

# HEALTH CULTURE WITHIN THE CONTEXT OF THE NORTHERN ENVIRONMENT

## ABSTRACT

*Hellevi Tervo*<sup>1</sup>

*Ludger Müller-Wille*<sup>2</sup>

*Merja Nikkonen*<sup>3</sup>

**Objectives.** This article is part of an ethnographic study that aims to describe and understand health as a phenomenon of the Sami culture.

**Study Design.** The article is based on literature concerning the northern environment and the Sami culture, which is analysed from the point of view of health culture.

**Results.** From the point of view of health culture, life in the northern regions requires adaptation to certain special features of the climate and the natural environment. Nature is also a versatile source of health care, healing and traditions. Particularly in the late 1990's, the northern environment and the Sami lifestyle were profoundly affected by changes in the sources of income caused by modernisation and the adaptation of traditional Sami livelihoods to governmental regulations. The current Sami values and beliefs are multilayered factors affecting health culture. The social growth milieu of Sami children as a source of health culture has changed over the generations. The key elements affecting the growth milieu have changed over time, due to the attitude of the government towards the Sami culture and the consequent changes and actions of society.

**Key words:** Health, Culture, Sami, Northern environment, Ethnography

<sup>1</sup> Rovaniemi College of Health and Welfare, Rovaniemi, Finland

<sup>2</sup> Department of Geography, McGill University, Montreal, Canada

<sup>3</sup> Department of Nursing and Health Administration, University of Oulu, University Hospital of Oulu, Oulu, Finland

## INTRODUCTION

This article is a part of an ethnographic study that aims to describe and understand health as a phenomenon of the Sami culture. The study is based on the results of surveys done by the Finnish social and health services for the Sami. According to these results, the special cultural features of the Sami are not taken into account in the social and health services (1). The Sami people, similarly to other indigenous peoples, have tried to advocate for cultural rights in all domains of society - including the traditional sources of livelihood (2), the educational system (3) and the social and health services (4).

The ethics of health care include a demand for culture-oriented work with the clients. Health care is based on a humanistic view of people. One of the fundamental goals of the humanistic view is to treat people as equal in different client service situations. According to the ethical principals of nurses, the nursing career aims to create an environment in which the individual's values, traditions and convictions are respected (5). Knowledge of the clients' cultural backgrounds, and the need to take that background into account in nursing are cornerstones of effective and safe nursing. The more knowledge nurses have of different cultures, the better they are able to understand cultural differences (6).

In a study concerning the work of nurses in northern Finland (7), a need for more cultural knowledge in nursing education was recognized. It is necessary to develop the knowledge base to be able to practise culture-sensitive nursing. Development of the knowledge base requires us to observe health as a cultural phenomenon (7). Papadopoulos (8) also mentions the lack of research and publications on culture-sensitive nursing. The lack of material means that general, non-specific concepts and theories (8) are used in nursing education.

Arctic medicine has produced varied information on the health of people living in northern environments. The Sami have also been studied in different fields of science. For example, the human body's seasonal physiological adaptation to the northern environment (9) has been studied. In health studies, Sami people and Finns have been compared for their health status and lifestyle (10,11). Descriptions and reports of the Sami traditional healing methods (12, 13, 14) also touch upon health culture. Research concerning health and illnesses does not, however, provide an adequate description of the

present-day Sami people's view of health and their actions based on it. Contextual information from the Sami point of view is needed, particularly in social and health care (15).

The purpose of this study is to formulate a theory for developing welfare services for the Sami (16). The study is based on the theory of health as a culturally defined phenomenon (17). Health culture is manifested in daily life as beliefs, practices and actions concerning health and welfare. The health culture is affected by the view of the world held by individuals, communities and social structures. Health culture is learnt in interaction with the changing environment (18,19). In this study, Sami health care is observed in its authentic context (16,20). In ethnographic research, the interpretative context, i.e. the social framework, plays a key role in the placement of the community members who are studied (21). The context of the phenomena consists of the physical environment, human actions and interpersonal relationships (20). In this article, we describe the northern environment as a context for the Sami health culture. We approach the physical environment, the traditional Sami livelihoods and the social environment of the Sami from the point of view of health culture. In describing the environment, we use a historical perspective to illuminate the background and basic motivation of this study.

