

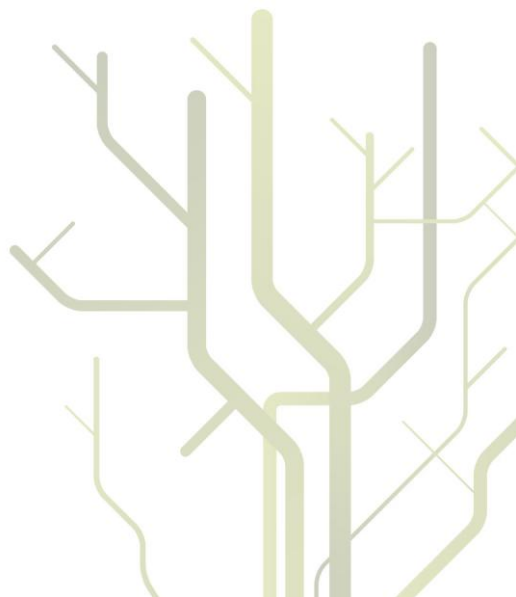
Aspects of health services in Sami areas

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Margrete Gaski

1 INTRODUCTION

1.1 WHAT IS THIS THESIS ABOUT?

Better health service for Sami people has been lifted on the political and professional agenda for many years and from several sides. As a response on a situation with difference in health gradients between the northernmost county of Finnmark, where many Sami live, and the counties further south in Norway, government actions has been implemented since the 1960s to strengthen the Sami people. Since 1980, problems of under-utilization of health services and communication between health workers and Sami patients are brought into focus, and Sami spokesmen still claim that the health services do not ensure the needs of Sami patients. The literature concerning health services for Sami patients indicate an early conclusion that the existence of health services research in the fields of health care utilization among Sami is limited to a few studies, not very wide-ranging. Along with the lack of knowledge about results of governmental action following the political and professional concerns related to health services for Sami, research needs for this thesis were identified. The overall aim of this thesis is to explore empirically aspects of health services in Sami municipalities, and compare with other indigenous people.

This work is carried out in the interface between several fields and disciplines. It draws upon theory and research from political science, geography, anthropology, and health science. It is based on three separate studies.

1.2 STRUCTURE OF THE THESIS

Chapter 2 of this thesis outlines aspects of health care to indigenous people in general, and particularly the health services concerning patients in Sami municipalities. Chapter 3 is a summary of the papers, including methods and main findings. Chapter 4 is a general discussion of the findings and contributions of the papers and treats methodological issues that were not thoroughly considered in the papers. In particular, challenges in the use of control groups, and challenges concerning the limitation of who are Sami people, are discussed. The need to discuss the arrangement and value of tailored solutions in Sami health service is brought up. The thesis is then organized as a collection of 3 separate papers.

1.3 LIST OF PAPERS

Paper I: Gaski M, Melhus M, Deraas T and Førde OH. Use of health care in the main area of Sami habitation in Norway – catching up with national expenditure rates. *Rural and Remote Health* 11(online), 2011: 1655. Available from: <http://www.rrh.org.au>

Paper II: Gaski M, Abelsen B, and Hasvold T. Forty years of allocated seats for Sami medical students – has preferential admission worked? *Rural and Remote Health* 8 (online), 2008: 845. Available from: <http://www.rrh.org.au>

Paper III: Gaski M. A comparative study of strategies for recruiting young indigenous people to become physicians. Nearly fifty years of preferential admission and support. (Conditionally accepted in *Human Resources for Health*)

2 BACKGROUND

Chapter 2 outlines aspects of the health services for indigenous people in general and particularly health services for Sami people. The principles for justification of preferential policy for educating more indigenous health personnel are outlined. Quantitative studies of somatic health services utilization and of Sami patients and their providers are reviewed. Main points in shaping a Sami health service policy are described.

2.1 ASPECTS OF HEALTH AND HEALTH CARE FOR INDIGENOUS POPULATIONS IN WESTERN COUNTRIES

In western countries like Australia, New Zealand, the United States and Canada, disparities in health status between the indigenous peoples and the majority are well documented. Most indigenous populations have high mortality rates for specific diseases and injuries, like heart disease among Māori, intentional self harm among Canadian First Nations peoples, and diabetes among American Indians and Alaska Natives. The relative size of indigenous/non-indigenous mortality disparities is highest in New Zealand and Australia (Oxfam 2007, Global Health Watch 1, Horton 2007, Bramley 2004). Although there are similarities in health and health care for indigenous people all over the world, there are also huge differences between groups of indigenous people in different countries. The gap in life expectancy between indigenous peoples and the rest of the population is 17-18 years in Australia, 8-9 years in New Zealand, 5-7 years in Canada, and 7-12 years in the United States (Ringold, 2005).

Infant mortality rates (deaths per 1,000 live births) are often used as an indicator of the health care available to a population. The gap in infant mortality rates between indigenous peoples and the majority population is 5 in Australia, 2 in New Zealand, 3 in Canada and 2 in the United States (Ringold, 2005, UN Statistics Division, 2005). Health services are important in the social distribution of health. A principal concern when the health service utilization is measured is the access to services. Access to health care, especially in early childhood, is one of the major determining factors of inequality (Mackenbach & Bakker, 2002). Access is cultural, geographical, and financial, although in the publicly funded health service in Norway the financial access is of secondary importance.

