consistency between the 10 questions measuring chronic pain was tested by the Cronbach’s alpha coefficient and was found to be high in both ethnic groups (0.98). This strengthens both the reliability and the validity of the instrument.

6.2.2 Selection bias

6.2.2.1 Non-participants

However, due to the low participation rate in the SAMINOR 2 questionnaire study (27%), selection bias is likely. We have limited information about the non-respondent, namely that participation increased by age and more women than men participated (81). Furthermore, in this study, a comparison was made between respondents participating in the SAMINOR 1 questionnaire study and those invited to the SAMINOR 2 questionnaire study (81). It was found that, compared to the non-participants, the participants were older and had a higher education level. In addition more women than men participated. Studies have shown an international trend that participation rates generally increase by age, female gender and higher educational level. It is therefore plausible to assume that there also is a selection bias in terms of education level in this study.

Since ethnicity is not recorded in any official register in Norway, we were not able to assess whether the proportion of the non-respondents differed in the two ethnic groups. However, the participation rate in SAMINOR 1 was considerably higher, (60.9%) than in the present study, but the proportion of participants classified, as Sami did not differ between SAMINOR 1 and SAMINOR 2 (81). We therefore assume that the proportion of the non-respondents in SAMINOR 2 is equally distributed among the Sami and the non-Sami.

The invitation letter had a Sami profile (Appendix 1), stating that it was from the Centre for Sami Health Research, UiT- The Arctic University of Norway, but the invitation recruiting participants was sent from Statistics Norway. The Sami profile of the invitation letter might also explain the low response rate from both Sami and non-Sami: The non-Sami might have interpreted the invitation to be less relevant to their group. For the Sami, the Sami profile on the invitation letter might have worked both ways: It might have increased the participation among those having a strong Sami identity, but decreased participation among those strongest affected by the assimilation policy. The SAMINOR 2 questionnaire is voluminous, and participating in the study involved considerable effort. This may also explain some of the low participation rate.

6.2.2.2 Non-participants and prevalence

The difference between respondents and non-respondents presents a socio-economic gradient that may have influenced the prevalence estimates of interpersonal violence, adult mental health problems and chronic pain. The prevalence may be different among the non-respondents. Since both interpersonal violence and mental health problems are associated with young age in our study, the estimated prevalence of interpersonal violence and mental health problems might have been higher if these groups had been included. As to the lifetime prevalence of any violence, as well as the different types of violence, we conducted stratified analysis on the different age- groups. For women, young age was a risk factor for all types of violence. Hence, given the same age- gradient differences among the non-respondents, a higher response- rate among younger non-participants might have yielded an equal or even a higher prevalence among women. Among non-Sami men, young age was a risk for interpersonal violence. Hence, among non-Sami men, the estimated prevalence would have been higher if more non-responders had been included. Among Sami men, the pattern was different: young age was a protective factor for all types of violence. Hence, the estimated prevalence might be overestimated for all types of violence, and the ethnic differences among men could have been even stronger with input from younger non-participants.

The participation rate in the first SAMINOR questionnaire study was considerably higher (60.9%) than in the SAMINOR 2 questionnaire study (27%). Furthermore, the proportion of participants classified as Sami did not differ between SAMINOR 1 and SAMINOR 2 (81). Hence, the population of SAMINOR I may have been representative for the background population. However, participants in SAMINOR 2 tended to have higher education compared to participants in SAMINOR 1. This might have influenced the results by making our estimates slightly higher than if there were no differences in education level between respondents and non-respondents. We therefore have estimated the prevalence of any violence by respondents participating in both SAMINOR I and SAMINOR 2 and respondents theoretically participated in SAMINOR 1 (Table 13 and 14). The results showed a slightly higher prevalence for all types of violence in both ethnic groups and gender, except among Sami men (Table 12 and 13).

Table 13 The prevalence, crude and adjusted odds ratio for any lifetime violence in paper I, among those participating in both SAMINOR 1 and 2 and among those who theoretically could have participated in SAMINOR I, among women.

Any lifetime violence	n=	% with any violence	P.value	Crude OR	CI	Adjusted OR	CI
Paper I (n=6303)							
Ethnicity			<.001				
Sami (n=1242)	610	49.1		1.8	1.6-2.1	1.6	1.3-1.8
non-Sami (n=5061)	1758	34.7		1		1	
SAMINOR^a(n=2496)							
Ethnicity			<.001				
Sami (n=561)	259	46.2		2.0	1.7-2.4	2.0 ^c	1.7-2.5
non-Sami (n=1935)	577	29.8		1		1	
SAMINOR^b(n=3374)							
Ethnicity			<.001				
Sami (n=687)	328	47.7		1.9	1.6-2.3	1.6 ^c	1.3-1.8
non-Sami (n=2687)	871	32.4		1		1	

a) Participants in both SAMINOR 1 and SAMINOR 2, b) Excluded participants under 43 years and from the municipality of Sør- Varanger (respondents theoretically participated in SAMINOR I), c) Adjusted for age and education.

Table 14 The prevalence, crude and adjusted odds ratio for any lifetime violence in paper I, among those participating in SAMINOR 1 and 2 and among those who theoretically could have participated in SAMINOR I among men.

Any lifetime violence	n=	% with any violence	P.value	Crude OR	CI	Adjusted OR	CI
Paper I (n=4993)							
Ethnicity			<.001				
Sami (n=955)	379	39.7		2.2	1.9-2.5	1.9	1.6-2.3
Non-Sami (n=4038)	935	23.2		1		1	
SAMINOR^a(n=2048)							
Ethnicity			<.001				
Sami (n=469)	177	37.7		2.5	2.0-3.2	2.5 ^c	2.0-3.2
non-Sami (n=1579)	304	19.3		1		1	
SAMINOR^b(n=3086)							
Ethnicity			<.001				
Sami (n=637)	263	41.3		2.5	2.1-3.0	2.5 ^c	2.1-3.1
non-Sami (n=2449)	537	21.9		1		1	

a) Participants in both SAMINOR 1 and SAMINOR 2, b) Excluded participants under 43 years and from the municipality of Sør- Varanger (respondents theoretically participated in SAMINOR I), c) Adjusted for age and education.

6.2.2.3 Non-participants and associations

To assess the strength of associations between the dependent and independent variables, selection bias is regarded as affecting the result to a lesser degree than prevalence estimates (127). If the prevalence of childhood violence and mental health problems is

underestimated, it has probably not affected the strength of the association between the two variables. The risk of type II error is low due to the high number of respondents. However, if childhood violence is over- or underestimated and the prevalence of mental health problems is correct, the strength of the association is stronger/weaker than it would be in reality. The estimated prevalence of mental health problems seems reasonable. Since our participants were older than non-participants and chronic pain is associated with increased age, our prevalence estimates of chronic pain might have been overestimated, thus, inflating the strength of association between childhood violence and adult chronic pain. On the other hand, if childhood violence is underestimated and adult chronic pain is overestimated, the strength of the association presented in paper III might be correct. In addition, non-differential misclassification error has an important effect in measuring the strengths of association. A misclassification of the outcome variable will reduce the strength of the association and the researchers might fail to find an association. In our analysis, we found a strong association in all our main analysis, except between childhood violence and adult chronic pain among Sami men. We regarded the bias in the results as minor due to the misclassification of the outcome variable.

6.2.3 Confounding

A confounding variable is defined as a variable associated both with the exposure and the outcome variable (110, 111). A confounding variable may create a false association or mask a real association between the exposure and the outcome. In regression analysis, restriction, stratification and controlling are strategies for dealing with the bias caused by confounding (ref). We used all three strategies. In all three papers, we excluded participants with missing responses on ethnicity and violence. In paper II we also excluded respondents with three or more missing on the HSCL-10 according to the manuscript described by Stand et al. (83), and missing the outcome variable PTS. In paper III we excluded missing response on chronic pain. We stratified all main analyses on gender due to the knowledge that there were possible gender differences in the prevalence of the exposure and the outcome variables (75, 128-130). When assessing the association between childhood violence and adult mental health problems in paper II, we stratified the main analysis by Sami and non-Sami ethnicity, using age and education as confounding variables in the adjusted analysis. In paper III, stratified

bivariate analyses were performed by ethnicity. Furthermore, in the logistic regression analysis, ethnicity was used as a covariate variable, while age, education and any specific symptom were considered confounding variables.

6.2.4 Interaction

Another source of error is interaction, which occurs whenever the effect of one variable partially or wholly depends on the presence of another variable (110). Interaction was explored in all three papers. In a regression analysis, interaction is detected by adding a term to the model that is the product of the two variables. This term is included in the model only if it is significant (111). In addition to including the interaction variable in the model, stratification is also a strategy for dealing with the bias caused by interaction. We used both strategies. In paper I, we tested the potential interaction between ethnicity and living area. In paper II, the interaction was tested between any childhood violence and ethnicity on psychological distress and PTS. In paper III we investigated the interaction between childhood violence and ethnicity on the outcomes and stratified the analysis due to significant results.

6.3 *Sensitivity analysis/additional analysis*

6.3.1 Rural areas

The participants from the municipality of Alta (n=3,236) constitute a large part of the study population (27.8% in paper I) and are defined as constituting a town. Sør-Varanger (n=1,691, 15.0% in paper I) contains Kirkenes, which also is defined as a town. To generalize our results to the populations in rural areas, a sensitivity analysis excluding the participants of Alta, and then excluding participants both from Alta and Sør-Varanger was conducted, and the ethnic differences remained the same (data not shown).

6.3.2 Various types of interpersonal violence

Sami ethnicity was found to be a risk factor for any lifetime interpersonal violence. In the regression analysis in paper I, we stratified on the different types of violence and the pattern remained the same (Table 15 and 16).

Table 15 Crude and adjusted odds ratio for the different types of violence among men.

Lifetime violence	Crude OR (CI)	p.value	Adjusted OR* (CI)	P.value
Emotional				
Sami	2.0 (1.8-2.4)	<0.001	1.9 (1.6-2.3)	<0.001
Non-Sami	1		1	
Physical				
Sami	2.2 (1.8-2.7)	<0.001	1.9 (1.5-2.4)	<0.001
Non-Sami	1		1	
Sexual				
Sami	1.2 (.89-1.7)	.192	1.2 (0.8-1.8)	.328
Non-Sami	1		1	

*Adjusted for age, educational level, living area, affiliation to Laestadianism and alcohol intake.

Table 16 Crude and adjusted odds ratio for the different types of violence among women.

Lifetime violence	Crude OR (CI)	p.value	Adjusted OR* (CI)	P.value
Emotional				
Sami	1.8 (1.6-2.1)	<0.001	1.6 (1.4-1.9)	<0.001
Non-Sami	1		1	
Physical				
Sami	1.5 (1.3-1.8)	<0.001	1.3 (1.1-1.6)	.004
Non-Sami	1		1	
Sexual				
Sami	1.5 (1.3-1.7)	<0.001	1.3 (1.1-1.6)	.002
Non-Sami	1		1	

*Adjusted for age, educational level, living area, affiliation to Laestadianism and alcohol intake.

Table 17 Prevalence of psychological distress, PTS and chronic pain among women participating in the SAMINOR 2 questionnaire study, participating in both in SAMINOR 1 and 2, and participants theoretically participated in SAMINOR 1.

Women	Psychological distress (n=)	%	P.value	PTS (n=)	%	P.value	Chronic pain (n=)	%	P.value
Paper II				Paper II			Paper III		
Ethnicity			.010			.001			.140
Sami	189 (n=1,195)	15.8		194 (n=1,195)	16.2		647 (n=1,226)	52.8	
non-Sami	623 (n=4,808)	13.0		598 (n=4,808)	12.4		2747 (n=4,984)	55.1	
SAMINOR^a				SAMINOR^a			SAMINOR^a		
Ethnicity	N=2339		.008			<.001			.999
Sami	66 (n=559)	11.8		111 (n=559)	19.9		290 (n=573)	50.6	
non-Sami	155 (n=1,922)	8.1		245 (n=1,922)	12.7		988 (n=1,952)	50.6	
SAMINOR^b				SAMINOR^b			SAMINOR 1^{ab}		
Ethnicity			.355			.004			.413
Sami	70 (n=656)	10.7		104 (n=656)	15.1		381 (n=647)	58.9	
non-Sami	242 (n=2,591)	9.3		302 (n=2,591)	11.2		1520 (2,506)	60.7	

a)both SAMINOR 1 and SAMINOR 2, b) Excluded participants under 43 years and from the municipality of Sør- Varanger (respondents theoretically participated in SAMINOR I).