## DATA AND METHODS

The study was conducted as a field study using the ethnographic approach (16). The researcher interviewed Sami people and observed their daily life in Sapmi, the Sami region in Finnish Lapland. The Sami experts who participated in this study are of different ages and live permanently in the municipalities of either Inari, or Utsjoki. Most of the informants live in sparsely populated areas, are Northern Sami and practise the traditional Sami livelihoods. During the field work, the researcher lived in Sámi families for weeks and observed their daily life. The number of experts is forty, which included ten key informants, with whom the researcher spent time for several days and weeks. The data are also based on the literature concerning the northern environment and the Sami culture related to health culture.

## THE SAMI: A NORTHERN INDIGENOUS PEOPLE

The Sami are one of the northern indigenous peoples. According to Carpelan (22), the Sami are descendants of the populations which, after the retreat of the glacier at the end of the Ice Age, spread from different directions and were driven by different forces to the present Sami-populated region. Nowadays, the Sami live in the northern parts of Norway, Sweden, Finland and Russia. The Sami differ from the other minority groups of Finland in that they are both a geographical and an ethnic minority. The Sami region consists of the municipalities of Enontekiö, Inari and Utsjoki, and the Lappi reindeer herding district in the municipality of Sodankylä. The estimated number of Sami is 70,000, with 7,000 living in Finland where approximately 4,000 live in the Sami region, 2,000 live in other parts of Finland and the rest live abroad (23).

The settlement of northern Finland in the course of centuries and, particularly, the post-war migration led to the gradual cultural assimilation of some Sami (24). Due to cultural change, there are different kinds of Sami living in the region today. According to Snellman (25), the social and health care system deals with four different types of Sami clients. There are those who live in a unicultural Sami environment, those who have become completely assimilated to the Finnish culture, those who master both languages and cultures and identify themselves with both cultures, and those who remain culturally marginal and do not identify themselves with either culture. The assimilation of cultures and the legislation concerning the rights of the Sami led to a need to define who is Sami. According to the law concerning the Sami Parliament (3), enacted in 1995, a Sami is a person who considers him/herself Sami, on the condition a) that the person in question or at least one of his/her parents or grandparents has learnt Sami as their first language, or b) that he/she is a descendant of a person who is either a mountain, forest or fisher "Lapp" according to the land or tax registers, or the census list; or c) that at least one of his/her parents has been, or could have been, entitled to vote in the elections of the Sami Delegation until 1994, or the Sami Parliament after 1995 (26). The Sami experts who participated in this study are of different ages and live permanently in the municipalities of either Inari, or Utsjoki. In addition to the place of residence, self-identification (24, 27) as a Sami person was central to the definition of Sami status in this study. Most of the informants live in sparsely

populated areas, are Northern Sami, and practise the traditional Sami livelihoods.

## THE RELATIONSHIP BETWEEN NORTHERN ENVIRONMENT AND HEALTH CULTURE

From the point of view of health culture, the northern natural environment requires people to adapt to the physical conditions, as well as to the use of elements of the surrounding nature to maintain and improve their health and to heal illnesses. The Sami region is distinctive in terms of light, climate, vegetation, waterways and landscape. These factors affect, either directly or indirectly, the inhabitants' health culture.

Until the second part of the 20<sup>th</sup> century, the *physical place of residence* defined the ways of meeting the basic needs of human life, which underlie health culture. Itkonen (13) has divided the Sami, according to their place of residence and use of resources, into the Forest Sami, Fisher Sami and Reindeer Sami. The Fisher Sami are divided into the River Sami along the Teno, the Lake Sami in Inari, Utsjoki valley, Pulmankijärvi and Petsamo, and the Sea Sami in Finnmark and Petsamo. Place of residence determined the traditional livelihoods and, consequently, the diet. Reindeer meat and fish together with arctic berries constitute the basic Sami diet. Nowadays, the influence of the place of residence on the diet is smaller (28), though still noticeable.

Temperature and the amount of light are central elements of the northern natural environment that require people to adapt. Northernmost Lapland belongs to the snow forest zone based on the common climate criteria. In the snow forest environment, the summer is short and cold, there is no dry season, and frost is common during the growing season. Compared with other climates in areas at the same latitude, the climate in northernmost Lapland is mild, due to the influence of the Atlantic Ocean and the Gulf Stream (29, 30). The climate typical of northern areas has affected the structure of livelihoods of the Sami by, for example, limiting agricultural expansion in Lapland. The length of the winter in Lapland and the shortness of the summer mean that the growing season is shorter in Lapland than in the central and southern parts of Finland (30, 31).