The geographical literature discusses spatial barriers of access to care, like distance or travelling time to hospital, and there are two assumptions: First; the nearer one is to services, the greater is the access. Second; people living in areas with more services (e.g. more physicians) have greater access to health care (Rosenberg and Hanlon, 1996). The socio-cultural literature is concerned with securing equal cultural access. In order to cope with clinical practice in a multicultural society, successful communication with the patients is a key. Communication can be defined as social interaction in which understanding hinges on whether the participants share language and culture. Among the communication and interaction problems that are revealed between physicians and patients from minority cultures, are language problems, involving families in clinical decision making, and beliefs about disease that vary from the biomedical model (Park et al., 2006). Misunderstandings and miscommunication are revealed between physicians and indigenous peoples who are westernized, e.g. in Australia and USA (Cass et al., 2002, Jecker et al., 2002).

The indigenous people are underrepresented among the health workforce. The literature about cultural access tells us to produce a health work force that draws on the knowledge and skills of people from all segments of the society; indigenous people included. As 2.4 % of the inhabitants in Australia are Aboriginals, only 0.2 % of the doctors and 1.1 % of the medical students are Aboriginals (Wenitong, 2005). In Canada 4.5 % of the population are Inuit, but only 0.7 % of the medical students are Inuit (Dhalla et al., 2002). A strategy chosen by many medical schools is preferential admissions for indigenous medical students to produce a kind of health workforce that draws on the knowledge and skills from indigenous people.

From the extensive literature about education of indigenous health care providers, language problems and communication between minority patients and providers, the rationale for admission and support policies in medical school favouring indigenous people contains two principles (Nickens, 1992): *The equity principle* is based on equity and social justice; it concerns educational opportunities to all citizens and compensation for past societal discrimination. In that respect preferential admission is supposed to even out barriers so that more indigenous doctors can be educated. *The diversity principle* is built on a belief that minority physicians function differently from majority physicians. Therefore, society has an interest in increasing their numbers. The diversity principle is based on two types of arguments and literature. The first argument is that a diverse population of doctors will *better* serve a diverse population of patients. Resuming the literature about cultural access, we know

that communication between providers and patients is likely to be less effective in some socioeconomic groups. Linguistic problems and cultural differences, e.g. different concepts of health and illness between providers and users, may shape barriers for effective communication and treatment. A literature review concludes that ethnic concordance between patients and physicians is associated with better communication and higher patient satisfaction (Cooper and Powe, 2004). A study found that because the association between ethnic concordance and higher patient ratings of care is independent of patient-centred communication, other factors such as patient and physician attitudes may mediate the relationship (Cooper, 2003). Second, the diversity principle is also based on studies indicating that minority physicians serve disproportionately *more* patients of their own ethnic group (Keith et al., 1985, Komaromy et al., 1996), and that physicians from underrepresented minority groups are more likely to serve minority patients (Cantor et al., 1996).

2.2 HEALTH SERVICES FOR SAMI PEOPLE

Along with the situation among other native people in westernized regions such as North-America, Australia and New Zealand, the health of Sami people has traditionally been worse than in the majority population. Nearly fifty years ago, the infant mortality in Finnmark, where most Sami people live, was 24.6 per 1,000 and in line with the poorest countries in Europe, compared to 17.1 in the rest of the country. Today the infant mortality is 3.6 compared to 3.0 in the rest of the country and below the EU average (Statistics Norway years 1961-65 and StatBank Norway years 2005-2009, Eurostat, 2008). This trend in infant mortality indicates the progress in medical health services for Sami people. The assimilation of Sami people in Norway has led to a loss of Sami language and traditional culture, but on the other hand Sami people today are well educated and there are not found any telling health differences between Sami people and other Norwegians today (Special Study Group of Sami Statistics, 2009). Although there are no telling health differences, there is a lack of knowledge about health care utilization.

The literature about health service utilization is extensive, but there is a limited scientific basis for describing inequalities in the utilization of health care services among Sami people compared to the majority population in Norway. A study by Per Fugelli carried out in 1980 concluded that linguistic and cultural barriers prevented Sami patients from going to the

doctor, leading to an inferior health service for Sami people (Fugelli, 1991). This study had been quoted in governmental plans since then and seemed to be an important scientific study that was often referred to and made generalisations of, although the study is limited to a single Sami village and a population dominated by reindeer herders and their families (NOU, 1995). Still, in 2009 the Norwegian health government states that illness is probably not reported as often among Sami people as among other Norwegians. In the lack of quantitative studies which are adequate for making generalizations of, the Fugelli study and qualitative studies seem to be sources for this statement. In white papers it is stated that barriers result in an under-utilization of health services among Sami patients, and there are problems of cross-cultural communication like the health personnel do not know or understand the background, mindset, and manner of Sami people and often treat patients in a way that is culturally unfamiliar to Sami people (The Coordination Reform, 2009).

