

The SAMINOR study

K.L. Hansen, M. Melhus, E. Lund
e.mail: ketil.lenert.hansen@ism.uit.no

Centre for Sami Health Research, Institute of Community Medicine, University of Tromsø, Norway

BACKGROUND:

There is a lack of knowledge of health and living conditions for the Sami population in Norway. As a consequence of this, the Norwegian Minister of Health in 2000 founded a Centre for Sami Health Research.

The centre has been responsible for planning and conducting a health screening study in areas with both Sami and Norwegian population. The survey was conducted in collaboration with the National Health Screening Service (NHSS), now incorporated in the Norwegian Institute of Public Health.

MATERIAL AND METHODS

The SAMINOR study is a population based study of health and living conditions in areas with a mixed Sami and Norwegian population. The study was carried through in 2003-2004.

Study sample: 24 municipalities were selected, based on a high rate of Sami inhabitants. (Figur 1)

For municipalities visited in 2003 all inhabitants born 1925-1967 and 1973 were invited. In 2004 those born 1925-1968 and 1974 were invited. The eligible population was 27 986 persons.

Contents: The study consisted of 3 questionnaires together with a clinical investigation. An initial 2 paged questionnaire contained questions on ethnicity, use of health services and traditional healers, socio-economic factors, accidents and discrimination. Together with invitation to the clinical investigation, the participants received a 3 paged questionnaire containing standard questions for the national screening programme, such as self reported diseases, diseases in the family, mental health, use of medicines, diet and physical activity. For women only there were questions on menstruation and child births.

At the clinical examination standard measures such as blood pressure, height, weight, waist and hip circumference were taken together with blood samples for analysis of cholesterol, glucose, ferritin etc.

When attending the screening, they received a 4 paged additional questionnaire with more detailed questions of present and past diet with special focus on traditional foods together with questions on social identity and values.

Participation: Participation vary with age and gender (table 1). Also, participation varies in different municipalities, from under 30 % up to over 70 %. Due to low participation rate, then 30 year olds are excluded in the analyses.

Table 1. Participation by age and gender (initial questionnaire)

Gender and age	Sample	Participants	Participation rate %
Men 30	427	121	28.3
36-45	3990	1866	46.8
46-55	4206	2414	57.4
56-65	3334	2096	62.9
66-79	2583	1513	59.6
Men total	14540	8010	55.1
Women 30	409	194	47.4
36-45	3682	2226	60.5
46-55	3649	2510	68.8
56-65	2901	2036	70.2
66-79	2805	1662	59.3
Women total	13446	8628	64.2
Men and women total	27986	16638	59.5

RESULTS

Ethnicity: There were several questions on family background, language and self-perceived ethnicity. The participants were asked which language each of their parents, grandparents and themselves were using at home and which ethnicity their parents and themselves had. Finally, they were asked about their self-perceived ethnicity; what they regarded themselves to be. They were allowed to give multiple answers from the categories Norwegian, Sami, Kven or other.

Based on these questions, we decided to divide the participants into 6 ethnic categories:

1. Sami I: All grandparents, both parents and the participant speak Sami language at home
2. Sami II: Minimum 2 Sami speaking grandparents
3. Sami III: Sami language or ethnicity for at least one of the grandparents, parents or themselves.
4. Kvens
5. Ethnic Norwegians
6. Foreigners

By dividing the Sami population in three subgroups, we obtain a graded ethnicity variable with Sami I having the strongest Sami affiliation and Sami III the weakest. The distribution of ethnic belonging are given in table 2.

People in the Sami I group reported poorer self rated health than the ethnic Norwegians. This was the case for all three age groups and for both sexes (table 3).

Table 2. Ethnicity (30 year olds excluded, N=163223, 66 missing)