In addition to the selection of livelihoods, climate has influenced

the physiology of northern people. Habitation in a cold environment causes the dermal blood vessels to constrict as part of the process of keeping the heat in the human body. The dermal vasoconstriction often leads to higher blood pressure, which is a risk factor for cardiovascular diseases. Another physiological change caused by the cold climate is the development of brown fat (32). According to occupational health research, the health risks caused by coldness in reindeer herding include frostbites, respiratory symptoms and accidents caused by cold weather and exertion (33).

The seasonal changes in the amount of light in Lapland are considerable. There is a two-month period in the summer during which the sun does not set at all in northernmost Lapland. In the winter, at latitude 68 degrees north, the sun does not rise between 25<sup>th</sup> November and 17<sup>th</sup> January. Changes in the amount of light are great and affect both physical functions and subjective well-being. According to research findings, there is a relationship between the amount of light and the moods of people. The amount of light also causes changes in physical functions, such as the need for rest, the diet and the amount of exercise. Seasonal Affective Disorder (SAD) was added to the criteria of illnesses in the 1980's. As its name suggests, it occurs during the dark season and is considered to be caused by the diminishing amount of light and the increase in the production of melatonin in the human body during the autumn (34). Recent research has shown that the decline in well-being during the arctic period of winter darkness is mostly mild, and only a small proportion of the population suffer from actual winter darkness depression (35). In connection with the changes in melatonin secretion caused by light, there are indications of seasonal changes in the secretion of sex hormone (9) that affect ovulation. Another health risk related to light is represented by the changes in the retina of the eye caused by the large amount of ultraviolet radiation measured in the north (32).

The Sami are inhabitants of the northern timberline forest, this region is divided, based on its vegetation, into Forest Lapland and Mountain Lapland (29,36). The northern coniferous forest in Finnish Lapland is an ecologically remarkable zone in which many other plants also grow. Northernmost Lapland belongs to the northern boreal *vegetation* zone. The forests in the southern part of Lapland consist of sparsely placed low trees. They are mostly dry pinewood forests with blueberry, northern bilberry and Labrador tea. The forest in the central and northern parts of the boreal vegetation zone

include a few spruce stands. The birches typical of these areas are downy birch and its northern counterpart, the mountain birch (30). The vegetation of the living environment includes several plants that the Sami have learnt to use for improving their health and for healing illnesses. One of the typical plants used for health nursing in the mountainous area is the birch, whose bark layers have been used to stop bleeding and to treat gouty arthritis. In addition to birch, the plants typically used in traditional medicine include garden angelica, Labrador tea and juniper (37).

### CHANGES IN THE TRADITIONAL SOURCES OF LIVELIHOOD AND THE ACTIVITIES OF DAILY LIFE

The nature and content of work shape the individual and communal health culture in two ways. Firstly, by working, one ensures the fulfillment of basic needs. Secondly, work gives one a certain position in the community and a way to express oneself. The work of the Sami has gradually changed from completely natural livelihoods, to versatile sources of income. According to J. Helander (31), the Sami can nowadays be categorized according to their livelihoods in the following way: the reindeer Sami, the Sami who practise other traditional livelihoods, the Sami who work in business life and other wage employment, and the white-collar Sami workers. The traditional livelihoods often consist of a combination of reindeer herding, fishing, hunting and using other natural resources for living. Despite the diminishing proportion of traditional livelihoods in the Sami region and particularly in the sparsely populated areas, the work, income and life of the Sami are closely related to reindeer husbandry and other traditional livelihoods. For example, 75% of the inhabitants of Angeli village still live from reindeer herding. In other areas, too, reindeer herding is an important indirect source of income (38).

The traditional livelihoods have remained part of the daily life, but their content and practices have been adapted to the politics and developments of society. Changes in the traditional livelihoods, which are simultaneously lifestyles, always have multiple effects on the daily activities, such as daily routine, transportation, diet, social interaction and the relations among the generations. The evolution of national states with borders, the wars and the technological development of the 20<sup>th</sup> century (13, 27, 31, 39, 40, 41) are examples of

factors that have affected reindeer herding. The latest factor affecting the practices of reindeer herding is the fact that Finland has become a member state of the European Union.