There are a few contemporary studies of Sami patients and their providers, but only Turi et al (2009) tries to measure the frequency in the use of health services. In the study of Sami adolescents (15-16 years old) and their non-indigenous peers they find that Sami and non-Sami youth use health services with equal frequency. In a study of mental health care (Sørli and Nergård, 2005), the Sami patients showed less satisfaction with all investigated treatment parameters than their Norwegian peers, including contact with staff and treatment alliance. In a cross-sectional study, Nystad et al. (2008) finds that the Sami-speaking patients express that they are less satisfied with the municipality GP (general practitioner) service than the Norwegian-speakers, and that misunderstandings between physician and patient due to language problems were more frequent. They launch 3 possible explanations; the first is about poor continuity in GP services, which affects some of the Sami municipalities. The second and third explanation affects the relational circumstances in the encounter between physician and patient. The article states that there are limitations concerning the ability to explain causal connections. What is not discussed is the third option of what the patient satisfaction actually could be a measurement of, namely traits in the patients and their expectations of the services. Could patient satisfaction rather be an expression of the attitudes of the patient (Cooper, 2003) as much as it is an expression of communication problems?

2.3 SHAPING THE SAMI HEALTH POLICY

Public policy is the course of action (or inaction) taken by the state with regard to a particular issue. To shape the public policy and government actions in a field is a process that involves interest groups. Actors will try to justify their arguments and claims. Sami participate in and influence the public health policy in Norway through Sami professional organizations, and through participation in elected politics including Sametinget (the Sami Parliament). A shift in minority policy in Norway started around 1960, from the harsh Norwegianization which led to a loss of Sami identity and language, to a policy to strengthen the Sami people as a group and implement social and economical efforts, having in mind a modernization of the Sami way of living and further integration in the Norwegian society (Stortingsmelding nr. 21 (1962-63)). The first years of the new policy did not involve a distinct change, only isolated initiatives was implemented. Allocated seats for Sami students in medical school were of the first initiatives of the new policy implemented to strengthen the Sami people. This took place at the University of Bergen in 1963.

Along with the establishment of a child and adolescent out-patient psychiatry clinic in 1984, the Sami out-patient clinic in 1987 and Sametinget in 1989, the growth of Sami institutions in Norway expanded, which can be interpreted as shifts in power structures. In politics and administration legitimacy was built up for Sami actors to be listened to. Political procedures have resulted in mutual recognition and political integration which includes the Sami (Broderstad, 2008). In the 1980s, Sami health worker organizations were established (Henriksen, 2009). Since this time, the interaction and communication between health personnel and Sami patients has gradually been taken into the public eye; put forward by Sami health professionals and other pioneers. In 1985, the Organization of Sami physicians acted to emphasize Sami language skills in medical school admission, regardless of the applicants having a Sami background. Although there have been Sami doctors educated since 1963, the majority of medical care for Sami people continues to be delivered by non-Sami physicians.

Sami politicians have tried to influence the making of a Sami health service policy by calling attention to and claiming that the health services do not ensure the needs of Sami patients. There is a lack of data about how wide-ranging the communication problems between Sami

patients and health personnel are. The Patient Ombudsman of Finnmark had in 2009 203 requests. 17 of those were presented by Sami-speaking individuals (Patient Ombudsman in Finnmark, 2009). In the discourse about health services for Sami patients in Norway the last few years, attention is given to cases where the health services is accused of not taking care of the needs of Sami patients. «The system do not allow for neither language nor cross-cultural communication or the patients' view of health. We do have two different understandings of culture in the Norwegian system and in the Sami system. As the public health service is a Norwegian one, it does not ensure the Sami patient»¹ says representative of Sametinget Tone Finnesen (Sami Radio webnews, 12.11.2007). She draws attention to the differentness of the Sami view of health. Her representation seems to be that all Sami patients have a view of health that differs from what other Norwegians have. The former president of Sametinget, Aili Keskitalo, makes herself a spokesman for a group of people that has become a victim in the Norwegian health service, and has not been recognized: «What we have learned is that Sami culture and knowledge is hard to get acknowledged within the Norwegian public health service. The Sami aspects disappear within this system»² (NSR, 28.3.2008). Even though the health among Sami people is as good as among other Norwegians, which makes the situation for indigenous people in Norway different from other indigenous people in western countries, the health service for Sami patients is still characterized by focusing on barriers and a poorer quality of health services. An ideal situation according to some main Sami politicians and health workers seems to be a Sami hospital trust including a Sami hospital (NSR, 28.3.2008, Henriksen, 2009).

2.4 RESEARCH PROBLEMS

The overall aim of this thesis is to explore empirically aspects of health services in Sami municipalities and government actions following the political and professional concerns related to health services for Sami and other indigenous people.

¹ ” Systemet... tar ikke hensyn til verken språk eller kulturforståelse, og heller ikke sykdomsforståelse. Vi har jo forskjellige kulturforståelser i det norske systemet og i det samiske systemet. Når helsevesenet er bygd opp etter et norsk system, så ivaretar det ikke den samiske brukeren.”

² ”All erfaring viser at det er vanskelig å få anerkjent samisk språk- og kulturforståelse innenfor det norske helsesystemet. Systemet er så stort at det samiske ofte forsvinner.”

The scientific basis for describing inequalities in the utilization of health care services among Sami people compared to the majority population in Norway is limited. Data in the often quoted Fugelli-study which described barriers and under-consumption of health care was collected more than 30 years ago. It was likely to assume that the assimilation and modernization of Sami people has led to a change in the perceived cultural and linguistic barriers. Paper I aims at studying the present utilization of healthcare services among the Sami people by investigating expenditure on somatic hospital and specialist service in Norway at present time. Is there an under-utilization of health care services?