Table 18 Prevalence of psychological distress, PTS and chronic pain among men participating in the SAMINOR 2 questionnaire study, participants in both SAMINOR 1 and 2, and participants who theoretically participated in SAMINOR 1.

Men	Psychological distress (n=)	%	P.value	PTS (n=)	%	P.value	Chronic pain (n=)	%	P.value
Paper II				Paper II			Paper III		
Ethnicity			.001			.005	Ethnicity		.801
Sami	105 (n=921)	11.4		112 (n=921)	12.2		456 (n=941)	48.5	
non-Sami	308 (n=3,866)	8.0		353 (n=3,866)	9.1		1910 (n=3,979)	48.0	
SAMINOR^a				SAMINOR^a			SAMINOR^a		
Ethnicity			.017			.078			.428
Sami	40 (n=467)	8.6		61 (n=467)	13.1		196 (n=474)	41.4	
non-Sami	87 (n=1,572)	5.5		160 (n=1,572)	10.2		691 (n=1,592)	43.4	
SAMINOR^b				SAMINOR^b			SAMINOR^b		
Ethnicity						.022			.645
Sami	56 (n=617)	9.1	0.18	70 (n=617)	11.3		307 (n=604)	50.8	
non-Sami	152 (n=2,361)	6.4		198 (n=2,361)	8.4		1186 (n=2,286)	51.9	

a)both SAMINOR 1 and SAMINOR 2, b) Excluded participants under 43 years and from the municipality of Sør- Varanger (respondents theoretically participated in SAMINOR I).

6.4 Causality

The goal of health research is to produce new knowledge to improve health. The “gold standard” is to prove causality between an exposure and an outcome variable (110). To assess causality, the exposure must come before the outcome. However, the design of the study was cross-sectional, using population-based information collected retrospectively. The main limitation of the cross-sectional design is that both exposure and outcome are measured at the same time; hence no conclusion regarding causality can be made. However, since our study measures violence in childhood and its association with adult mental health and adult chronic pain, the exposures of violence reported are likely to have taken place prior to the reported mental distress condition and chronic pain. Another limitation is that the cross-sectional design measures only one point in time, whereas many conditions vary across time. For instance, despite mental health problems seeming relatively stable, we could obtain another result if we measured another point in time. A longitudinal design with repeated measurements allows for estimation of the prevalence of different health conditions and changes over time.

6.5 External validity

External validity concerns the extent to which the findings can be generalised from the specific sample in the study to a larger population. The issue of external validity in our studies is whether our findings are valid for the Sami population in Norway. In this thesis, we used data from the SAMINOR 2 questionnaire study. Data were collected in Sami-Norwegian municipalities, making it possible to assess ethnic differences within the same geographical area. All municipalities and communities, except Alta (n= 12,153) and Sør-Varanger (n= 6,300) had fewer than 3000 inhabitants in 2012 (Figure 1). However, selection bias is a serious threat to external validity (see the discussion concerning selection bias).

Furthermore, most of the municipalities were drawn from Finnmark and Troms County, whereas fewer municipalities were collected from Nordland, and even less from the counties in Trøndelag. Hence, the results might be more valid for Finnmark and Troms County.

Despite likely selection bias, we believe that our results may be generalised to the Sami population living in Mid- and Northern Norway.

6.6 Comparison with other studies

The prevalence of violence differs between and within countries (19). In addition, most studies have been conducted among women (19, 48). However, instruments to assess violence as well as targeted population differ. In a multicountry population-based study, assessing intimate partner violence, huge differences between countries, and within countries have been found (rural higher than urban, low income countries higher than high income) (43).

Moreover, the first national study on partner violence in Norway found differences in prevalence across regions. The lowest proportion reporting any partner violence was women living in the West at 21.3% and highest in the North regions at 35.7% (3). The instrument utilised in this study was a detailed questionnaire on various methods couples may have used to solve conflicts. The proportions are difficult to compare with our result; however the regional differences found are relevant to our study.

Only a few multicountry studies in high-income countries have been conducted assessing violence with the same instrument. The Nordic study assessing gynaecological patients found the lifetime prevalence to be 22.8%. The full version of NorAQ was used and the site was urban (Trondheim) (131). This is lower than our prevalence among women and among the non-Sami (34.7%). This may suggest regional differences or urban/rural differences.

A European multicountry study among pregnant women, also using the full NorAQ found the proportion of women in Norway reporting any violence was 37.1% (132). The study sites in Norway included both urban and rural areas as well as health regions. Our finding of 34.7% among non-Sami women is in line with this finding.

The short version of NorAQ was used in the Mo-Ba study (133). This population-based study found that 32% of the pregnant women reported experience of any violence during their lifetime.

The other study using the abbreviated form of NorAQ reported intimate partner violence (134). They found that 14% had experience any type of intimate partner violence. This study was conducted in an urban area. We found that that violence in adulthood was reported by 13.3% (plus 3.2 both as an adult and as a child) among non-Sami women and 18.1% (plus 6% both as an adult and as a child) among Sami women).

The above comparisons suggests that our finding Sami women are more likely to be exposed to any lifetime violence compared to that of non-Sami women living in the same region, is not caused by too low estimate of violence among non-Sami women. Rather, the estimation among non-Sami women seems to be in line with other studies.

A higher prevalence of interpersonal violence among indigenous populations compared to the dominant group in their countries has been demonstrated in international studies. Findings for Sami women in our study (49.1%) are congruent with a study of the Inuit population in Greenland that reported that 47% of Inuit women were exposed to violence. However, the reported prevalence for Inuit men (48%) was higher than for Sami men in our study (39.7%). In the study by Curtis et al. (33), sexual violence was reported by one in four Inuit women (25%) and 6% of Inuit men. In our study, one in five Sami women reported

sexual violence (21.8%). The corresponding figure for Sami men was 5% in our study. This might suggest that the prevalence of sexual violence in the Inuit and Sami people is rather similar. Furthermore, Curtis et al. reported that 8% of Inuit women and 3% of Inuit men had been subjected to childhood sexual violence. In our study, sexual violence in childhood was reported by 16.7% of Sami women and 4.9% of Sami men. Discrepancies may be explained by differences in phrasing the questions: in the Curtis study, the question regarding sexual assault was phrased 'have you ever been forced into sex', while in our study the question regarding sexual violence was phrased more generally: 'Have you been exposed to sexual assault?'. The age cut-off was also lower in the study by Curtis et al.: less than 13 years; the cut-off in our study was 18 years. Moreover, regarding the potential impact of the period under study, Curtis et al. conducted their study in Greenland in 1993–1994. An increased openness in society in general and the establishment of various health facilities addressing sexual violence may also have resulted in a higher prevalence of reported sexual violence in childhood in our study.

A national population-based study in Norway shows that the prevalence of rape was 9.4% in women and 1.1% in men (2). Half (49%) of the women who reported rape had been raped before the age of 18. Lifetime prevalence of rape and other forms of sexual violation was 33.6% of women and 11.3% for men. The figures in our study were considerably lower. This might indicate that our prevalence estimate of any sexual violence is underestimated. Less severe physical partner violence (after age 18) was reported by 16.3% women and 14.3% of men. Physical violence where the victim was afraid of serious injury or death was reported by 13.9% men and 11.2% of women. The figures in our study were considerably lower for men (3.7%). This might indicate that physical violence among men is underestimated in our study, while the figures for women (10.1%) are in line with the national study. The national study did not measure emotional/psychological violence after age 18.

6.6.1 The prevalence of childhood violence

The prevalence of childhood violence varies greatly across countries (19). Globally, it is estimated that the prevalence rate of childhood sexual victimization is 20% among women and of 5– 10% among men. Furthermore, nearly one in four adults reports having been

physically abused as a child, and 36% report emotional abuse as a child. Psychological abuse against children has been given less attention globally than physical and sexual abuse (57). Cultural factors appear to strongly influence the non-physical techniques that parents choose to discipline their children, some of which may be regarded by people from other cultural backgrounds as psychologically harmful. Defining psychological abuse is therefore very difficult (57).

In a national population-based study in Norway, the prevalence of psychological abuse from parents/caregivers in childhood was estimated: it was reported by 15.4% of women and 11.2% of men (2). In our study, the figures for emotional violence were 14.2% among women and 13.7% among men. Our findings showed a slightly lower prevalence for women and slightly higher prevalence for men. In the national study, any childhood physical violence was reported by 28.8% of women and 33.8% among men. In comparison, our figures for any childhood physical violence were considerably lower: 9.9% among all women and 8.4% among all men. However, in the national study, the figures for serious physical violence were 5.1% among men and 4.9% among women. Although a lower prevalence estimate, these figures are more in line with our results, and may indicate that physical violence may have been interpreted as serious in this study. In the national study, the figures for sexual intercourse before age 13 when the perpetrator is ≥ 5 years older than the victim was reported by 4.0% of women and 1.5% for men, at median age of 8 years. Other sexual violence before age 13 was 10.2% for women and 3.5% for men (2). Our figures for childhood sexual violence were 12.6% among women and 3.9% among men and do not largely differ compared to the national study of sexual violence before age 13. Further, in the national study any sexual violence before age 18 was reported by 21.2% of women and 7.8% of men. Our prevalence estimates are lower than the figures from the national study, indicating that our estimates are more in the direction of under- than overestimation in the case of childhood sexual violence.

6.6.2 The prevalence of mental disorders

The prevalence of mental disorders seems to have stayed relatively stable in recent decades across Europe and the USA (135). In Norway, the lifetime prevalence of mental illness is

estimated to be between 25% - 52% (128). It seems like Norway has a lower level of psychological distress compared to the rest of the world due to the high standard of living (128). However, health-related and social inequalities are increasing in Norway (128). In Norway, psychological distress, measured by the Hopkins Symptom Check List (HSCL-25) shows that among all respondents, 10.2% reported psychological distress: the figures for women were 12.4% and 7.8% for men. Furthermore, significant regional differences were found among men, not women, with higher levels of psychological distress in East and South of Norway compared to Mid- and Northern Norway (128). In comparison, our figures for non-Sami women were 13.0% and 9.1% for non-Sami men and are in line with the figures from the national study. We have also compared the mean value of the HSCL-10 with the mean value of the HSCL-25 in the national study. The mean value for non-Sami women in our study was 1.36 and 1.35 among non-Sami men. These figures correspond with the national study which reports a mean of 1.36 for women in Mid- and Northern Norway. The figures for men were 1.24 in Northern Norway and 1.25 in Mid Norway. The mean for Sami women in our study was 1.40 and 1.31 for Sami men. The mean for Sami men can be compared with the mean for men living in the Eastern region of Norway (128). The mean for Sami women (1.40) is similar to the mean found among the lowest household-income group in the national study and higher than the mean found in any region in Norway in the national study. The estimated prevalence among the non-Sami seems to be in line with national findings. The above comparison suggests that our findings of higher prevalence of psychological distress among the Sami compared to the non-Sami living in the same geographical region is not caused by a too low estimate of psychological distress among the non-Sami. Additionally, in the national study, female gender, young age, being single and low income are all risk factors for psychological distress.

6.6.3 The prevalence of adult chronic pain

Two population-based studies on chronic pain in Norway showed a prevalence of 24.4 % and 30% (75, 136). These two studies had no information on Sami ethnicity. A population-based study comparing Sami and Norwegian adolescents found no major ethnic differences in musculoskeletal pain (78). The Norwegian Institute of Public Health found that the Sami reported less chronic pain than Norwegians (39.4% vs. 43.3%, data from the SAMINOR 1

questionnaire study) (79). However, the definition of the Sami group differed from our definition. Our prevalence estimate of chronic pain is considerably higher than the figures from both national studies and the figures from the SAMINOR 1 questionnaire study. This may reflect selection bias and indicate that our prevalence estimate of chronic pain is inflated.

6.7 Interpretation of the results

The discussion in this section will concentrate on the main findings in this thesis. First, the higher prevalence of lifetime interpersonal violence among the Sami compared to the non-Sami respondents will be discussed. Then, the association between childhood violence and adult mental health problems and chronic pain will be discussed.