The Sami practising reindeer herding and other traditional livelihoods have moved from seasonal dwellings to permanent residences. Getting around when at work has become easier with the help of snowmobiles and other motor vehicles. Even today, certain tasks in reindeer herding, such as the summer ear marking and the autumn round-ups, cause nearly all members of the reindeer herding association to gather in the mountains for a few weeks. In the Kaldoaivi reindeer herding association, the school also moves to the mountains during the autumn round-ups (42). From the point of view of management, the central and still unresolved issue in the Sami region is the question of ownership and right to use land and waters for practising traditional livelihoods.

Despite the structural changes in the traditional livelihoods and their effect on fulfilling the basic needs, reindeer still play an important role in the daily life of the Sami living in the northern areas. Reindeer herding also defines Sami culture when observed from the outside (13, 43, 44). Reindeer have, for hundreds of years, fulfilled the basic needs of the Sami. They have been used for nourishment, transportation and the production of tools and utensils (13, 27). Reindeer hide has been used for making clothes and shoes adapted to the environment (45). It is a traditional Sami way of honouring reindeer to use all parts of it. The use of reindeer has grown more versatile over time. For example, items made of reindeer bone and clothes made of leather are nowadays sold to tourists. Thus, reindeer herding is both a source of income, a leisure time activity and a form of social interaction.

## THE BASIC VALUE OF THE SAMI CULTURE AND THE PRACTICES OF HEALTH CULTURE

Basic health culture is learnt in interaction with one's social environment. The values of educators and society are a basis for the customs and traditions concerning health and well-being and the healing of illnesses. From the point of an individual Sami, the most immediate influential environment is naturally his/her family. In addition to the family, day-care and school are modern environments that shape the

health culture. The most profound influence on health culture is through the fundamental value base inherent to societies.

According to the traditional Sami world view, people are not the centre of the universe. According to the Sami belief, people are part of nature and, thus, depend upon it. People base all their actions on respect for nature and its elements. Nature is home (46). In 1922, the well-known Sámi reindeer herder and author from Swedish Lapland, Johan Turi, wrote about the close relationship between the Sámi and nature: "*When a person is in a good mood and things go well, he sees happy scenery, and when he is sad, he sees the scenery, its trees and rocks crying like himself.*" (45). The traditional Sámi world view included gods and spirits that there were present as invisible forces. Furthermore, Sámi also related strongly to superstition and relied on shamans with respect to the interpretation of the world around them. Shamans were recognized as having the powers to cause and heal illnesses. The basic values of Sámi culture obliged people to live in peace with each other in their daily life, to respect different lifestyles, to regard animals as equals and to think positively about nature (47). These values were threatened and finally displaced by the forceful missionization of the Sámi by the protestant state churches of Denmark, Norway, or Sweden during the 18<sup>th</sup> century.

In a health culture based on animism, the first task in treating illnesses was to find the cause of the illness. Treatment was based on the cause, not the symptoms. The diseases were mostly believed to be caused by wicked spirits. The illnesses were divided into non-curable diseases of God, illnesses caused by other people and ordinary illnesses (13). An even more powerful magic was needed to make the bad spirits leave. Animals were respected in general. Some animals were sacred to the Sami. It was believed that harming a frog in any way could cause a fatal disease. Some animals were regarded as omens of diseases. Foxes and owls were considered as omens for the people living in their neighbourhood (48).

Christianity started to replace the beliefs and lifestyles based on animism from the 13<sup>th</sup> century onwards. In the west, the influence came from the Catholic church and, in the east, from the Greek Orthodox church (13, 49). Active conversion was started by the Lutheran state church in the 17<sup>th</sup> century. In the early 1800's, the sectarian Laestadian movement emerged and is still strongly represented in the Sami region today. The founder of the movement, Lars Levi Laestadius, was partly Sami. He used the shamanistic elements

of the traditional Sami religion in his conversion efforts (49).

Despite the long-term influence of Christianity, many pre-Christian beliefs and ceremonies have persisted until today (48, 49). According to E. Helander (48), the word “witch” was used in the 20<sup>th</sup> century to refer to quacks, healers and visionaries. A Norwegian study shows that the Sami still use traditional healers next to the services of the official health care system (48, 50, 51).