In 1963, the first medical training institution to adopt preferential admissions for Sami medical students was the University of Bergen. The University of Tromsø followed suit later. The policy was to provide a physician workforce that was familiar with Sami language and culture. Paper II aims at exploring to what extent the physicians admitted to training on allocated Sami seats have been working in Sami municipalities. How many Sami physicians were educated? Did preferential admissions actually lead to more Sami physicians working in Sami communities, and did they stay there?

Similar preferential admissions policy exists for indigenous groups in western countries however concepts with similar labels have different policies across contexts, and similar policies are disguised by different terminology. Little research is accomplished to evaluate the effects of the preferential policies (Bollinger, 2003, Spencer et al., 2005, Ratima et al., 2006, and Lawson et al., 2007). The aim of the final paper is to identify the universities' stated objectives and strategies when recruiting young indigenous people to medical school, and second, to identify how the results of various strategies that target indigenous students within medical programs have been measured.

3 SUMMARY AND THE RESULTS OF THE PAPERS

This chapter presents a summary of the papers, including methods and main findings.

3.1 METHODS AND METHODOLOGICAL CONSIDERATIONS

There are different reasons on which different methods are used in this thesis. The most fundamental is that it is my conviction that research methods should follow the research questions in a way that offers the best chance to obtain full answers. This means that one has to choose the combination or mixture of methods and procedures that works best to answer the research questions, having pragmatism as the philosophical partner (Johnson & Onwuegbuzie, 2004). A justification for combining different research methods is complementarity (Greene et al., 1989, Bryman, 2006); different methods are used to measure different facets and build a more complete picture, when bringing together a more comprehensive account of the Sami health policy and the health services for patients in Sami municipalities.

A characteristic of quantitative methods is that it refers to investigations of quantitative properties and relations. Quantitative purists maintain that social science inquiry should be objective, meaning that time- and context-free generalizations are possible (Nagel, 1986). The study of health care expenditure is in many ways a typical quantitative study, dealing with a comprehensive data-set and rates. The retrospective study of allocated seats for Sami students is also a quantitative study but with a small N. A main issue for social scientists in studies like this is to search for structure in the data to reveal a pattern (Bjørndal & Hofoss, 2004), in this case of which groups were more apt to be educated on allocated Sami seats, be recruited to work in Sami communities, and stay there. The third study is comparative. A common concern in many definitions of cross-national comparative research is to observe social phenomena across nations (Hantrais, 1999). There is not *one* comparative method, and both quantitative and qualitative techniques are used in this tradition. The comparative study in this thesis brings in questions usual for quantitative research like counting the frequency of reports of results. A more qualitative aspect adds interpretations of observations from the qualitative tradition and case studies including categorization that does not involve numbers. The qualitative researcher is thought to be context based. The subjective perspective of the researcher is supposed to enrich the quality of the research (Ercikan & Roth, 2006).

An outline of the methods and data is shown in Table 3.1. The research processes resulting in Paper II and Paper III overlap in the way that two of the nine cases in Paper III also appear in Paper II.

Table 3.1: The research themes, methods and data

<i>Research theme</i>	<i>Methods and data</i>
Paper I explores the current utilization of health care services in Sami municipalities.	Data on expenditure of somatic hospitals and specialist service is retrieved from Norwegian Patient Registry, and age- and sex-adjusted expenditure rates are calculated. Predominantly Sami and non-Sami municipalities are compared as well as comparison of the national average.
Paper II explores impacts of the allocated seats for Sami students, regarding education, recruitment and retention of Sami physicians.	A retrospective study of the work experience of students admitted to medical school on allocated Sami seats in 1963-86 and 1991-2000 at two Norwegian universities. Quantitative study with N=38. Data were collected from two universities to identify students admitted on allocated Sami seats and review the graduation rate. Data from several sources were used to scrutinize the careers of the Sami graduates.
Paper III explores strategies when recruiting young indigenous people to medical school, and identifies how the results have been measured.	A comparative study with a radial categorization approach to examine the strategies. Data were collected from web sites, program brochures, scientific literature, and official documents as well as staff from the included universities.

Methodological considerations which were not thoroughly considered in the papers are discussed in chapter four, general discussion.

3.2 PAPER I

USE OF HEALTH CARE IN THE MAIN AREA OF SAMI HABITATION IN NORWAY – CATCHING UP WITH NATIONAL EXPENDITURE RATES

The aim of the paper is to explore whether somatic hospital services and specialist care are under-utilized among Sami people. In 1980, a study of a Sami village determined that a low rate of health expenditure on Sami patients had led to inferior health services for the Sami people, with the average consultation rate 6 times lower than the Norwegian national average.

The results from the 1980-study have been interpreted as a measure of health care utilization among Sami people in general, although 2/3 of the Sami in this study were reindeer herders and their families, facing extraordinary challenges as the work of both reindeer herders and their families used to be influenced by the wandering of the reindeers. Since 1980, few investigations on differences in the utilization of medical services between Sami people and the rest of Norway have taken place. Our study investigates the current health expenditure in somatic hospital and specialist service in the Sami municipalities. Age- and sex-adjusted data on expenditure of somatic hospitals and specialist service is retrieved from Norwegian Patient Registry. Predominantly Sami and non-Sami municipalities are compared, as well as a comparison with the national average.