6.7.1 Prevalence of lifetime interpersonal violence – possible risk factors

One of the main findings of this thesis was that Sami ethnicity was a risk factor for emotional, physical and sexual violence, and any lifetime violence, except for sexual violence among men. Sami respondents have almost a twice-higher risk for exposure to interpersonal violence than non-Sami respondents. As stated by the WHO, there is no single factor that can explain why some persons or groups are more exposed to interpersonal violence than others. Instead, it seems to be a complex interrelationship of several factors at different levels, such as individual, personal relationships, community and societal (20). In this thesis, the assumed factors interacting with violence and included in the statistical analysis were age, educational level, residence in a Sami minority or majority area, affiliation to Laestadianism and alcohol intake. Among all, young age, low educational level, living in a Sami majority area and affiliation to Laestadianism were found to be significant risk factors for any lifetime violence. When including all factors in the regression analysis model, the odds ratio slightly declined, but still showed a significant result. This means that these factors account for only some of the ethnic differences, but not all. Hence, there are some unmeasured factors leading to the higher risk of interpersonal violence among the indigenous Sami compared to the non-Sami in the same geographical area. Some of these unmeasured factors may, according to the colonisation theory, be patriarchal dominating

behaviour, boarding school experiences and structural violence. Hence, one possible explanation for the higher prevalence of violence, not measured in this thesis, may be a larger cultural experience regarding colonisation.

6.7.2 Other factors addressed in this thesis

Christian Lutheran/Laestadian values: This branch of the Christian religion became particularly widespread among the Sami, and has had a strong influence on their handling of stressful life events. Sexuality and especially female sexuality has been taboo (137). The traditional way of solving conflicts and dealing with unacceptable behaviours defined as sins, is to talk with the church principal (137). Unacceptable behaviours also include incidents of incest, other types of sexual violence, or any other forms of maltreatment. Neither police nor health care professionals might be informed of serious interpersonal violence (17). The consequence of the perpetrator being given forgiveness by the church principal might be that the violence continues. The victim is obliged to forgive the perpetrator, no matter the severity of the violent act. Even more serious is that the victim believes that the violent act is forgiven in the name of God, and hence should be forgotten. Repressing violence and sexual assaults may lead to serious mental health problems. If not given the opportunity to get proper health care, the risk for further victimisation is increased.

Disclosure: Within the Norwegian health care system, most professionals are ethnic Norwegians and speak only Norwegian. Hence, one might assume that Sami patients are less apt to confide in professionals when experiencing violence, because they fear further stigmatisation. In addition, studies have shown that the Sami are reluctant to talk with others about their own health and illnesses (138). This might be the case when it comes to interpersonal violence, too. However, our results only partly support this general assumption. Our findings showed that there was no ethnic difference in confiding in professionals among women; whereas, among men, significant ethnic differences were found. It is a little surprising that we did not find any ethnic differences among women. One might expect Sami women to disclose to a lesser degree than the non-Sami due to assumed less or even a lack of trust of the health care system, which is often run by Norwegians. However, an ethnic difference was found among men. Almost twice as many non-Sami men

reported to have confided in professionals than Sami men. One reason for this result might be that Sami men are less likely to confide in health professionals than non-Sami men: A study comparing reindeer-herding Sami with the non-Sami majority in Sweden found that the Sami had less confidence in primary health care and psychiatry (139). Moreover, in Norway, Sami (speaking) patients are found to be less satisfied with public psychiatric services and GP services (140, 141). The reasons are that they felt that misunderstandings between physician and patient occur because of language difficulties (141). Another reason might be that Sami boys are raised to strongly value the endurance of hardship and pain without complain (142). The disclosure of violence may also be perceived as threatening to gender-roles (46). Consequently, health professionals should be aware of this ethnic difference.

6.7.3 Others theoretical risk factors

The colonisation theory discussed by Daoud et al. (41) describes structural violence, altered gender roles and boarding school experiences, all part of the assimilation policy, as potential risk factors that can explain the higher prevalence of interpersonal violence among indigenous people in Canada. Some of the potential risk factors mentioned in the introduction will be discussed below. However, these factors are not measured in this thesis.

Structural violence: It has been theorised that the higher prevalence of interpersonal violence in indigenous communities globally, is the result of the mass trauma of colonisation (21, 41, 143). The first factor described in the colonisation theory is the effect of collective violence which leads to structural violence and violations of human rights. A major limitation of our study is that our statistical models did not include the variable of ethnic discrimination.

Gender roles: The unequal distribution of power/patriarchal dominant behaviour is considered as driver for violence against women (20). Literature concerning the historical position of Sami women is sparse. In a paper, the Sami researcher Kuokkanen has raised several important issues addressing violence against indigenous women in Canada and Sami women (42). First, due to existing patriarchal social relations, the existence and prevalence

of violence is often a forbidden subject within indigenous communities. This will ultimately lead to indigenous women internalising and naturalising violence (42). In Norway, it has not been until recent years that the subject has become a public issue in Sami communities, in contrast to Canada where violence against aboriginal women is widely recognised. The lack of research addressing this problem among the Sami reflects the silence in Sami communities and among Sami leaders. Kuokkanen argue against that violence is rationalised and normalised only as a consequence of colonial history. Such externalising fails to account for the internalisation of patriarchy. Furthermore, there is a widespread norm that the Sami women are very psychologically strong (42, 46) which could mean there might be tension in gender roles between Sami women and men. Opposition to the inequality of power may increase interpersonal violence (20). Furthermore, the norm of strong Sami women may have led to the idea that Sami women endure, included interpersonal violence (42).

Boarding schools: Like other indigenous peoples, the Sami people have suffered from an austere assimilation policy (28, 30). Boarding schools in Sami communities have a long history in Norway as they played an important role in the former Norwegian assimilation policy towards the Sami (25). Living in residential schools may be a risk factor for exposure to childhood violence (144). As early as the age of six or seven, children were sent to boarding schools far away from home. Interviews with former boarding school residents revealed that emotional, physical as well as sexual violence at boarding schools did take place (144). For Sami-speaking children, the boarding school experience was culturally devastating, as they did not understand Norwegian and their own language was forbidden to speak (25, 144). A study of child abuse of indigenous children in Canada has shown that patterns of abuse in indigenous families may persist across generations and can be tracked back to the abuse experience by indigenous children who were forced to attend boarding school (145). It is a major limitation that this study has not included a question on boarding school and investigated the association between interpersonal violence and boarding school experiences.

Sami childrearing: A study among the Sami in Norway has shown the more frequent practice of physical punishment and teasing/or ridiculing to promote resilience in children (85). This strong value on hardiness and the endurance of hardships in child rearing might both be a

risk factor for interpersonal violence as well as promote the silence about exposure to violence.

Social risk factors: Extended family: The extended family plays an important part in the lives of many Sami. Research shows that Sami adolescents report that social networks are mainly constructed by family and kinship, and these networks are important factors in the development of ethnic identity (47). However, it may also be a risk factor for interpersonal violence in childhood as there are potentially more people with access to the child and hence, potentially higher risk to exposure of interpersonal violence. Kuokkanen claims that the extended family often protect male perpetrators rather than support female victims of violence (42). Lack of support by victims of violence, and protections of perpetrators have emerged in newspaper stories in Norway (17). Furthermore, inter- and intrafamilial relations and obligations form barriers to acknowledging and addressing violence against women (42). Another powerful cultural norm is the family reputation which may prevent the Sami from not seeking help after a violent assault, as well as protect the perpetrator (17, 42, 46). A Sami psychologist, who have extended experiences with victims of violence in Sami communities, confirms the norm that talking about violence victimisation bring shame to both the victim and the extended family, and breaks cultural norms (46). To avoid further stigmatising the Sami people, victims of violence suffer in silence (42, 46).

6.7.4 Childhood violence and adult mental health problems and chronic pain

Internationally, the association between childhood violence and adult mental health problems has been extensively investigated, especially in the last decade (50, 51, 53, 56-58, 60). However, research in indigenous populations is sparse. How individuals respond to potentially traumatic experiences, such as childhood violence, may depend on the biological, social- and cultural background. This thesis aimed to fill the knowledge gap in the association between childhood violence, adult mental health problems and chronic pain among the Sami in Norway. The results showed that the strength of association between childhood violence, adult mental health problems and chronic pain did not differ between the Sami and non-Sami. Hence, our findings strengthen the assumption that violent victimisation generally affects mental and physical health regardless of ethnicity. However, the strength of

association between childhood violence and adult chronic pain was weaker and not significant among Sami men. The complexity of chronic pain lies in the interrelationship between physiological, psychological and sociocultural aspects (146). An explanation of the finding might be cultural differences in their interpretation of the act of violence itself: i.e. that the Sami men might have interpreted the violent episode(s) as less severe than non-Sami men. Such difference in cultural interpretation may be related to aspects of Sami child-rearing (142). An earlier study has shown a more frequent practice of physical punishment and teasing/ridiculing in Sami than in Norwegian child-rearing (142). In this study, a positive correlation between physical punishment and externalizing problems emerged for the Norwegian boys, but not for the Sami boys. Teasing or/ridiculing was positively correlated with internalising problems for Norwegian boys, but inversely correlated for the Sami boys (147). A variety of interpretations can be generated to explain this; one might be that harsh discipline has different meanings in different cultures and hence, different outcomes. The strong impact of Sami values placed on hardiness and the endurance of hardships might have heightened the threshold of tolerance for physical pain among Sami men in our study. In sum, we would argue that Sami cultural practices and values might both increase the exposure to potentially violent episodes, as well as make children less vulnerable and more resilient. Events may be recalled as violent, but experienced as less hurtful by Sami than non-Sami men.

6.8 Clinical implications

This thesis documented that Sami ethnicity was a risk factor for emotional, physical and sexual violence, except sexual violence among men. Exposure to interpersonal violence is well-established as a risk factor for poorer mental and physical health.

To reduce the health differences between indigenous Sami and the dominant population in the same geographical area, both Sami communities and public authorities must recognize the possible risk factors that in part drive the exposure to interpersonal violence in Sami communities. Both national and local health interventions in areas with Sami and non-Sami populations should be culturally sensitive.

There is still limited evidence regarding effective health care interventions to prevent interpersonal violence in indigenous populations. However, experiences from Alaska Natives' practice shows that a training and support programme for primary health care practitioners enhanced their ability to recognise interpersonal violence and arrange appropriate support services.

Our finding shows that many do not disclose violence to professionals when it occurs: thus, it may become a hidden health risk. Hence, physicians often unknowingly attend both children and adults exposed to violence. This applies in particular to Sami men.

The fact that very young children can be impacted by traumatic events, and witness traumatic events like interpersonal violence, reinforces the need for early interventions into partner violence.

7 Conclusion

The lifetime prevalence of interpersonal violence is high in both ethnic groups and genders, and it is higher among Sami respondents. There are distinct gender differences in the reported prevalence of sexual violence. Sami ethnicity is found to be a risk factor for interpersonal violence, except for sexual violence and men. Interpersonal violence in childhood is associated with both adult mental health problems and adult chronic pain. However, the association between interpersonal violence and adult chronic pain was weaker and not significant among Sami men. This may be due to cultural differences among Sami men regarding how the violent episode (s) is processed and reported. Interpersonal violence in childhood was found to mediate some ethnic differences in adult mental health.

7.1 Future Research

Future research should follow up linking SAMINOR to health registries for e.g. a prescription registry, the Norwegian Patients Register (NPR), Norwegian Cause of Death Registry (NIPH) or other registries to assess health outcomes and their consequences longitudinally. Perhaps SAMINOR could be linked to the Medical Birth Registry to assess the potential differential effect of child abuse based on perceived poorer perinatal conditions among the Sami. Future research should also assess the potential differential effect of adult violence depending on the type of perpetrator (intimate partner violence vs. others). Studies should also be conducted in areas not covered by SAMINOR 2, applying other selections of participants using Sami networks and using response- driven sampling. In addition, the instrument for measuring interpersonal violence among the Sami should be validated. There is also a lack of research among the Sami living in urban areas.

8 Errata

In paper I, there was a displacement in tables III and IV for education and alcohol intake and OR. The correct numbers for crude OR for education for women are: 1.2 (.97- 1.4), 1.3 (1.1- 1.5) and 1.1 (.98- 1.3). The figures for men are 1.1 (.94- 1.4), 1.2 (.98- 1.4) and 1.1 (.90- 1.3). All the values are correct.