### FROM SIIDA TO CULTURAL SIIDA – OBSERVING THE CHANGING SOCIAL ENVIRONMENT

The sense of family and community has traditionally been one of the central values of the Sami culture. Traditional Sami family life is governed by a sense of permanence and social control (52). The system of Siida, which existed among the Skolt Sami until the 20<sup>th</sup> century, was based on an idea of shared responsibility and caring for one another within the family. The knowledge and skills needed in life were learnt by working under the guidance of the elders (27, 53). The significance of family as an educator in Sami society faced a challenge in 1947, when the new Act on Education came into force. According to the Act, compulsory attendance at school was also to be applied to the children who lived more than five kilometres away from the school (54). Following this Act, the migratory, or “catechist”, schools for the Sami were discontinued. This schooling system began in the 18<sup>th</sup> century. Its aim was to provide basic schooling for the Sami. Many of the teachers were Sami (3). The Sami school generation after 1947 is called the “boarding school generation”. The new environment for this generation of children and adolescents was marked by long separations from their parents and attempts to make them abandon the Sami language and customs. The boarding school system has gradually been abolished due to better transportation and an infrastructure that replaces boarding with daily long commutes for school children between distant homes and schools. The “boarding school generation” represent the parents and grandparents of today’s Sami children and youngsters. The particularly strong experience of the Skolt Sami was the forced relocation from Petsamo to Sevettijärvi and Nellim after World War II, following the cession of the Petsamo area to the Soviet Union. To make matters even worse, the Skolt Sami were discriminated against by the other Sami.(55). Semenoja writes

from first-hand experience: “*Is there anyone more sad than those who have lost their connection with their language and culture, who have learned to despise their own people and still know that they belong to that despised minority?*”

Mixed marriages also contributed to the assimilation of cultures along with the changes in family structure caused by the educational system. Müller-Wille has studied the encounters between two cultures, Sami and Finnish, in the late 1960’s. At that time, the Finnish population was a new element in the demographic structure of the municipality of Utsjoki. The most rapidly growing group at the time consisted of the individuals with a mixed marriage background. It seemed, from a cultural point of view, that the majority of the mixed population had begun to identify with the predominant ethnic group of Finns (24).

In the 1970’s, the Sami started to revive their culture as a counterforce for the cultural assimilation and the possible disappearance of the Sami language and culture. In the 1980’s, the Sami language was threatened by possible extinction, unless something could be done immediately (56). In the 1990’s, the Sami cultural rights have become more established. Finnish society does not try to obliterate the Sami culture any longer, as it did a few decades ago. The actions of today’s education officials are based on a multicultural approach. According to the Finnish constitution, the Sami have a right to practise their culture (26, 57). Finland also ratified the European Charter for Minority and Regional Languages in 1998. The Charter obliges the Finnish authorities to organise both the instruction of Sami languages and the education in Sami at all levels of comprehensive and senior secondary schools (3). Cultural *Siidas* have been founded in the Sami region to revive the Sami language and culture.

The current versatile value base of Sami families is a consequence of the cultural assimilation characteristic of these families. The Sami identity of Sami children and adolescents is supported in all aspects of life. According to a study on the family dynamics of the Sami by Vuorio (58), Sami families continue to be very functional and close communities. In addition to the health culture dominant in the families, the culturally defined world view of the nursing and teaching staff affects the evolution of health culture among Sami children and adolescents.

## CONCLUSIONS

From the point of view of health culture, the different aspects of the daily life of the Sami make up a unique cultural context. As a context for health culture, the everyday life environment is a mixture of permanent and changing elements. The physical environment is defined by the elements of the northern natural environment. The built-up environment is shaped by the development of the economy and technology. The natural environment remains mostly the same over time, despite certain long-term changes, such as changes in temperature, that affect the ecosystem (36). The built-up and social environments have turned out to be aspects of the context that change constantly. In these environments, both gradual and sudden shifts occur that affect health culture. The connection between the physical environment and the health culture evolves, primarily, through the adaptation of people to the features of the environment, such as light and temperature. In addition, there are elements in nature that have been traditionally used by northern indigenous people for improving health and treating illnesses. According to the definition of health culture, one of its dimensions is the concept of space (e.g. 59). In the case of people living in the sparsely populated (29) northern environment, we can speculate on the significance of space for the Sami concept of health.

The question concerning the relationships between different factors comes up in the analysis of the aspects of the physical environment. How, for example, does the built-up environment affect the natural environment and, consequently, the health culture? This article does not discuss the current threats to the northern natural environment, such as atmospheric pollution, intensive use of reindeer pastures, timber felling, or the ever-growing tourist industry. These phenomena are discussed in the north, and they do affect the living environment of the Sami and other local residents such as Finns, and, consequently, their health culture. The Sami opinion on the above-mentioned phenomena places an emphasis on sustainability, a concept that is implicit in the Sami way of life with its respect for nature.