The study demonstrates that the overall public hospital expenditure rate in Sami municipalities is above the national average and equivalent to corresponding municipalities in the same geographical area. However, there was a considerable variation among the Sami municipalities. The age groups 35-49 and 50-64 in all Sami municipalities have higher expenditure rates than the national average regarding out-patient contacts and hospitalizations, while the expenditure rate on the elderly (≥ 80 years) is below the national average in most Sami municipalities. In addition to the public sector, there is a considerable volume of private practice specialist health care, mostly public funded and in urban parts of Norway. If the use of specialists in private practice is included, there is less variation in total out-patient expenditure rates in the Sami municipalities, with one exception. The municipalities with the lowest rate of public expenditure have the highest rate on private expenditure.

Our study found no marked differences in healthcare expenditure between the Sami and other municipalities. Overall healthcare use in Sami municipalities is above the national average and similar to corresponding municipalities in the same geographical area. However, a considerable variation in expenditure was observed among the Sami municipalities.

3.3 PAPER II

40 YEARS OF ALLOCATED SEATS FOR SAMI MEDICAL STUDENTS – HAS PREFERENTIAL ADMISSION WORKED?

This article examines the effects of a special admission policy for Sami medical students in Norway. In the 1960s, public health and health care were found to be poorer in Sami communities than in the rest of Norway. There were few doctors and none of them spoke Sami. Sami school leavers found it difficult to gain admittance to medical schools. In response to this situation, the medical faculty at the University of Bergen adopted a special admissions policy for Sami students in 1963. The University of Tromsø did the same in 1991.

Preferential admission is regarded as a political correct strategy as it on one hand alludes to educational opportunities and compensation for past societal discrimination (the equity principle). On the other hand, it is believed that a diverse population of doctors will better serve a diverse population of patients, and serve disproportionately more patients from their own minority group (the diversity principle). In this study we have analyzed whether the allocated seats for Sami produced the desired outcomes, emphasizing the diversity principle. The study population is admitted to medical school on allocated Sami seats in the two periods 1963-86 at the University of Bergen, and 1991-2000 at the University of Tromsø.

In assessing the outcomes, we revealed that in total 38 students were admitted to the allocated seats, and 32 graduated. 93 % of the candidates had practiced medicine in one of the two northernmost counties in Norway. Graduates during the 1960s and 1970s were more likely to have worked as GPs in the main area of Sami habitation. Regarding the workplace location variable, there were no differences between Sami and other physicians from the northern part of Norway who were educated at the University of Tromsø.

3.4 PAPER III

A COMPARATIVE STUDY OF STRATEGIES FOR RECRUITING YOUNG INDIGENOUS PEOPLE TO BECOME PHYSICIANS – NEARLY FIFTY YEARS OF PREFERENTIAL ADMISSION AND SUPPORT

The paper explores various strategies for recruiting and supporting indigenous people to become physicians, and identifies how the results of various strategies that target indigenous students within medical programs have been measured. A radial categorization approach was adopted to examine those strategies in Australia, New Zealand, the United States, Canada and Norway, to determine the defining attributes. Nine preferential admission programs were categorized according to the attributes of the program and grouped into four different models. The programs refer to strategies that include an indigenous admission stream and one or more of the following three attributes are in most cases included: different or additional selection factors for indigenous applicants; pre-admission initiatives are offered; and post-admission-initiatives are offered.

The reporting of results was non-standard. The level of success was generally not measured, or measured by the numbers of indigenous physicians who graduated. According to six of the nine projects, which had stated goals about addressing the lack of health professionals in indigenous communities, the results are generally not measured. However, some tracking projects have recently been established.

The study has revealed that a wide range of preferential admission and support programs are available for indigenous medical students. The paper suggests that evaluations are not a common part of preferential admission programs for indigenous medical students. In other words: there is a lack of studies which can demonstrate to what extent indigenous doctors admitted to medical school serve indigenous patients.

4 GENERAL DISCUSSION

First I reflect on how to handle ethnicity in health services research and especially in the study of health care expenditures, as the geographical delimitation is explained. Then aspects in the study of allocated Sami seats are focused upon. The categorizing and comparing of ambiguous concepts of preferential admission is discussed, and the arrangement and value of tailored solutions in Sami health service is questioned.

4.1 ETHNICITY AND GEOGRAPHICAL DELIMITATION IN SAMI HEALTH RESEARCH

As ethnicity was thought to be readily observable by outward appearance in the past, it is now suggested to characterize ethnic identity as chosen rather than ascribed (Hirschman et al., 2000). The shift in measurement and understanding means that ethnicity is a social more than a biological category. Individuals can identify with more than one ethnicity in different contexts. This fact has consequences for health and health services research. If the research is based on the ethnic affiliation of each individual and the aim is to call attention to health differences or differences in the utilization of health care among groups of the population, it is a general consensus in some countries that it might be expedient to use culturally determined ethnicity data, which is based on cultural affiliation, rather than data based on ancestry (Callister et al., 2007). This is explained by growing heterogeneity because of intermarriage and international migration.