9 References

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APPENDIXES

Appendix I

Information letter in Norwegian and in Lulesami

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 gjenkjennende 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, Reindrifftsforvaltningens database, Folkeregisteret og folketellinger. Forsikringssselskaper 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 tilleggs spørreskjema eller vil delta i en klinisk helseundersøkelse. Prosjektslutt 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 **Ragnhild Vassvik Kalstad tlf. 78 46 89 01** ved Senter for samisk helseforskning, Universitetet i Tromsø, avd Karasjok. 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

Gatjálvis oassálasstet SAMINOR 2 dutkamprosjæktaj

Duogásj ja ájggomus

Dát le dunji gatjálvis oassálastátjit soames dutkamprosjæktaj man ulmmen le lappit máhtudagáv varresvuoda, skihpudagáj ja iellemðile birra guovlojn gánná sáme ja dáttja árru. Dán guhti oassálastá dán guoradallamij gáhtjuduvá vásstedit varresvuoda ja iellemðile birra.

Dán le gáhtjuduvvam oassálasstet dán dutkamij gá dán le 18-69 jage gaskan, ja áro avtan dáj suohkanijn mij le välljiduvvam gullut guoradallamij. Sáme varresvuoda dutkamguovdásj Rámsá universitehtan dutkamav tjádat.

SAMINOR 2 varresvuodadutkama oajvveulmme le oadtjot ienep dieđojt sihke vádáfaktávrráj ja duon dan skihpudagá gávnnsij gáktuj ja vejulasj sivájt dajda.

Majt dutkam merkaj?

Guoradallamin gáhtjuduvá vásstedit gatjálvissijemáv mij tjuovvu ja midjij dav ruoptus rádjat, jali adnet mijá gatjálvissijemáv mij le internehtan. Jus vällji næhttatjoavddusav de maná <http://saminor.uit.no> ja ávkki addnenamáv ja bessambágov mij tjuovvu:

Mij dáhpáduvvá tjoahkkidum dieđojt duv birra?

Dieđo ma registreriduvvi duv birra galggi dássju aneduvvat nav gáktu le tjeilggiduvvam dutkama ájggomusán. Gájkka dieđo giehtadaláduvvi namá ja riegiádimnummara dagá jali ietjá dábdelis dieđojt dagá. Biejaduvvam le kávdđá mij tjádná duv ietjat dieđojt nammalista baktu. Dat merkaj dieđo le välljiduvvam ierit ásijs maj milta aktak ij máhte gávnnat guhti le vásstedam. Dássju dáhkkiđum prosjæktabargge oadtju nammalistav gæhttjat ja gávnnat dieđojt duv birra. Dutkam máhkken máhtti dieđo duv birra biejaduvvat aktan dieđojt ma li ietjá registarijn Datatilsynet (Dáhtábærrájgæhttje) dáhkkiđimijn. Gájkka dásj dieđojs váldeduvvi namma ja persávnnummar ierit. Dá máhtti liehket regisstara oajo, skihpudagá, sisboado, áhpadasá, virge ja ietjá dieđojt birra ma gávnnuji ávdep SAMINOR- jali ietjá varresvuodadutkamijn (sihke gatjálvissijemá ja varraátsálvisá). Almna regisstara li Bårrédávddaregisstar, Jábmemoarreregisstar, Boatsojæláduvá dáhtábássa ja Álmmuklåhkoregisstar ja ulmusjlåhkåma. Buohttidusvidnudagájda jali ietjá kommersijåla institusjåvnåjda ij le vejulasjvuohtha oadtjot dieđojt. Divna ietjá giehtadallam varresvuodadieđojs dáhpáduvvá Regional komité for medisinsk og helsefaglig forskningsetikk (Guovlo medisijna ja varresvuodafågalasj komitea dutkametihka) dáhkkiđimijn.

Ij galga liehket máhttelis duv birra (ájnegis ulmutjin) majdik gávnnat dutkama báhtusij gá dá almoduvvi. Mañnela máhtta dujna váldeduvvat aktijvuohtha gatjálvisáj jus hálijda vásstedit lijggegatjálvisáj jali oassálasstet klinihkalasj varresvuodadutkamij. Prosjevta loahppa le biejadam 31.12.2067. Dan mañnela dieđo gáđoduvvi jali anonymiseriduvvi.

Luojvoj oassálasstem

Oassálasstem guoradallamij le luojvoj. Gá sjiemáv vássteda ja dav ruoptot rája, pásta mañen jali gá sjiemáv nehtan vássteda, de miededa aj dutkamij oassálasstet. Dán máhtá goassa sidá, ja váni sivva vattek, gæssádit ietjat miededusáv guoradallamij oassálasstet Dujna le rievtesvuohtha vuoñnet makkár dieđo duv birra li tjoahkkidum. Dujna le aj rievtesvuohtha oadtjot divodum dajt dieđojt majt mij lip dujsta tjoahkkim jus la juoga boasstot. Jus gæssáda dutkamis, de máhtá gájbbedit tjoahkkidum dieđojt oadtjot gáđodum, jus dieđo juo ælla adnuj váldedum analysajn jali diedalasj almodusáj.

Jus dán mañnela hálijda gæssádit, jali jus dujna li gatjálvisá dutkama hárráj, máhtá aktijvuodav váldet **Anne Karen Hættajn** tlf. 404 90 467 jali **Ragnhild Vassvik Kalstadajn** tlf. 78 46 89 01, Sáme varresvuoda dutkamguovdásj, Rámsá universitehtta, Kárásjgå ássudahka. Máhtá pásta baktu oadtjot gáhttjomav oassálasstet SAMINORA klinihkalasj varresvuodadutkamij ja áđá gatjálvissijebmáduktamijda.


Ruhtadibme


Gálmma nuorttamus fylkasuohkana, Varresvuohtha Nuorttan, Sáme nasjåvnålasj máhtudakguovdásj – psykalasj varresvuodasuodđjim (SANKS), Rámsá universitehtta, Ádåsmåhttem-, háldadus-, ja girkkodepartementa (FAD), Sámedigge ja huksodepartemænnta li ruhtadam dutkamav dutkamrudáj. Dáj instånsaj ij la berustimrijđdo dutkama hárráj.

Dieđo dutkama báhtusij birra

Dutkama báhtusa almoduvvi internasjonålasj ja nasjonålasj diedalasj ájggetjållagijn ja duon dan populæriedalasj kanålajn ja mediajn.

Varrudagáj


Magritt Brustad
Professor Dr. Scient


Ragnhild Vassvik Kalstad
Ássudakjådediddje

Appendix II

Appendix 2. The SAMINOR 2 questionnaire in Norwegian

Helse- og levekårsundersøkelse



1. Jeg samtykker i å delta i undersøkelsen i henhold til informasjon gitt i informasjonsskrivet..... Ja



Egen helse

2. Hvordan er helsen din nå? (Sett bare ett kryss)

Dårlig Ikke helt god God Svært god

3. Har du, eller har du noen gang hatt?

	Ja	Nei	Alder ved start
Diabetes (sukkersyke).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Høyt blodtrykk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Angina pectoris (hjertekrampe).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hjerteinfarkt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Psysiske plager som du har søkt hjelp for.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Kronisk bronkitt, emfysem, KOLS.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Astma.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Eksem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Psoriasis.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Multipel sklerose (MS).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Bechterews sykdom.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

4. Har du i løpet av det siste året vært plaget med smerter og/eller stivhet i muskler og ledd som har vart i minst 3 måneder sammenhengende?..... Ja Nei

Hvis ja, angi grad av plager fra de ulike deler av kroppen i tabellen nedenunder (ett kryss pr linje)

	Ikke plaget	En del plaget	Sterkt plaget
Nakke, skuldre.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Armer, hender.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Øvre del av ryggen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Korsryggen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hofte, ben, føtter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hode.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brystregionen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mageregionen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underliv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andre steder.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Hvor ofte har du i løpet av de siste 4 uker brukt følgende medisiner? (sett ett kryss pr linje)

	Ikke brukt siste 4 uker	Sjeldnere enn hver uke	Hver uke men ikke daglig	Daglig
Sovemedisin.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beroligende medisin.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medisin mot depresjon.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Hvilke utsagn passer best på din helsetilstand i dag?

Gange

- Jeg har ingen problemer med å gå omkring
- Jeg har litt problemer med å gå omkring
- Jeg er sengeliggende

Personlig stell

- Jeg har ingen problemer med personlig stell
- Jeg har litt problemer med å vaske meg eller kle meg
- Jeg er ute av stand til å vaske meg

Vanlige gjøremål (f.eks. arbeid, studier, husarbeid, familie- eller fritidsaktiviteter)

- Jeg har ingen problemer med å utføre mine vanlige gjøremål
- Jeg har litt problemer med å utføre mine vanlige gjøremål
- Jeg er ute av stand til å utføre mine vanlige gjøremål

Smerte og ubehag

- Jeg har verken smerte eller ubehag
- Jeg har moderat smerte eller ubehag
- Jeg har sterk smerte eller ubehag

Angst og depresjon

- Jeg er verken engstelig eller deprimert
- Jeg er noe engstelig eller deprimert
- Jeg er svært engstelig eller deprimert

7. Hvor mye veier du? (i hele kg).....

8. Hvor høy er du? (i hele cm).....

9. Vi ber deg angi din fysiske aktivitet etter en skala fra svært lite til svært mye. Skalaen nedenfor går fra 1–10. Med fysisk aktivitet mener vi både arbeid i hjemmet og i yrkeslivet, samt trening og annen fysisk aktivitet som turgåing o.l. Sett kryss i ruten som best angir ditt nivå av fysisk aktivitet.

1 2 3 4 5 6 7 8 9 10
Svært lite Svært mye



Familie og språkbakgrunn

I Nord-Norge bor det folk med ulik etnisk bakgrunn. Det vil si at de snakker ulike språk og har forskjellige kulturer. Eksempler på etnisk bakgrunn, eller etnisk gruppe er norsk, samisk og kvensk.

10. Hvilket hjemmespråk har/hadde du, dine foreldre og besteforeldre? (Sett ett eller flere kryss)

Norsk Samisk Kvensk Annet, beskriv:

Morfar.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mormor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farfar.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Far.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Hva er din, din fars og din mors etniske bakgrunn?

(Sett ett eller flere kryss)

Norsk Samisk Kvensk Annet, beskriv:

Min etniske bakgrunn er.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min fars etniske bakgrunn er.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min mors etniske bakgrunn er.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Hva regner du deg selv som? (Sett ett eller flere kryss)

Norsk Samisk Kvensk Annet, beskriv:

.....

13. Hvordan vil du vurdere dine ferdigheter til å forstå, snakke, lese eller skrive samisk?

Svært bra Nokså bra Med anstrengelse Noen få ord Ikke i det hele tatt

Forstå.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Snakke.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lese.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skrive.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Arbeid, trygd og økonomi

14. Hvor stor er familiens/husstandens bruttoinntekt per år?

Under kr 150 000 kr. Kr 150 000–300 000
 Kr 301 000–450 000 Kr 451 000–600 000
 Kr 601 000–750 000 Kr 751 000–900 000
 Over 900 000

15. Hvor mange personer bor det i din

husstand? Antall personer.....

16. Hvor mange års skolegang har du gjennomført?

(Ta med alle år du har gått på skole eller studert).....

17. Bodde du på internat (statsinternat kommunalt eller privat) da du gikk på grunnskolen?.....

Ja

Nei

18. Hva har vært dine viktigste inntektskilder siste året?

(Sett ett eller flere kryss)

Lønnsarbeid:

Heltid Deltid Sesong

Selvstendig næring:

Heltid Deltid Sesong

Alderspensjon/AFP

Kontantstønad/overgangsstønad/foreldrepenger

Dagpenger

Sykepenger

Arbeidsavklaringspenger

Uførepensjon

Stønad til livsopphold (sosial stønad)

Støtte fra ektefelle/foreldre/søsken/barn

Lån/studielån og stipend

Annet (Oppsparte midler/arv/gevinst osv)

19. Mener du at du står i fare for å miste ditt nåværende arbeid eller inntekt de nærmeste 2 årene?.....

Ja

Nei

20. Kunne du tenke deg å flytte fra din nåværende bostedskommune dersom du fikk tilbud om arbeid et annet sted?

Ja Kun deler av året Nei Vet ikke

21. Dersom du er i lønnet arbeid hvordan trives du i din nåværende jobb/næring?

Svært godt Godt Dårlig Veldig dårlig

22. På bakgrunn av egen helse og erfaringene fra arbeidslivet, hvor sannsynlig tror du det er at du fortsetter i lønnet arbeid/næring fram til:

Svært sannsynlig Sannsynlig Mindre sannsynlig Svært lite sannsynlig

62 års alder.....

67 års alder.....

70 års alder.....

Eldre enn 70 år.....