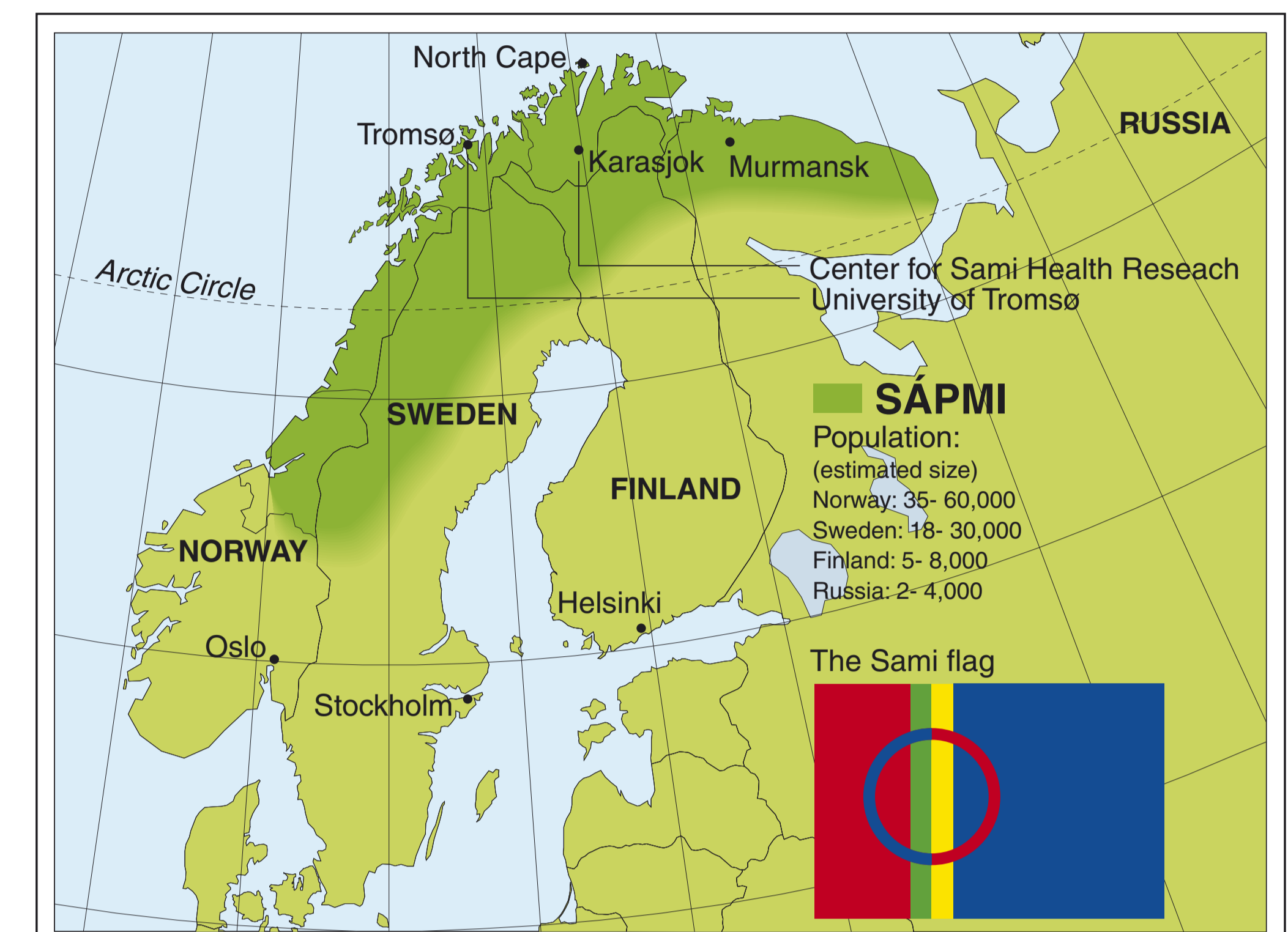
Ethnicity	Frequency	%	Cum. Cum.	
			Frequency	%
Sami language in 3 generations	2105	12.9	2105	12.9
At least 2 grandparents with Sami language	2448	15.1	4553	28.0
At least 1 person with Sami language or ethnicity	1198	7.4	5751	35.4
Kvens (People of Finnish Descent)	1182	7.3	6933	42.6
Other Norwegians	9052	55.7	15985	98.3
Foreigners	272	1.7	16257	100.0

Table 3. Rate of persons reporting good/very good current health.