Studies of ethnic minorities and health disparities are criticized for not discussing the assumption they do about the existence of two different cultures; the minority culture and the mainstream society (Hunt et al., 2004). Stereotypical ideas also characterize Sami studies. Many refer to "the Sami people" as if this is a delimited group of people that is easy to identify, based on an idea of two different cultures and isolated societies; the Sami and the mainstream Norwegian. Sami culture has for long been associated with an idea of a traditional culture (reindeer herding, Sami clothing and Sami language). But generalizations that were useful, no longer work in the growing diversity of Sami culture (Hovland, 1996:39). The traditional culture is easier to describe than a modern Sami identity which is dynamic and

heterogeneous. Sami affiliation used to be regarded as something negative. Today, Sami affiliation is wished for among many and could be used as a tool when competing for limited resources like in studies with restricted entry, employment and grants in culture or business. Norwegian government and Sametinget have in most cases intended that policies justified because of special Sami conditions should be implemented independent of ethnical belonging, using a geographical delimitation of an area which has a considerable Sami population (Eythórsson & Gaski 2001). The geographical area varies dependent of areas of policy. An often used limitation matches two principal policy areas, education and language. The governmental actions in those policy areas were first implemented in 6 municipalities in Norway, which is often regarded as the main area of Sami habitation.

The geographical delimitation in Paper 1

Viewed against this backdrop, we will not try to ‘force’ the population into a dichotomy of identities; either Sami or Norwegian. A geographical delimitation is chosen, reflecting the areas that are predominating Sami. The lack of data based on individual ethnicity makes the choice of delimitation easier. The obvious weakness of geographical limitation is that it will always be imprecise. However, an interesting policy issue is; would the use of complex culturally based data instead, help in identifying elements that are significant for health differences? And most important; would this contribute to diminish possible health differences (Callister et al., 2007)?

We use 3 different sources of data (Table 4.1) to justify the inclusion of 6 municipalities where a considerable part of the population has Sami belonging. None of the sources gives a complete picture of the proportion of Sami people living in different areas, but these are the best data sources there is. The first source of data is the Sami Census which was established in 1989 along with Sametinget in Norway. The share of the population who have registered in the Sami Census in the Sami municipalities is between 20 and 68 %. In 15 of the 17 neighbouring municipalities in Finnmark and Northern Troms there are between one and eight percent who have registered, and 16-17 % who has registered in the remaining two. There are reasons to believe that many Sami people avoid reporting their Sami belonging. Elements that make people refrain from registering in the Sami Census are that one does not want an official registration of the ethnical identity, or that the Sami identity might not result in a general interest in Sami politics (Pettersen, 2005). Using the second and the third source of data to illustrate where Sami people live, Sami language is a proxy for Sami ethnicity. Source

number 2 is the Saminor study, which is a population based study of health and living conditions in 24 municipalities in northern and central Norway (Lund et al., 2007). All residents aged 30 and 36-79 years were invited. Data from the questionnaires about which language is used at home, is used. The data were collected during 2003. Between 14 and 86 % of the population in the six Sami municipalities speaks Sami, compared to 4 % in the neighbouring municipalities. The available data from the neighbouring area comprises only 5 of the 17 surrounding municipalities, which were considered to be “most Sami”. The third data source is used by Sametinget when estimating the amount of people who is able to understand Sami language, and refers to a survey among the inhabitants of most municipalities in northern Norway (Sami Trade- and Development Centre, 2000). This survey tells that between 35 and 96 % of the population in the six Sami municipalities are able to understand Sami language, compared to 9-10 % in the neighbouring municipalities. However, this survey has some methodological vagueness (Nordic Sami Institute).

Table 4.1: Three illustrations on the Sami belonging profile in the Sami municipalities and the neighbouring area

<i>Area</i>	<i>Share of population 18 years and older, registered in the Sami census 2005</i>	<i>Share of population using Sami language at home (Saminor 2003)³</i>	<i>Share of population understanding Sami language (based on Sami Trade- and Dev. Centre 2000)</i>
Kautokeino	68.4	86	96
Karasjok	62.2	77	94
Nesseby	47.2	58	75
Tana	37.4	43	53
Porsanger	20.3	21	35
<i>Rest of municipalities in Finnmark (incl. S-V, Kv, Hfest)</i>	<i>5.3 Between 0.9 and 16.9</i>	<i>- Between 2 and 11⁴</i>	<i>10⁵</i>
<i>Comparison Area Finnmark</i>	<i>5.5 Between 0.9 and 16.8</i>	<i>-</i>	<i>10</i>
Kåfjord	20.5	14	46
<i>Comparison Area Northern Troms</i>	<i>4.3 Between 2.1 and 11.5</i>	<i>-</i>	<i>9⁶</i>
Main area of Sami habitation	34.4	48 %	64 %

³ Data available from only one municipality in N-Troms, and three municipalities in the rest of Finnmark, in addition to the six Sami municipalities.

⁴ Five of the 17 surrounding municipalities in Finnmark and Northern Troms.

⁵ The survey was carried through in 13 out of 14 municipalities.

⁶ The survey was carried through in 2 out of 3 municipalities.

The results of the surveys differ, and are most different in the two municipalities with the lowest share of people who speak or understand Sami language (Lund et al., 2007, Sami Trade- and Development Centre, 2000). The shares of population registered in the Sami Census are in most municipalities lower than the share speaking or understanding Sami language.

We have demonstrated that the proportions of Sami in the main area of Sami habitation varies among the 3 sources and all demonstrate high Sami populations in the 6 municipalities selected, and low numbers in the neighbouring municipalities.