23. Dersom du er selvstendig næringsdrivende, hvilke type næring jobber du i? (Sett ett eller flere kryss)

- Reindrift Fiske
 Jordbruk Skogbruk
 Forretningsdrift Annet

Psykisk helse

24. Under finner du en liste over ulike problemer. Har du opplevd noe av dette de siste 4 ukene? (Sett ett kryss for hver plage)

	Ikke plaget	Litt plaget	Ganske mye	Veldig mye
Plutselig frykt uten grunn.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt deg redd eller engstelig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matthet eller svimmelhet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt deg anspent eller oppjaget.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett for å klandre deg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Søvnproblemer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedtrykt, tungsindig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av å være unyttig, lite verd.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av at alt er et slit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av håpløshet mht. framtida.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Spørsmålene handler om hvordan du har følt deg og hvordan du har hatt det den siste uken. For hvert spørsmål, velg det svaralternativet som best beskriver hvordan du har hatt det. Hvor ofte i løpet av den siste uken har du: (Vennligst kryss av i boksen som er nærmest det utsagnet som best beskriver deg.)

	Hele tiden	Nesten hele tiden	Mye av tiden	En del av tiden	Litt av tiden	Ikke i det hele tatt
Følt meg glad og i godt humør.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt meg rolig og avslappet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt meg aktiv og sterk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt meg opplagt og uthvilt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følt at mitt daglige liv har vært fylt av ting som interesserer meg.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Har du i løpet av de siste 12 månedene opplevd at ubehagelige minner har trengt seg på og forstyrret deg uten at du har kunnet gjøre noe med det?

- Nei Ja, men sjelden Av og til Ofte

27. Har du i løpet av de siste 12 månedene bevisst unngått situasjoner for å slippe ubehagelige minner eller følelser, på en slik måte at det har hindret deg i å gjøre det du vil?

- Nei Ja, men sjelden Av og til Ofte

28. Har du i løpet av de siste 12 måneder ikke vært i stand til å reagere følelsesmessig i situasjoner der de fleste andre reagerer?

- Nei Ja, men sjelden Av og til Ofte

29. Angi hvor godt følgende påstander beskriver deg og familien din

	Stemmer dårlig	Stemmer helt
Jeg stoler fullt ut på mine vurderinger og avgjørelser.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg trives best sammen med andre.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg trives svært godt i familien min.....	<input type="checkbox"/>	<input type="checkbox"/>
Troen på meg selv får meg gjennom vanskelige perioder.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg knytter lett nye vennskap.....	<input type="checkbox"/>	<input type="checkbox"/>
Det er godt samhold i familien min.....	<input type="checkbox"/>	<input type="checkbox"/>
I motgang klarer jeg å finne noe bra å vokse på.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg er flink til å få kontakt med nye folk.....	<input type="checkbox"/>	<input type="checkbox"/>
Familien min ser positivt på fremtiden selv i vanskelige perioder.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg klarer å akseptere hendelser i livet som er umulig å forandre.....	<input type="checkbox"/>	<input type="checkbox"/>
Jeg synes det er enkelt å finne på noe bra å snakke om.....	<input type="checkbox"/>	<input type="checkbox"/>
I familien vår er vi lojal mot hverandre.....	<input type="checkbox"/>	<input type="checkbox"/>

Tobakk og rusmidler

30. Røyker du, eller har du tidligere røykt?

- Ja, daglig Ja, tidligere Ja, av og til Nei, aldri

Hvor mange sigaretter røyker du vanligvis daglig?.....

Hvor gammel var du da du begynte å røyke daglig?.....

Alder i år

31. Bruker du, eller har du tidligere brukt snus?

- Ja, daglig Ja, tidligere Ja, av og til Nei, aldri

Til deg som snuser daglig: Hvor mange porsjoner bruker du hver dag?.....

Til deg som snuser av og til: Hvor mange porsjoner bruker du vanligvis pr uke?.....

Hvis ja, hvor gammel var du da du begynte å snuse daglig?.....

Alder i år

32. Omtrent hvor ofte har du i løpet av det siste året drukket alkohol? (Lettøl og alkoholfritt øl regnes ikke med)

- Aldri drukket alkohol
- Har ikke drukket alkohol siste året
- Noen få ganger siste året
- Omtrent en gang i måneden
- 2-3 ganger pr måned
- Ca. 1 gang i uka
- 2-3 ganger i uka
- 4-7 ganger i uka



33. Har du drukket alkohol i løpet av de siste 4 uker? Ja Nei

Hvis ja, har du drukket så mye at du har kjent deg sterkt beruset (full)?

- Nei
- Ja, 1-2 ganger
- Ja, 3 ganger eller mer

34. Vil du karakterisere ditt alkoholbruk eller drikkemønster som periodisk (drikker ofte og mye i perioder, for så å ha lengre perioder uten alkoholinntak)?

(sett ett eller flere kryss)

- Ja, siste 12 måneder
- Ja, tidligere
- Nei

35. Har du noen gang brukt narkotika?

(sett ett eller flere kryss)

Ja, siste året Ja, tidligere Nei

Hasj/marihuana (cannabis).....

Andre narkotiske stoffer for eksempel LSD, amfetamin, ecstasy, kokain, heroin, GHB, o.l.

Religion og livssyn

36. Er du, dine foreldre eller dine besteforeldre knyttet til noen av de følgende livssynssamfunn: (sett ett eller flere kryss)

Statskirka.....

Læstadiansk forsamling.....

Annen religiøs forsamling/fellesskap.....

hvilket:

Ikke-religiøst livssynssamfunn.....

hvilket:

Ikke medlem av noe livssynssamfunn.....

37. Hvordan stiller du deg til religion?

- Jeg er troende/bekjennende kristen (personlig kristen)
- Jeg tror det finnes en Gud, men religion betyr ikke så mye for meg i det daglige
- Usikker
- Jeg tror ikke det finnes noen Gud



38. Hvor ofte har du i løpet av de siste 6 måneder vært på/i:

(Sett ett kryss pr linje)

	Mer enn 3g/mnd	1-3 g/mnd	1-6 g/siste 6 mnd	Aldri
Kirke.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forsamlings-/menighetshus.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humanetisk tilstelning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen religiøs bygning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Selvopplevd diskriminering

Diskriminering forekommer når en person eller gruppe av mennesker blir behandlet mindre fordelaktig enn andre på bakgrunn av f.eks. etnisk opprinnelse, religion, tro, funksjonshemning, alder eller seksuell legning.

39. Har du opplevd å bli diskriminert?

- Ja, de to siste årene
- Ja, før
- Nei
- Vet ikke

Dersom du svarte ja, på forrige spørsmål, besvar spørsmål 40-47. Hvis du har svart nei, går du videre til spørsmål 48.

40. Dersom du har vært utsatt for diskriminering, hvor ofte skjedde det?

- Svært ofte
- Noen ganger
- En sjelden gang

41. Hvorfor tror du at du ble diskriminert? Skyldes diskrimineringen: (Sett ett eller flere kryss)

- Funksjonshemning
- Seksuell legning
- Lærevansker
- Kjønn
- Religion eller tro
- Nasjonalitet
- Etnisk bakgrunn
- Geografisk tilhørighet
- Alder
- Sykdom
- Andre årsaker, spesifiser:
- Vet ikke

42. Kan du angi hvor diskrimineringen foregikk? (Sett ett eller flere kryss)

- På Internett
- I skolen/utdanning
- I arbeidslivet
- I forbindelse med jobbsøking
- I frivillig arbeid/organisasjoner
- I møtet med det offentlige
- I familie/slekt
- Da du skulle leie/kjøre bolig
- Da du skulle skaffe banklån
- I forbindelse med å få medisinsk behandling
- På butikken eller ved restaurantbesøk
- I lokalsamfunnet
- Annet sted, spesifiser:



43. Kan du angi hvem som diskriminerte deg?

(Sett ett eller flere kryss)

- Offentlig ansatt Ukjente Arbeidskollegaer En eller flere fra samme etniske gruppe som deg selv. En eller flere fra annen etnisk gruppe enn deg selv. Medelever/studententer Lærere/ansatte Andre

44. Gjorde du noe aktivt for å få slutt på diskrimineringen? Ja Nei

45. Har du noen gang tatt kontakt med Likestillings- og diskrimineringsombudet for råd eller hjelp angående diskriminering?

- Ja Nei Husker ikke

46. Hvor mye berørte diskrimineringen deg?

- Ikke i det hele tatt Litt Noe Mye

47. Har du opplevd at du har blitt diskriminert fordi du er same?

- Ja Nei Vet ikke Er ikke same

Vold og overgrep

48. Har du opplevd at noen systematisk og over lengre tid har forsøkt å kue, fornedre eller ydmyke deg? (Sett ett eller flere kryss)

- Nei, aldri Ja, som barn (under 18 år) Ja, som voksen (18 år eller over) Ja, de siste 12 mnd

Hvis ja, av hvem?

- Fremmed person Samlivspartner Familie, slektning Andre kjente

49. Er du blitt utsatt for fysiske overgrep/mishandling? (Sett ett eller flere kryss)

- Nei, aldri Ja, som barn (under 18 år) Ja, som voksen (18 år eller over) Ja, de siste 12 mnd

Hvis ja, av hvem?

- Fremmed person Samlivspartner Familie, slektning Andre kjente

50. Er du blitt utsatt for seksuelle overgrep? (Sett ett eller flere kryss)

- Nei, aldri Ja, som barn (under 18 år) Ja, som voksen (18 år eller over) Ja, de siste 12 mnd

Hvis ja, av hvem?

- Fremmed person Samlivspartner Familie, slektning Andre kjente

51. Hvis du har vært utsatt for noen form for overgrep, har du betrodd deg til noen? (Sett ett eller flere kryss)

- Nei Noen i familien Venner Fagfolk

Tannhelse

52. Hvordan vurderer du tannhelsen din

- Dårlig Ikke helt god God Svært god

53. Har du tannprotese/gebiss?..... Ja Nei

54. Bruker du selv noen av følgende hjelpemidler – og i tilfelle hvor ofte?

	Regelmessig/ daglig	Uregelmessig/ noen ganger i uka	Uregelmessig/ noen ganger i mnd.	Sjeldnere/ aldri
Tannbørste.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluortannkrem...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tanntråd.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tannstikkere.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluortabletter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skyllvæske.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protesebørste.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

55. Når var du sist hos tannlege eller tannpleier?

- Mindre enn ett år siden 1–2 år siden 3–5 år siden Mer enn 5 år siden

56. Hvis det er mer enn 2 år siden, hva er da grunnen ?

(Sett ett eller flere kryss)

- Jeg har ikke blitt innkalt Det er lang ventetid hos tannlegen Jeg har ikke hatt tid Økonomiske årsaker Jeg har ikke hatt behov for tannbehandling Jeg er redd eller engstelig for å gå til tannlege Andre årsaker:

.....

57. Hvordan bruker du tannhelsetjenesten? (Sett ett eller flere kryss)

- Blir regelmessig innkalt av tannlege eller tannpleier
 Melder meg regelmessig for undersøkelse
 Melder meg når jeg har vondt eller har mistet en fylling
 Bruker ikke å gå til tannlege så ofte



58. Har du i løpet av de to siste årene fått en eller flere av disse diagnosene hos tannlege ?

	Ja	Nei	Vet ikke
Alvorlig tannkjøttbetennelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mild tannkjøttbetennelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Munntørighet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hull (karies) i en eller flere tenner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andre diagnoser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

59. Er du fornøyd med tennene dine eller protesene? Angi svaret på en skala der 1 er svært misfornøyd og 5 er svært fornøyd

1 2 3 4 5
Svært misfornøyd Svært fornøyd

60. Hvor ofte pusset du tennene dine som 10-åring?

- En gang om dagen eller mer
 Av og til
 Sjelden eller aldri

61. Hvor ofte kontrollerte foreldrene eller dine foresatte at du hadde pusset tennene dine, da du var i 10-årsalderen?

- Ofte (omtrent daglig) Av og til Aldri

62. Om du har barn under 6 år boende hos deg, hvor ofte hjelper du til med tannpuss eller kontrollerer at barna har pusset tennene sine?

- Ofte (omtrent daglig) Av og til Aldri

63. Om du har barn som er mellom 6–12 år boende hos deg; hvor ofte hjelper du til med tannpuss eller kontrollerer at barna har pusset tennene sine?

- Ofte (omtrent daglig) Av og til Aldri

64. Dersom du har barn i aldergruppen 0–12 år boende hjemme hos deg, har dere da praktisert faste regler for spising av sjokolade og andre søtsaker for barna?