The development of the Sami livelihoods has probably shaped the health culture more than is commonly believed. The contents of work and the ways of working have radically changed the practices of

fulfilling the basic needs. The different generations of contemporary Sami have diverse experiences of different sources of income and life-styles, diet, clothing, travelling, working and cohabiting with all generations.

Values and beliefs make up the cognitive dimensions of health culture (18). The value and belief base of the Sami as a basis for health culture seems to be multilayered due to the mixing of animism, Christianity and other beliefs. The different conditions for the development of cultural identity are one of the factors separating Sami generations. The elder Sami generation grew up in a less disturbed and seemingly homogeneous environment defined by their culture. The post-war generation experienced assimilation to the dominant culture, in which some of the Sami permanently lost contact with their Sami roots. The Sami adolescents of today can grow up in an environment that is pro-Sami and culturally mixed.

## REFERENCES

Note: The reader should be aware that the most of the literature on this topic is in languages other than English. The authors decided to list all sources in their original languages and are willing to provide any further information to the interested

- Välilä A, Laiti-Hedemäki E, Birge ja Eale Dearvan. Saamelaisten sosiaali- ja terveyspalveluprojektin loppuraportti. Sosiaali- ja terveysministeriön monisteita 1997:25. Sosiaali- ja terveysministeriö, Helsinki 1997.
- Aikio P, Aikio, A. Saavatto saamelaiset elää rauhassa. In: Scheinin M, Dahlgren T. Toteutuvatko saamelaisten ihmisoikeudet. Ihmisoikeusliiton julkaisusarja no 7. Helsinki University Press. 2001: 92-119.
- Aikio-Puoskari U. Saamen kielen ja saamenkielinen opetus Pohjoismaissa. Tutkimus saamelaisten kielellisistä ihmisoikeuksista Pohjoismaiden kouluissa. Lapland's University Press. Rovaniemi 2001.
- Magga R. Saamelaisten oikeudet omaan kieleen ja kulttuuriin sosiaali- ja terveydenhuollossa toteutuvat huonosti. Sosiaaliturva 1998; 4: 20-22.
- Kalkas H, Sarvimäki A. Hoitotyön etiikan perusteet. WSOY, Juva 1996.
- Lea A. Nursing in today's multicultural society: a transcultural perspective. Journal of Advanced Nursing 1994; 20 (2); 307-13.
- Lohiniva V. Terveystieteiden työ ja koulutus pohjoisessa toimintaympäristössä. Acta Universitatis Ouluensis D Medica 509. Oulun yliopisto, Oulu 1999.
- Papadopolous I, Tilki M, Alleyne J. Transcultural nursing and nurse education. British Journal of Nursing 1994; 3 (11); 583-586.
- Reiter RJ, Leppäluoto J. Melatonin as a Hormone and Antioxidant: implications for organisms at high latitudes. International Journal of Circumpolar Health 1997; 56: 4-11.
- Näyhä S, Sikkilä K, Hassi J. Cardiovascular Risk Factor Patterns and their Association with Diet in Saami and Finnish Reindeer Herders. Arctic Medical Research 1994; 53: Suppl.2: 301-304.