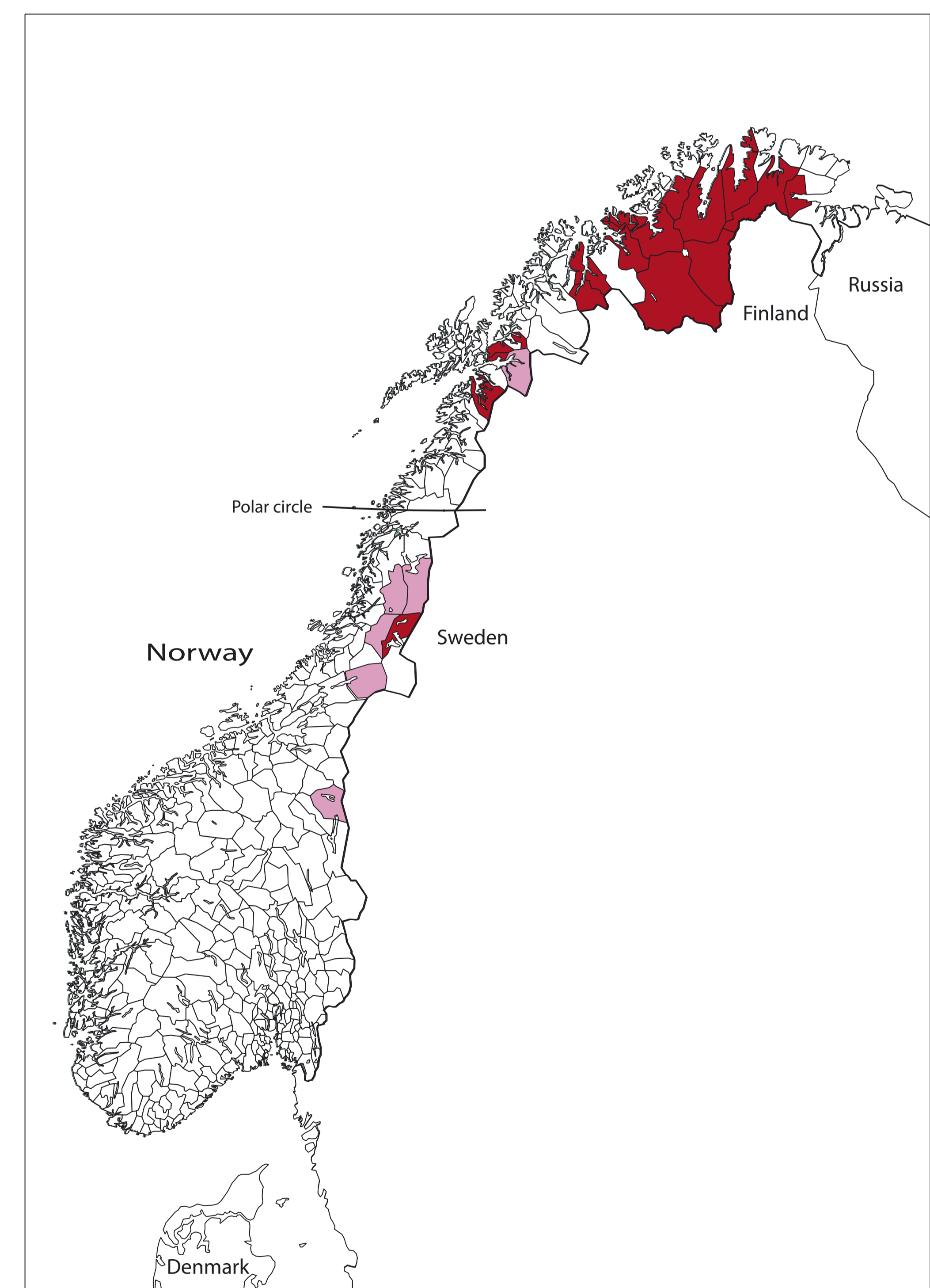
Gender	Age	Sami I	Ethnic Norwegians
Men	36-49	81.3	83.5
	50-60	59.2	67.6
	65-79	56.0	63.0
Women	36-49	72.3	78.2
	50-64	59.9	63.3
	65-79	51.4	55.2

CONCLUSION:

The SAMINOR study has been a major priority for the Centre for Sami Health research and will in the future be used for a wide range of studies on living conditions and health focusing on the Sami people.



Location: Centre for Sami Health Research is organized as a department under the Institute of Community Medicine at the University of Tromsø and is located partly in Karasjok and partly in Tromsø.



Figur 1.

Red areas: All inhabitants in given age groups were invited
Pink areas: Only selected areas of the municipality were included

THE SAMI PEOPLE:

The Sami is an indigenous people living in northern parts of Norway, Sweden, Finland and Russia, most of them in Norway. They have their own language and culture. Traditionally the Sami were close to nature, with hunting, fishing and reindeer herding as important livelihoods. They have experienced rapid social changes, which have had large influence on health and living conditions.

REFERENCES

Aubert V. Den samiske befolkningen i Nord-Norge. Statistics Norway no.107: 1978.