- Ja Nei +

65. Hvor fornøyd er du med tannhelsetjenesten i din kommune?

svært misfornøyd svært fornøyd Vet ikke

Selv mord og selvmordsatferd

66. Har du mistet noen som har stått deg nær i selvmord?..... Ja Nei

67. Har du tenkt på å ta livet ditt?

- Ja, det siste året Ja, tidligere Nei, aldri

68. Har du forsøkt å ta ditt eget liv?

- Ja, det siste året Ja, tidligere Nei, aldri

69. Har du skadet deg selv med vilje?

- Ja, det siste året Ja, tidligere Nei, aldri

Dersom du har forsøkt å ta livet ditt, kan du svare på spørsmålene som følger. Hvis du har svart nei på dette spørsmålet, kan du gå videre til spørsmål nr 76.

70. På hvilken måte forsøkte du å ta ditt eget liv?

(Sett ett eller flere kryss)

- Henging Skytevåpen
 Skarp gjenstand Overdose piller/medikamenter
 Annen måte

71. Hva var motivet for å forsøke å ta ditt eget liv?

- Et klart ønske om å dø..... Ja Nei
Situasjonen følte uutholdelig..... Ja Nei
Jeg ønsket hjelp fra noen..... Ja Nei

72. Var du beruset/rusa da du forsøkte å ta ditt eget liv?.....

- Ja Nei

73. Hvor gammel var du første gang du forsøkte å ta ditt eget liv?

74. Hvor mange ganger har du forsøkt å ta ditt eget liv?

75. Fortalte du til andre om selvmordsforsøket/ene?

(Sett ett eller flere kryss)

- Nei Noen i familien Venner Fagfolk

Spilleatferd

76. Har du noen gang følt behov for å spille for mer og mer penger? (Sett ett eller flere kryss)

- Ja, siste året Ja, tidligere Nei



77. Har du noen gang løyet for mennesker som er viktige for deg, om hvor mye du spiller? (Sett ett eller flere kryss)

- Ja, siste året Ja, tidligere Nei +

78. Har du noen gang hatt perioder da du, etter å ha tapt penger på spill en dag, har vendt tilbake en annen dag for å vinne de tilbake? (Sett ett eller flere kryss)

- Ja, siste året Ja, tidligere
 Nei Vet ikke/husker ikke

79. Har du i løpet av siste året spilt online rollespill?

- Ja, daglig Ja, ukentlig
 Ja, månedlig eller sjeldnere Nei

Erfaringer og bruk av helsetjenester

80. Den legen du vanligvis bruker er det

- Din fastlege Annen lege

81. Hvor lenge har du hatt din nåværende fastlege?

- Mindre enn 6 mnd 6 til 11 måneder
 12 til 24 mnd Mer enn 2 år

82. Har du i løpet av de siste 12 mnd kontaktet fastlegen din for hjelp eller råd til deg selv?

- Ja Nei

Hvis ja, opplevde du at du fikk den hjelpa du ba om?

- Aldri Av og til Vanligvis Alltid

83. Hvor fornøyd eller misfornøyd er du med følgende sider ved fastlegjetjenesten?

	Meget fornøyd	Fornøyd	Misfornøyd	Meget misfornøyd	Vet ikke
Fastlegens tilgjengelighet på telefon.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventetid for å få time hos fastlege.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tid hos fastlegen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fastlegens forståelse for dine problem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fastlegens informasjon om dine helseplager, undersøkelse og behandlingsopplegg.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totalt sett, hvor fornøyd eller misfornøyd er du med den kommunale helsetjenesten?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Med spesialisthelsetjenesten menes det sykehus, distriktpspsykiatrisk senter (DPS), spesialistlegesenter eller enkeltspesialist



84. Har du i løpet av de siste 12 måneder vært til undersøkelse eller behandling for fysiske plager hos

- Sykehus Spesialistlegesenter
 Privatpraktiserende spesialist Ingen av delene

85. Har du i løpet av de siste 12 måneder vært til undersøkelse eller behandling for psykiske plager hos

- Psykiatrisk sykehus Distriktpspsykiatrisk senter
 Privatpraktiserende spesialist Ingen av delene

86. Dersom du har vært til behandling hos spesialist for fysiske eller psykiske plager, svar på følgende spørsmål Svar på en skala fra 0 til 10 (0 = i liten grad 10 = i stor grad)

Fikk du anledning til å fortelle det du følte var viktig om din tilstand?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>

Snakket legene/behandlerne til deg slik at du forstod dem?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>

Føler du at du fikk være med å bestemme over din behandling?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>

Er du blitt bedre av behandlingen?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>

Alt i alt, har du tillit til sykehuset eller spesialisten du var hos?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>

Alt i alt, hvor tilfreds er du med pleien og behandlingen du eventuelt fikk?

	0	1	2	3	4	5	6	7	8	9	10	Ikke aktuelt
For fysiske plager	<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"/>	<input type="checkbox"/>
For psykiske plager	<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"/>	<input type="checkbox"/>



Erfaringer med henvisning

87. Har du i løpet av de siste 12 måneder ønsket å bli henvist til spesialist, men ikke blitt det?

For fysiske plager

- Nei, aldri Ja, en gang
 Ja, flere ganger Ikke aktuelt

For psykiske plager

- Nei, aldri Ja, en gang
 Ja, flere ganger Ikke aktuelt

88. Har du i løpet av de siste 12 måneder ønsket å bli henvist til fysioterapeut, kiropraktor eller liknende, men ikke blitt det?

- Nei, aldri Ja, en gang
 Ja, flere ganger Ikke aktuelt

89. Dersom du ble henvist, hvor lenge ventet du på time?

Antall uker

90. Har du bedt om fritt sykehusvalg ved henvisning til spesialistbehandling?

- Ja Nei Ikke aktuelt

Språk ved legebesøk

91. Sist du var hos fastlegen, hvilket språk snakket du og legen sammen på?

- Norsk Samisk Annet, beskriv:
Jeg snakket
Legen snakket

92. Sist du var på sykehus/hos spesialist, hvilket språk snakket du og legen sammen på?

- Norsk Samisk Annet, beskriv:
Jeg snakket
Legen snakket

93. Hvilket språk ønsker du først og fremst å snakke med helsepersonell på? (sett ett eller flere kryss)

- Norsk Samisk Annet, beskriv:

Bruk av tolk

94. Hvis du har svart «samisk», men ikke fikk tilbud om samisktalende lege ved siste legebesøk, ble det da tilbudt tolk?

Hos fastlegen:

- Ja Nei
 Ønsker ikke å bruke tolk Ikke aktuelt

På sykehus/hos spesialist:

- Ja Nei
 Ønsker ikke å bruke tolk Ikke aktuelt

95. Dersom samisktalende tolk ble brukt ved siste legebesøk, hvem fungerte da som tolk?

Hos fastlegen:

- Offentlig ansatt tolk Familie
 En ansatt på legekantoret Annet

På sykehus/hos spesialist:

- Offentlig ansatt tolk Familie
 Annen sykehusansatt Annet

96. Hvis du noen gang har vært til legeundersøkelse/ behandling der det ble brukt samisktalende tolk, hvor fornøyd er du med kommunikasjonen/samtalen mellom deg og legen/ behandleren?

Hos fastlegen:

- Meget fornøyd Fornøyd
 Misfornøyd Meget misfornøyd
 Vet ikke

På sykehus/hos spesialist:

- Meget fornøyd Fornøyd
 Misfornøyd Meget misfornøyd
 Vet ikke

97. Har du noen gang opplevd at du ikke har fått norsk/samisk tolkehjelp selv om du ba om det?

- Ja, det har hendt at jeg har bedt om tolk, men ikke fått det.
 Nei, jeg har alltid fått tolk hvis jeg har bedt om det
 Har aldri spurt om tolk

Takk for at du deltok i undersøkelsen!



Varresvuoda- ja iellemdile guoradallam



1. Mån guorrasav oassálasstet guoradallamij daj diedoj milta ma li diehtjuohkemttjállagin Guorrasav

Ietjat varresvuolta

2. Gáktu le duv varresvuolta dálla? (Bieja avtav ruossav)

Nievrre Ij la állo buorak Buorak Huj buorak

3. Le gus dujna, jali le gus dujna goassak læhkám?

	Le	Ij la	Man vuoras lidji gá oadtjo
Diabetes (sáhkárvihke).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alla varradæddo.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris (tsáhkegæsádahka).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsáhkehávve.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykalaš vájve masi la viehkev áhtsám.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bisse bronkihtta, emfysema, KOLS.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ástmá.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eksebma.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soriasis.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multippel sklerose (MS).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bechterews dávda.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Le gus manemus jage vájvástuvvam báktjasij ja/jali viednam diehkoj ja gálvam lahtasij binnemusát gálmá máno avtat rajes?..... Lev Iv la

Jus le, tjále tabellaj vuollelin makta le vájvástuvvam

(Bieja avtav ruossav juohkka linjá)

	Iv la vájvástuvvam	Vehik vájvástuvvam	Huj vájvástuvvam
Niske, oalge.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gieda.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hárddo.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Svirrala.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nárrása, juolge.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oajvve.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radde.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tjoajvve.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuollevájmmo.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ietjá sajijn.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Man álu le manemus 4 vahkon bárrám tjuovvovasj dálkkasijt? (Bieja avtav ruossav juohkka linjá)

	Iv la bárrám manemus 4 vahkon	Vuorjábút gå juohkka vahko	Juohkka vahko, valla ij bæjválettjat	Bæjvá- lettjat
Oademdálkkasav.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ráfájuhttemdálkkasav.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dálkkasav lássámiela vuosttij.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Makkár javllamusá hiepi buoremusát duv varresvuoda dilláj uddni?

Vádtsem

- Mujna ij la gássjelisvuolta vádtset
 Mujna le vehik gássjelisvuolta vádtset
 Mån iv máhte ietján gå sengan vellahit

Ietjat sujtto

- Mujna ij la gássjelisvuolta ietjam sujttit
 Mujna le vehik gássjelisvuolta basádimijn ja gárvvunimijn
 Mån iv ietjam basádit máhte

Dábálasj dájma (d.d. barggo, læhkám, sijddabarggo, famillja- jali asstoájggedájma)

- Mujna ij la gássjelisvuolta dábálasj dájmajt doajmmat
 Mujna le vehik gássjelisvuolta dábálasj dájmajt doajmmat
 Mån iv nagá ietjam dábálasj dájmajt doajmmat

Báktjasa ja unugisvuolta

- Mujna ælla báktjasa jalik unugisvuoda
 Mujna le vehik báktjasa ja unugisvuoda
 Mujna le garra báktjasa jali unugisvuoda

Ballo ja lássámiella

- Mujna ij la ballo ij ga lássá miella
 Mujna le vehik ballo jali lássá miella
 Mujna le huj ballo jali huj lássá miella

7. Man álov viehkki dán? (áalles kilojt).....

8. Man allak le dán? (áalles cm).....

9. Gáhttojop duv almodit ietjat rubbmelasj dájmadimev skálan huj binnás gitta huj állu. Skála dánna vuollelin le 1–10 rádjáj. Rubbmelasj dájmadime li sihke sijddadájma ja bargo bargodilen, ja aj lásjmuđallama ja ietjá rubbmelasj dájmadimev duola degu vádtsem jnv Bieja ruossav dan ruktuj mij buoremusat tjielggi man rubbmelasj dájmalasj dán le.

Huj binná 1 2 3 4 5 6 7 8 9 10 Huj állu

Famillja ja gielladuogásj

Nuortta-Vuonan árru ulmutja gejn le moattelágásj tjerđalasj duogátja. Dat merkaj sij hálli genga gielajt ja sijajn le genga kultuvra. Ávddámærkkán tjerđalasj duogátjij, jali tjerđalasj juohkusij li dádtja, sábmelattja ja guojna.

10. Makkár gielav hála. Makkár gielav hálli/hállin duv æjgáda ja áhko ja ádjá sijdan? (Bieja avtav jali moadda ruossa)

	Dáro- gielav	Sáme- gielav	Guojna- gielav	letjá gielajt, tjielggi:
Áddjá (iedne áhtje).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhkko (iedne ieddne)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áddjá (áhtje áhtje).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhkko (áhtje ieddne)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhtje.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ieddne.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mån iesj.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Mij le duv, duv áhtje, duv iedne tjerđalasj duogásj?