- Laurila A, Bloigu A, Näyhä S, Hassi J, Leinonen M, Saikku, P. Chlamydia pneumoniae and helicobacter pylori infections in Sami and Finnish reindeer herders. Journal of Circumpolar Health 1997; 56: 70-75.
- Alten I, Minde G-T. eds. Samisk folkemedisin i dagens Norge. Rapport fra seminar i regi av Institutt for sosiologi og Senter for samiske studier, Tromsø 26.-27.nov. 1998. Skriftserie Nr 9, Universitet i Tromsø, Tromsø 2000.
- Itkonen TI. Suomen lappalaiset vuoteen 1945. Osat I – II. WSOY, Porvoo 1984.
- Rathje L. Notes on Saami folk medicine. In: Kvist R, ed. Readings in Saami history, culture and language II. University of Umeå, Umeå, 1991; 93-108.
- NOU, Norges offentlige utredninger 1995: 6, Plan for helse- og sosialtjenester til den samiske befolning i Norge. Statens forvaltningstjeneste seksjon statens trykning. Oslo, 1995.
- Hammersley M, Atkinson P. Ethnography. Principles in practice. 2nd edition. Routledge, London 1995.
- Leininger M. Transcultural Nursing as a Global Care Humanizer, Diversifier, and Unifier. Hoitotiede 1997; 5 (9); 219-225.
- Weidman HH. Research strategies, structural alterations and clinically relevant anthropology. In: Christman NJ, Marezki TV, eds. Clinically Applied Anthropology. D. Reidel Publishing Company, Boston, U.S.A., 1982; 201-241.
- Reynolds-Turton CL. Ways of Knowing about Health. An Aboriginal Perspective. Advances in Nursing Science 1997; 19 (3); 28-36.
- Räsänen M, Räsänen R. Ihminen fyysisen ympäristön viitekehityksessä. In: Suojanen P, Saressalo L, eds. Kulttuurin kenttätutkimus. Tampereen yliopiston kansanperinteen laitoksen julkaisu 9. Tampereen yliopiston jäljennepalvelu 1984; 39-49.
- Ahponen P. Kulttuurin pesäpaikka. Yhteiskunnallisia lähestymistapoja kulttuuriteoriaan. WSOY, Helsinki 2001.
- Carpelan C. Saamelaisten esihistoriaa ja saamelaisarkologiaa. In: Linkola M, ed. Lappi. Saamelaisten ja suomalaisten maa. Karisto Oy:n kirjapaino, Hämeenlinna; 36-37.
- Tilastokeskus. Pohjois-Suomen katsaus 2001. Multi-print, Oulu 2001.
- Müller-Wille L. Kahden kulttuurin kohtaaminen - Saamelaiset ja suomalaiset Utsjoella. Arktisen keskuksen tiedotteita 18, Rovaniemi 1996.
- Snellman A. Saamelaiset ja suomalaiset - vähemmistö- ja enemmistökulttuurin kohtaamisesta sosiaali- ja terveydenhuollossa. In: Birge ja Eale Dearvan. Saamelaisten sosiaali- ja terveyspalveluprojektin loppuraportti 1997:25. Sosiaali- ja terveysministeriö, Helsinki 1997; 8-9.
- Laki saamelaiskäräjistä 974/95
- Nickul K. Saamelaiset kansana ja kansalaisina. SKS, Helsinki 1970.
- Müller-Wille L. From reindeer stew to pizza: the displacement of local food resources in Sapmi, northernmost Europe. Fennia 2001; 179 (1); 89-96.
- Sandström O, Vaara I, Heikkuri P. et al. Ylä-Lapin luonnonvarasuunnitelma. Metsähallituksen metsätalouden julkaisuja 38. Oy Edita Ab, Helsinki 2001.
- Lapin ympäristökeskus. Ympäristön tila Lapissa. Gummerus Kirjapaino Oy, Jyväskylä 1997.
- Helander J. Suomen saamelaisväestö ja heidän elinkei-