Studies of expenditure rates: Small Area Analysis

If there still are cultural and linguistic barriers resulting in under-consumption, the optimum situation would be to have access to contemporary primary healthcare utilization data. The available quantitative data on utilisation of GP's services seemed to be inadequate for this purpose. The access to available data made us choose a study in the tradition of Small Area Analysis to reveal a possible under-consumption of health care today among the population of the Sami municipalities. Data from somatic hospitals and specialist service was chosen. The data used are the basic data for the economic settlement of health services, and is regarded as being of good quality.

A typical Small Area Analysis might calculate the utilization rate for a service in small areas, and attempt to explain the variability in rates as a function of potential determinants like differences in access and need, characteristics of the population, the patient's decision to contact a physician, or the medical care system itself like physician's diagnostic decisions, treatment decisions or health resource supply (Gittelsohn & Powe, 1995, Joines et al., 2003, Wennberg, 2004). Utilization rates represent events, not persons. It is not possible to distinguish among effects using expenditure rates alone. Additional information is needed to understand reasons for variations.

An important limitation in geographical analysis is that ecological variables may be misleading when areas are heterogeneous (Gittelsohn & Powe, 1995). If there is an under-consumption of health care among Sami compared to other Norwegians, these differences will be diluted and difficult to find using a geographical delimitation. The lower density of Sami people in an area, the more difficult is it to detect a possible under-consumption. In many

cases micro-level studies are necessary to support the conclusions and hypotheses that emerge from small area analysis (Folland and Stano, 1990).

No control group

In Paper I, our choice was not to use a control group for controlling expenditure rates of somatic hospitals and specialist service. From my point of view, the use of a control group gives associations to a randomised controlled trial, where all variables are stable except the one that is examined; in this case to be a *Sami* municipality. This is problematic, as long as each municipality is distinct. We did search for municipalities that matched our Sami municipalities with respect to distance to hospital, level of education, gross income, population density, and the making-up of industry and primary industries. Especially two of the municipalities were hard to match, because the educational standards are high above what we find in rural municipalities with such a high share employed in the primary industry. We chose to use the national average and the neighbouring municipalities as comparison areas.

Generalisability

We do measure the whole population and have not been estimating, so there are no elements of uncertainty that needs to be tested. We have calculated the range of the yearly rates in the municipalities over five years, to demonstrate how much the rates vary from one year to another. When it comes to the generalisability, we do not generalize beyond the years that are measured.

Although the expenditure rates in Sami municipalities are above the national average, we cannot disregard that there still are some small groups with lower expenditure rates.

4.2 IMPACTS OF ALLOCATED SEATS FOR SAMI MEDICAL STUDENTS

Focus on impacts regarding the diversity principle and primary health care

An objective of Paper II was to focus on impacts of allocated seats for Sami according to the diversity principle, concerning better and more care for Sami patients. The focus was not to review the impacts regarding the equity principle; to educate more Sami physicians because it is fair to give educational opportunities to a group as a compensation of past societal discrimination. If that had been the purpose of the study, analysis like effectiveness in advancing the targeted group would have been a principal concern, like which segments gains of the admission policy. Also the temporal factor would have been emphasized more, like the cumulative effect of subsequent generations building on the advancements made by the original favoured (Horowitz, 1985, in Jenkins, 1998).

Another aspect concerning impact of preferential policy is whether there might be drawbacks for the group privileged with preferential admission. Do we risk that a focus on Sami ethnicity and ethnic categories perpetuates historical discrimination and prejudices, instead of contributing to taking it away? Most societies are critical to such policies (Jenkins, 1998). The policy can contribute to a backlash against the indigenous group.

Methods of data collection and limited data

In the collection of data on who had been admitted to medical school on allocated Sami seats, our main challenge was that the administrative systems in the two medical schools differ, and the system was also changed during the investigation period in one of the schools. The system was simply not organized in a way that made it easy neither to collect the data needed for our research, nor to describe what had been done. The administrative system made the amount of applications each year from Sami applicants impossible to determine. The international reviewers demanded data on all Sami medical students, including those who had been educated beyond the allocated seats for Sami students. Such information could have been interesting and deepened the analysis.

No control group

In Paper II we considered comparing the workplace location of Sami physicians with the workplace location of other physicians educated at the same time and place and raised in small rural villages in e.g. the western part of Norway. As in Paper I, the use of a control group gives associations to a randomised controlled trial, where all variables are stable except the one that is examined; in this case to be a *Sami* physician. As long as each physician is distinct and the ethnicity is only one out of many features of a physician, we decided not to use a control group. We also know that studies prove that it is a tendency to stay and work in the same region of the country as the training was carried out (Bertelsen, 1963). And so it became an impossible task to find a matching control group to the Sami physicians from northern region of Norway educated at the University of Bergen in the west.

4.3 COMPARING PREFERENTIAL ADMISSION

The strategies compared do not share all defining attributes

Paper III is inspired of policy analysis as my interest is in implementation issues of preferential policy. The main focus is on identifying which strategies the preferential policy for admitting indigenous students is translated into at different medical schools. As the concepts of preferential admissions among different nations and medical schools are ambiguous, it is a challenge to compare the cases. The study uses a technique from comparative theory to examine strategies. A radial categorization is an alternative guideline for comparing. Radial categorization is challenging the classical way of categorization, which implies that all members of a category share the full complement of attributes by which one could recognize the overall category. Radial categorization can be used to avoid conceptual stretching (Sartori, 1970), meaning that the definition of a concept is becoming more and more general when adapting to fit new cases. Using a radial categorization approach, it is possible that two preferential policy strategies will not share all of what it seen as the defining attributes. The overall meaning of the category is anchored in a “central subcategory”, which corresponds to the best case or prototype of the category. “Non-central subcategories” do not necessarily share all defining attributes with the central subcategory (Collier & Mahon, 1993). However the study compares strategies, and is not comparative in the meaning of discovering empirical relations between dependent variables and explanatory variables (Lijphart, 1971).