(Bieja avtav jali moadda ruossa)

	Dádtja	Sábme	Guojnna	letjá, tjielggi:
Muv tjerđalasj duogásj le.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Muv áhtje tjerđalasj duogásj le.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Muv iedne tjerđalasj duogásj le.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Manen ietjat aná? (Bieja avtav jali moadda ruossa)

	Dádtjan	Sábmen	Guojnna	letján, tjielggi:
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Gáktu dán árvustalá ietjat tjehpudagáv dádjadit, hállat, láhkát jali tjálllet sáme-gielav?

	Huj buoragit	Vehik buoragit	Vehik rahtjamijn	Soames bágov	Iv ávvánis
Dádjadav.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hállav.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lágáv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tjáláv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Barggo, oadjo ja økonomija

14. Man stuorra bruttosisboahito le familjan/goaden jahkásattjat?

- Vuollela 150 000 kr 150 000–300 000 kr
 301 000–450 000 kr 451 000–600 000 kr
 601 000–750 000 kr 751 000–900 000 kr
 Badjel 900 000 kr

15. Man galles árru dan vieson gánná dán áro? Galla ulmutja.....

16. Galla skávllájage le dán tjádadam? (Lágá gájkká jagijt majt la skávllán vádtsám jali studerim).....

17. Árru gus internáhtan (stáhtainternáhtan, suohkana jali priváhta) gá vuodoskávlláv vádtsi?..... Lev Iv la

18. Ma li læhkám ájnnasamos gáldo duv sisbáhtuj manemus jage? (Bieja avtav jali moadda ruossa)

- Báلكká barggo:
 Álessájggáj Oasseájggáj Jáhpebarggo
 Iesjrádalasj æládus:
 Álessájggáj Oasseájggáj Jáhpebarggo
 Boarrásijpensjávnná/AFP
 Ruhtadoarjja/gasskamuddodoarjja/æjgátrudá
 Biejvverudá
 Skihppijrudá
 Barggotjielggidamrudá
 Fábmalisvuodapensjávnná
 Doarjja viessombierggimij (sosiállaviehkke)
 Doarjja gállasguojmes/æjgádijs/oarbbenijs/mánásj
 Ládna/studieládna ja stipenda
 Ietján (siesstemrudá/árbbe/vidniga jnv.)

19. Árvvala gus dujna le máhttelisvuohita bargov majt dálla barga masset, jali ietjat sisboadov tjuodtjelij guovten jagen?..... Árvvalav Iv

20. Lidji gus jáhttát das suohkanis gánná dalla áro jus lidji bargofálaldagáv oadtjot ietjá sajen?

- Lidjiv Dássju oasev jages
 Iv lim Iv diede

21. Jus le báلكká bargon gáktu soaptso dan bargon/æládusán gánná le dálla?

- Huj buoragit Buoragit Nievret Huj nievret

22. Duv varresvuoda ja barggoátsádallamij milta le gus jáhkedahte báلكká bargon/æládusán joarká gitta dasik dævdá:

	Huj jáhke- dahte	Jáhke- dahte	Binnebut jáhkedahte	Huj binnáv jáhkedahte
Sulá 62 jage.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sulá 67 jage.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sulá 70 jage.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuorrasap gá 70 jage.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Jus le dujna iesjrádálásj æládus, makkár æládus le dujna?
(Bieja avtav jali moadda ruossa)

- Boatsojæládus Guolástus
 Ednambarggo Miehttseæládus
 Oasestibme Ietjá

Psykalasj varresvuolta

24. Vuollelin gávna listav duojna dájna gássjelisvuodajn.
Le gus vásedam majdik dájs dáj nielje manemus vahkon?

(Bieja avtav ruossav juohkka vájvváj)

	Iv le vájväs- tuvvam	Vehik vájväs- uvvam	Viehka vájväs- tuvvam	Sælldát vájväs- tuvvam
Hæhkka balo sivá dagi.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm balov jali læhkám goavgas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Njuotsas jali dajnas.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm ietjat niejdedum ja juolodibmen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iesjláttem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nahkárahtes ijá.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Håjen ja nievresluondok.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm ietjat ávkedibmen, dåbddåm dujna le binná árvvo.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm dæssju rahtjamasáv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dårvodisvuodav dåbddåt boahtteájge gáktuj.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Gatjálvisá le dan birra makkár dåbdå ja gáktu dujna le læhkám dan manemus vahko. Juohkka gatjálvisán, vällji dav vásstádusáv mij buoremusát tjielggi gáktu dujna le læhkám. Man álu le dán dan manemus vahko: (Bieja ruossav dan ruktuj mij lagámusát tjielggi duv dilev)

	Vargga Avtat rajes	Stuorra avtat rajes	Muhtem oasev ájges	Vehik oasev ájges	Iv ávvånis
Dåbddåm ietjam ávon ja buorre mielan.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm ietjam jasska ja loajttot.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm ietjam dájmalattjan ja gievrán.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm ietjam vieddje ja vuojnastam.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåbddåm muv árggabiejven le ássje majt mån berustav.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Le gus manemus 12 mánon vásedam unugis mujtoj ma li nággim ja ráfeduhtám duv, ja maj ij le læhkám máhttelisvuolta majdik dahkat?

- Iv la Lev, valla vuorjját Muhttijn Álu

27. Le gus dán manemus 12 mánon mielalattjat garvvám dilijt unugis mujtoj jali dåbdáj diehti nav vaj da li hieredam duv dahkamis dav majt hálijdi?

- Iv la Lev, valla vuorjját Muhttijn Álu

28. Le gus dán manemus 12 mánon dåbddåm ij la nahkam reagerit dilijn gånå ienemusá iehtjádijs reagerijin dåbdáj?

- Iv la Lev, valla vuorjját Muhttijn Álu

29. Almmuda man buoragit tjuovvovasj tjuottjodus gávvi duv ja duv familjav

	Ij hieba	Hiehpá buoragit
Luohtedav állásijt dajda merustallamijda ja mærrádusájda majt välldiv.....	<input type="checkbox"/>	<input type="checkbox"/>
Mån soaptsov buoremusát gå lav aktan iehtjádij.....	<input type="checkbox"/>	<input type="checkbox"/>
Mån soaptsov huj buoragit ietjam familja siegen.....	<input type="checkbox"/>	<input type="checkbox"/>
Muv jáhkko allasim viehket muv gassjelis ájgij tjadá.....	<input type="checkbox"/>	<input type="checkbox"/>
Mån álkket rádnajt oattjov.....	<input type="checkbox"/>	<input type="checkbox"/>
Muv familjan le buorre aktijvuolta.....	<input type="checkbox"/>	<input type="checkbox"/>
Vuosstemannamijn nagáv gávnnat buorre ássijt ma låggijji muv.....	<input type="checkbox"/>	<input type="checkbox"/>
Lev tjielhpe áttjutjit aktijvuodav amás ulmuttij.....	<input type="checkbox"/>	<input type="checkbox"/>
Muv familjan le positijvalasj vuojnno boahtteájggáj, gassjelis ájgij adjáj.....	<input type="checkbox"/>	<input type="checkbox"/>
Mån nagáv dáhkkidit dáhpádusájt iellemin majt ij máhte rievddat.....	<input type="checkbox"/>	<input type="checkbox"/>
Muv mielas le álkke gávnnat juojddáv buorev man birra máhttá sáhkadit.....	<input type="checkbox"/>	<input type="checkbox"/>
Muv familjan lip áskeldisá guhtik guojmmásimme.....	<input type="checkbox"/>	<input type="checkbox"/>

Dubáhka ja gárevsælgga

30. Suovasta gus, jali le gus suovastam ávddål?

- Lev bæjvålattjat Lev ávddål
 Lev muhttijn Iv, iv goassak

Galla sigárehta suovasta dábálattjat bæjvváj?.....

Áldar

Man vuoras lidji gå álggi suovastit bæjvålattjat?.....

31. Snuksi gus, jali le gus ávddål snuksim?

- Lev bæjvålattjat Lev ávddål
 Lev muhttijn Iv, iv goassak

Dunji guhti snuksi bæjvålattjat: Galli snuksi bæjvváj?.....

Dunji guhti snuksi duolój dálloj: Galli snuksi dábálattjat juohkka vahko?.....

Áldar

Jus lev, man vuoras lidji gå álggi snuksit bæjvålattjat?.....

32. Sulá galli le mañemus jage alkoholav juhkam? (Giehppisvuola ja alkoholadis vuola ij lágáduvá)

- Iv le goassak juhkam alkoholav
- Iv le juhkam alkoholav mañemus jage
- Soames bále dan mañemus jage
- Sulá akti mánnuj
- 2–3 mánnuj
- Sulá 1 vahkkuj
- 2–3 vahkkuj
- 4–7 vahkkuj

33. Le gus juhkam alkoholav dáj mañemus 4 vahkon? Lev Iv la

Jus le, le gus juhkam nav álov vaj dábdám la ietjat gárramin?

- Iv la
- Lev, akti – guokti
- Lev, gálmme jali ienep

34. Máhtá gus gáhttjot ietjat alkoholjuhkamav jali juhkamvuogev ájgggasskasattjan (jugá álu ja ednagav soames ájge, ja de le guhka ájgge goassa i jugá alkoholav)? (Bieja avtav jali moadda ruossa)

- Máhtáv, mañemus 12 máno
- Máhtáv, ávddál
- Iv

35. Le gus dujna goassak narkotihkajn dahkamus læhkám?

(Bieja avtav jali moadda ruossa)

- | | Lev,
mañemus
jage | Lev,
ávdvál | Iv
la |
|---|--------------------------|--------------------------|--------------------------|
| Hasj/marihuana (cannabis)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| letjá narkotihkalasj gárevselga, duola degu
LSD, amfetamijnna, ecstasy, kokaijnna,
heroijnna, GHB, jnv..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Ássku ja iellemvuojnno

36. Le gus dán, duv æjgáda jali duv áhko ja ádjá tjanádum aktasik dájda tjuovvovosj iellemvuojnno siebrija:

(Bieja avtav jali moadda ruossa)

- | | Mán
iesj | leddne | Áhtje | Áhko ja
ádjá |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| Stáhtagirko..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Laestadiánalasj tjoaggulvis..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| letjá vuojnjalasj tjoaggulvis/aktisasjvuohta | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| makkár: | | | | |
| Vuojnjalasj iellemvuojnno sebrudahkaj.. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| makkár: | | | | |
| Ij lav sebrulasj makkárik
iellemvuojnno sebrudagán..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

37. Makkár aktijvuohta le dujna ásskuj?

- Mán lav jáhkulasj/dábdástav risstalasjvuohtaj (persávnalasj ristagis)
- Mán jáhkáv Jubmel gávnno, valla jáhkos ij le nav stuorra berustibme bæjvállattjat
- Juorrolav
- Mán iv jáhke Jubmel gávnno

38. Man álu le daj mañemus 6 mánon læhkám:

(Bieja avtav ruossav juohkka linjá)

	lenep gá gálmme mánnuj	1–3 mánnuj	1–6 mañemus 6 mánnuj	Iv goassak
Girkkon.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tjoaggulvis-/biednadåben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humánehtalasj tjáhkanimen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
letjá vuojnjalasj dáben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Badjelgæhttjalimev vásedam

Badjelgæhttjam le gá ulmusj jali juogos ulmutjijs aneduvvi nievrebun gá ietjåda. Sivvan máhtá liehket sijå tjerdalasj duogås, ássko, jáhkko, doajmmahieredisvuohta, áldar jali seksuålasj berustime.

39. Le gus vásedam badjelgæhttjamav?

- Lev, mañemus guokta jage
- Lev, ávddál
- Iv la
- Iv diede

Jus vásstedi lev ávdep gatjålvissaj, vássteda gatjålvissaj 40–47. Jus le vásstedam iv, manå vijddåbut 48. gatjålvissaj.