- nonsa. Diedut Nr. 2 1991. Sami Instituutta, Guovdageaidnu 1991.
32. Leppäluoto J, Hassi J. Physiologigal Adaptation of Humans to the Finnish Climate. In: Heinonen J, ed. Cold Climate Research in Finland. The Finnish Government Printing Centre, Helsinki 1989.
  33. Hassi J, Kolivuori T, Pramila S. et al. Poronhoitajien työterveyshuolto: kokeilu ja suositukset. Oulun aluetyöterveyslaitos, Oulu 1991.
  34. Partonen T. Valoako masennuksen hoidoksi? Duodecim 1996; 112: 1521-1522.
  35. Partonen T. Valoa kansalle. Duodecim 1999; 115: 1185-1186.
  36. Järvinen A. Pohjoinen ekologia ja ympäristön muutokset. In: Kulonen UM, Pentikäinen J, Seurujärvi- Kari I. eds. Johdatus saamentutkimukseen. SKS, Helsinki 1994.
  37. Helander E. Sami Medical Concepts and Healing Methods. Baiki-the North American Sami Journal 1994; 12: 6-7.
  38. Torikka R. Saamelaiset: alkuperäiskansa ja vähemmistö. In: Scheinin M, Dahlgren T, eds. Toteutuvatko saamelaisten ihmisoikeudet. Ihmisoikeusliiton julkaisusarja no7. Helsinki University Press, Helsinki 2001; 7-37.
  39. Aikio P, Helle T. Poronhoito – katsaus Lapinmaan perinteisen elinkeinon historiaan. In: Linkola M, ed. Lappi Saamelaisten ja suomalaisten maa. Karisto Oy:n kirjapaino, Hämeenlinna 1985; 189-205.
  40. Linkola M. Saamelaisten poropaimentolaisuuden vaiheet. In: Linkola M, ed. Lappi Saamelaisten ja suomalaisten maa. Karisto Oy:n kirjapaino, Hämeenlinna 1985; 167-187.
  41. Pelto PJ, Müller-Wille L. Reindeer Herding and Snowmobiles: Aspects of a Technological Revolution (Utsjoki and Sevettjärvi, Finnish Lapland). In: Folk 1972; 14-15: 119-144.
  42. Lapin Kansa 22.10.2000. Opissa aidalla. Skalluvaaran erotuskoulussa lasten päivä rakentuu porotöiden ehdoilla.
  43. Aikio S. The Sami History. In: Aikio S, Aikio-Puoskari U, Helander J. The Sami Culture in Finland. Lapin Sivistysseuran julkaisu 49, Painatuskeskus Oy, Helsinki 1994; 10-49.
  44. Helander J. Economy and Economic Occupations. In: Aikio S, Aikio-Puoskari U, Helander J. The Sami Culture in Finland. Lapin Sivistysseuran julkaisu 49. Painatuskeskus Oy, Helsinki 1994; 70-94.
  45. Turi J. Kertomus saamelaisista. VWSOY, Porvoo 1979.
  46. Sergejeva J. Luonnonläheisyys uskonnon perustana. In: Pennanen J, Näkkäläjärvi K, eds. Siiddastallan Siidoista kyliin. Gummerus Kirjapaino Oy, Jyväskylä 2000; 221-227.
  47. Helander E. Saamelainen maailmankuva ja luontosuhde. In: Seurujärvi I, ed. Beavvi Manat. Saamelaisten juuret ja nykyaika. SKS, Helsinki 2000; 171-182.
  48. Helander E. Noidat ja parantajat ennen ja nyt –saamelaisten parannusmenetelmistä. In: Pennanen J, Näkkäläjärvi K, ed. Siiddastallan. Siidoista kyliin. Luontosisidonnainen saamelaiskulttuuri ja sen muuttuminen. Gummerus Kirjapaino Oy, Jyväskylä 2000; 238-245.
  49. Pentikäinen J. Saamelaiset Pohjoisen kansan mytologia. SKS. Karisto OY:n Kirjapaino, Hämeenlinna 1995.
  50. Fugelli P. Skjult helsebehov blant same? In: Sami Medica 3/86. Nordkalotten Offsettrykkeri A/S, Karasjok 1986; 43-53.
  51. Sande H, Winterfeldt S. Four Sami Healers – A Preliminary Interview Study. Arctic Medical Research 1994; 53: Suppl. 2. 238-246.
  52. Stordahl V. Changing roles in Sami families – a case illustration. Arctic Medical Research 1995; 54: Suppl. 1: 42-46.
  53. Näkkäläjärvi K. Siita eli lapinkylä yhteisöelämän perustana. In: Pennanen J, Näkkäläjärvi K, ed. Siiddastallan Siidoista kyliin. Gummerus Kirjapaino Oy, Jyväskylä 2000; 138-147.
  54. Oppivelvollisuuslaki 790/1946
  55. Semenoja M. Suomen koltta-saamelaiset. In: Saarinen T, Suhonen, S, ed. Koltat, karjalaiset ja setukaiset. Pienet kansat maailmojen rajoilla. Snellman-instituutti. A-sarja 19, 1995; 82-87.
  56. Aikio M. Saamelaiset kielenvaihdon kierteessä. Kielisosiologinen tutkimus viiden saamelaiskylän kielenvaihdosta 1910 – 1980. SKS. Mäntän Kirjapaino Oy, Mänttä 1988.
  57. Constitution of Finland, Act 731/99.
  58. Vuorio B. Saamelaisten perhedynamiikka. Pro gradu –tutkielma. Tampereen yliopisto, hoitotieteen laitos, Tampere 1997.
  59. Spector RE. Cultural Diversity in Health & Illness. Appleton & Lange, Stamford, Connecticut 1996

*Hellevi Tervo*

*Perunkajärvi, itäpuoli 801*

*FIN-96900 Saarenkylä*

*Finland*

*hellevi.tervo@roiami.fi*