40. Jus le vásedam badjelgæhttjamav, man álu dáhpåduvåj?

- Huj álu
- Duolluj dalloj
- Vuorjåjå

41. Mannen jáhkå dán badjelgehtjaduvvi? Mij lij sivvan badjelgæhttjamij: (Bieja avtav jali moadda ruossa)

- Doajmmahieredisvuohta
- Seksuålasj berustime
- Oahppamgåssjelisvuoda
- Sjiervve
- Ássku jali jáhkko
- Tjerdalasjvuohta
- Tjerdalasj duogås
- Geografalasj gulluvassjvuohta
- Áldar
- Skihpudahka
- letjá sivå, tjelggi:
- Iv diede

42. Máhtå gus subtsastit gånå badjelgæhttjam dáhpåduvåj?

(Bieja avtav jali moadda ruossa)

- Internehtan
- Skåvlån/åhpadusån
- Bargon
- Barggoåhtsåma aktijvuohtan
- Luovvojvuohtan/organisåsjåvnån
- Almulasjvuohta æjvvalimen
- Berrahij/familja aktijvuohtan
- Gå åjggu låjggit/oasstitt viesov
- Gå åjggu háhkuhit bánjkaluovkav
- Medisijnalasj dálkudime aktijvuohtan
- Oassåsin jali bårådimbåjken
- Båjkalasj sebrudagån
- letjá sajen, tjelggi:

43. Máhtá gus subtsastit guhti duv badjelvgehtjaj?

(Bieja avtav jali moadda ruossa)

- Almulasj bargge
- Amás ulmutja
- Bargorádna
- Akta jali moattes gejn le sæmme tjerdalasj duogásj gå dujna.
- Akta jali moattes gejn le ietjá tjerdalasj duogásj gå dujna.
- Guojmmeoahppe/studenta
- Åhpadiddje/bargge
- Iehtjáda

44. Dahki gus majdik vájmmelisát

hiejteditjt badjelgæhtttjamav? Dahkiv Ittjiv

45. Le gus goassak válldám aktijvuodav dássáduoahhtsijn áttjutjit rádev ja viehkev badjelgæhtttjama gáktuj?

- Lev Iv la Iv mujte

46. Guoskadaláj gus badjelgæhtttjam dunji?

- Ij ávvánis Vehik Muhtemærráj Ednagav

47. Le gus vásedam badjelgæhtttjamav dan diehti gå la sábme?

- Lev Iv la Iv diede Iv la sábme

Vahágahttem ja vierredahko

48. Le gus vásedam soames guhkes ájgev ja systemmáhtalattjat le gæhtttjalam niejddet, hæssodit jali njuoradit duv? (Bieja avtav jali moadda ruossa)

- Iv, iv goassak Lev, mánnán (vuollet 18 jage)
- Lev, állessjattugin Lev, mañemus 12 mánon (18 jage jali vuorrasabbo)

Jus le, gæssta?

- Amás ulmutjis Guojmes
- Berrahis, fuolkes Ietjá oahppásis

49. Le gus vásedam rubbmelasj vierredagov/dierredimev?

(Bieja avtav jali moadda ruossa)

- Iv, iv goassak Lev, mánnán (vuollet 18 jage)
- Lev, állessjattugin Lev, mañemus 12 mánon (18 jage jali vuorrasabbo)

Jus le, gæssta?

- Amás ulmutjis Guojmes
- Berrahis, fuolkes Ietjá oahppásis

50. Le gus vásedam seksuálalasj ráhtsatjimev? (Bieja avtav jali moadda ruossa)

- Iv, iv goassak Lev, mánnán (vuollet 18 jage)
- Lev, állessjattugin Lev, mañemus 12 mánon (18 jage jali vuorrasabbo)

Jus le, gæssta?

- Amás ulmutjis Guojmes
- Berrahis, fuolkes Ietjá oahppásis

51. Jus le vásedam makkárik vierredagov, le gus soabmásij dáv subtsastam? (Bieja avtav jali moadda ruossa)

- Iv la Soames berrahij
- Rádnajda Fáhkaulmuttjijda

Bádnevarresvuohta

52. Gáktu le duv bádnevarresvuohta ietjat mielas?

- Nievrre Ij la rat buorre Buorre Huj buorre

53. Le gus dujna luovasbáne? Le Ælla

54. Ávkástalá gus dán iesj muhtemav dájs tjuovvovasj viehkkenævojs – ja jus, man álu?

	Bæjválattjat	Duolla dálla/ moaddi vahkon	Duolla dálla/ moaddi mánon	Vuorjjábut/ ij goassak
Bádneskuorun.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluorbádnegella.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bádnesuodna.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bádnesáluna.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluor-tablehta.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Njálmedájddemtjåhtje.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bádneskuorun hiebadum luovasbånijda.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

55. Goassa mañemus lidji bådnedåktåra jali bådnesuttåra lunna?

- Binnep gå jahke das åvddål 1–2 jage åjgge
- 3–5 jage åjgge Badjel 5 jage åjgge

56. Jus le badjel guovte jage åjgge, mij dasi le sivvan?

(Bieja avtav jali moadda ruossa)

- Iv le gåhtjoduvvam
- Guhka vuorrdemåjgge le bessat bådnedåktåra lusi
- Iv la asstam
- Økonomalasj sívát
- Mujna ij la læhkåm dårbbø bådnesuttimij
- Mån baláv jali gåvav vuolggemis bådnedåktåra lusi
- Ietjá sívát:

57. Gåktu dån ávkki bádnevarresvuodadievnastusáv? (Bieja avtav jali moadda ruossa)

- Bádnedáktår jali bádnesujttár gáhttju muv duolloy dálloj boahitet
- Diededav juovnnát bánijt gehtjadittjat
- Diŋnguv tijmav gá li báktjasa, jali gá lav bádnevdadísáv lahppám
- Iv nav álu bádnedáktåra lusi maná

58. Le gus daj maŋemus guovten jagen oadtjum avtav jali ienebuv dajs diagnosajs bádnedáktåris?

	Lev	Iv la	Iv diede
Alvos bádneoadtjevuolssje	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bádneoadtjevuolssje mij ij la nav alvos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Njálme gájkám	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rájgge avtan jali moatten bānen (karies)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ietjā diagnosajt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

59. Le gus dudālasj ietjat bānij jali ietjat luovasbānij? Almoda vāsstādusáv skālaj gānnā 1 le huj duhtamahtes ja 5 le huj dudālasj

Huj duhtamahtes 1 2 3 4 5 Huj dudālasj

60. Man álu bānijt skuorru 10-jagāgin?

- Akti bæjvvāj jali ienebut
- Duolloy dálloj
- Vuorjjāt jali ij goassak

61. Man álu dārkestin duv æjgāda jali ávdāsvásstediddje jus dån lidji bānijt skuorrum, gā lidji 10-jagāk?

- Dájvvāj (birrasij bæjvālattjat) Duolloy dálloj Ij goassak

62. Jus dujna li mánā nuorabu gā 6 jagāga gudi duv lunna árru, man dájvvāj viehkeda dån sijáv bānijt skuorrot jali dārkesta gus jus sij le bānijt skuorrum?

- Dájvvāj (birrasij bæjvālattjat) Duolloy dálloj Ij goassak

63. Jus dujna li mánā 6–12 jage gaskan gudi duv lunna árru, man dájvvāj viehkeda dån sijáv bānijt skuorrot jali dārkesta gus jus sij le bānijt skuorrum?

- Dájvvāj (birrasij bæjvālattjat) Duolloy dálloj Ij goassak

64. Jus li mánā gudi li 0–12 jage gaskan gudi duv lunna árru, le gus diján læhkām njuolgadusá goassa mánā oadtju sjokolādav ja ietja hālmugijt bārrāt?

- Le Ælla

65. Man dudālasj le dån bádnevarresvuodadievnastusājn ietjat suohkanin?

Huj dudālasj Huj duhtamahtes Iv diede

Iesjsármim ja iesjsármimdáhpádu

66. Le gus massám soabmāsav lagámusájs iesjsármimma baktu? Lev Iv la

67. Le gus ájádallam ietjat sármmit?

- Lev, maŋemus jagen Lev, ávdđála Iv, iv goassak

68. Le gus gæhttjalam ietjat sármmit?

- Lev, maŋemus jagen Lev, ávdđála Iv, iv goassak

69. Le gus mielanækton vahágahttám ietjat?

- Lev, maŋemus jagen Lev, ávdđála Iv, iv goassak

Jus le gæhttjalam ietjat sármmit, máhtá vāsstedit tjuovnovasj gatjálvisájt. Jus le vāsstedam iv gatjálvissaj, máhtá mannat vijddábut 76. gatjálvissaj.

70. Gåktu gæhttjali ietjat sármmit? (Bieja avtav jali moadda ruossa)

- Hartsastimijn Vuohthemvæerjo
- Basstelis dávverijn Badjelmierre tablehtajs/dálkkasij
- Ietjā lāhkāj

71. Mij lij sivvan gā gæhttjali ietjat sármmit?

- Tjigelga hāлло jábmet Lej Ij lim
- Dille lij gierddamahtes Lej Ij lim
- Mån hālijdiv viehkev soabmāsís Lej Ij lim

72. Lidji gus juhkam/gárramin gā gæhttjali ietjat sármmit? Lidjiv Iv lim

73. Man vuoras lidji gā vuostasj bále gæhttjali ietjat sármmit?

74. Man galli le gæhttjalam ietjat sármmit?

75. Subtsasti gus iehtjádijda dån lidji gæhttjalam ietjat sármmit? (Bieja avtav jali moadda ruossa)

- Iv la Soames berrahij
- Rádnajda Fáhkaulmutjijda

Speallamdábe

76. Le gus goassak dábdđám dárbov spellat ienep ja ienep rudáj ávdás? (Bieja avtav jali moadda ruossa)

- Lev, maŋemus jagen Lev, ávdđál Iv la

Vásádusá rájaduvvamijn

87. Le gus mañemus 12 mánon hálijdam rájaduvvat sierratjehpij lusi, valla illa rájaduvvam?

Rubmelasj gássjelisvuoda aktijvuodan

- Iv, iv goassak Lev, akti
 Lev, moaddi Ij guoskadalá

Psykalasj gássjelisvuoda aktijvuodan

- Iv, iv goassak Lev, akti
 Lev, moaddi Ij guoskadalá

88. Le gus mañemus 12 mánon hálijdam rájaduvvat fysioterápevta, kiropráktora jali sulásattja lusi, valla ij la rájaduvvam?

- Iv, iv goassak Lev, akti
 Lev, moaddi Ij guoskadalá

89. Jus rájaduvvi, man guhkev vuorddi tijmav?

Galla vahko

90. Le gus sihtam friddja skihppijviesoválljimav gá le rájaduvvam sierratjehpijdáلكudibmáj?

- Lev Iv la Ij guoskadalá

Giella doktára lunna

91. Mañemus gá lidji stuovesdoktára lunna, makkár gielav hállabihtte dáj doktárijn?

Dárogielav Sáme gielav letjá gielav, tjielggi:

- Mán hálliv
Doktár hállaj

92. Mañemus gá lidji skihppijvieson/spesialista lunna, makkár gielav hállajda dáj doktárijn?

Dárogielav Sáme gielav letjá gielav, tjielggi:

- Mán hálliv
Doktár hállaj

93. Makkár gielav hállajda ienemusát hállat varresvuodabarggij? (Bieja avtav jali moadda ruossa)

Dárogielav Sáme gielav letjá gielav, tjielggi:

-

Dáلكáv adnem

94. Jus le vásstedam «sáme gielav», valla ittjij fáladuvá sáme gielak doktár mañemus gá lidji doktára lunna, fáladuváj gus de dáلكká?

Stuovesdoktára lunna:

- Fáladuváj Ittjij
 Iv hálijdam adnet dáلكká Ij guoskadalá

Skihppijvieson/sierratjehpe lunna:

- Fáladuváj Ittjij
 Iv hálijdam adnet dáلكká Ij guoskadalá

95. Jus lij sáme gielak dáلكká mañemus gá lidji doktára lunna, guhti dájmaj dáلكkán?

Stuovesdoktára lunna:

- Almulasj báلكkiduvvam dáلكká Beraj
 Doktárkontávra bargge lehtjáda

Skihppijvieson/sierratjehpe lunna:

- Almulasj báلكkiduvvam dáلكká Beraj
 letjá bargge skihppijviesos lehtjáda

96. Le gus goassak læhkám doktárguoradallamin/dáلكudimen gánná lij sáme gielak dáلكká, man dudálasj lidji dán, duv ja doktára/dáلكudiddje, ságastallamijn?

Stuovesdoktára lunna:

- Huj dudálasj Dudálasj
 Duhtamahtes Huj duhtamahtes
 Iv diede

Skihppijvieson/sierratjehpe lunna:

- Huj dudálasj Dudálasj
 Duhtamahtes Huj duhtamahtes
 Iv diede

97. Le gus goassak vásedam ij le oadtjum dárogielak/sáme gielak dáلكáviehkev vájku le ádnem?

- Lev vásedam dáلكáv lev ádnem, valla iv la oadtjum
 Iv la, agev lev dáلكáv oadtjum jus lev ádnem
 Iv la goassak dáلكáv ádnem

Gijtto gá oassálassti guoradallamijn!