Excluding a richer context for the analysis

In Paper III, no discussion is included about differences in the social environment in which the indigenous populations find themselves in their respective countries. Providing a rich context for the analyses was considered, including differences in the social environment. An assumption in such an analysis would be that the Sami people in Norway are better integrated into the mainstream society than their counterparts in Canada, USA, Australia and New Zealand, and are less socioeconomically deprived. But such a discussion would go beyond the scope of the article. It is not the ambition of the study to *explain* differences, only to explore various strategies for recruiting indigenous people to become physicians and discuss the extent to which the effects have been measured.

Indigenous vs. rural

Recruiting of physicians to serve indigenous populations is often considered recruiting for serving rural populations. Shortage of physicians and other health care providers in rural communities is a global problem (WHO 2003), as it is for indigenous populations. Additionally, indigenous entry programs go hand in hand with rural entry programs. In Paper III regarding indigenous entry programs, 8 of our 9 cases are accompanied by a focus on rural entry to medical school (by rural entry programs) or education and research for rural health care. One has to be careful, not to mix the expectations of impacts of those two entry programs.

It is proved that candidates with a rural origin are more likely to practice in a rural setting (Wilson et al 2009). Although indigenous and rural entry programs go hand in hand, there are no studies which indicate a similarity when it comes to the tendency for indigenous doctors to move back to and serve indigenous populations - although an expectation of serving indigenous patients is expressed in policy documents. The research which concludes that minority physicians serve disproportionately more patients of their own ethnic group, and are more apt to serve minority patients, is conducted in urban areas. It is not proved that minority candidates are more apt to work among minority populations – if these populations live in a rural setting. We can not expect indigenous physicians from cities to “go back” and serve indigenous people in rural areas, whether it is in American Indian reservations or in the main area of Sami habitation, which is a rural area. Many indigenous doctors, like all other doctors, do not want to work in rural areas because they do not make as much money as physicians

working in urban areas, often work longer hours per week, are professionally isolated, and it is harder to find appropriate work for spouses and education for children (Kim 2000, Wilson et al., 2009). This implies that although if there are as much as 10 annual seats for Sami medical students, this policy will probably still not solve the recruiting problem to rural Sami municipalities.

4.4 FINAL REFLECTIONS

This thesis adds to limited literature concerning health services in Sami areas. Sametinget claims that the Medical School at the University of Tromsø should accomplish more culturally specific training (Sametinget 2007, letter to UiT). Sametinget sets as a precondition for an equal health service to Sami people, that the health workers serving Sami patients know Sami language and culture. However, as the Sami population in Norway has become heterogeneous and well integrated in the Norwegian social system, the arrangement and value of tailored solutions in Sami health service might need to be revised.

Better quality health care- training of physicians “made for” serving Sami patients

The study of expenditure rates detects no under-utilization of health services among patients in Sami municipalities, and thus no evidence of cultural or linguistic barriers that prevent Sami from using health care. However, avoiding communication failure between patients and providers must still be taken into consideration. Today, two main strategies are implemented in medical schools to train doctors for meeting patients from other cultures, and make a better quality health service for minority patients. The first strategy is founded on culturally specific training, based on individual cultures. This knowledge of individual cultures, special challenges and local needs, has traditionally been the focus. For example patients of an ethnic group are assumed to have some common health beliefs. There is, however, some disagreement as to whether and to what extent this knowledge should be emphasized (Hudelson, 2006). Others claim that focus on knowledge of individual cultures may lead to stereotypes and an oversimplification of culture (Betancourt, 2004).

The alternative strategy is emphasizing a cross-cultural approach. There are various guidelines for helping health professionals to make effective cross-cultural negotiation with the patient. The basis is the provider attitude, which is also described as cultural sensitivity. Providers develop such skills during formal and informal training. It is suggested by a study from an indigenous community in Canada (Towle et al., 2006), that communication problems may be overcome when patients feel they have a voice and the time for it to be heard; a perception that they are treated as individuals, respected and listened to. It has long been accepted that developing cross-cultural communication skills is something that can be taught and learned, and many medical schools have implemented some form of cultural competency

training (Crandall et al., 2003). But it is pointed out that developing cross-cultural communication takes years, and most of the skills and knowledge is gained through informal learning (Kelly & Brown, 2002).

Earlier it is referred to literature which tells that ethnic concordance between patients and physicians is associated with better communication. As long as there are no studies that compare whether there is any difference in patient's ratings of physicians with many years of experience from working with indigenous patients, and physicians of similar ethnicity as the patient, we must not underestimate the quality of the care by physicians coming from abroad or from other parts of Norway. Today Sami people move and live all over Norway, in addition to in the main area of Sami habitation, and people from other cultures move to Sami municipalities. In this situation, the cross-cultural approach could be an alternative: to prioritize the training of cultural sensitive doctors. This will not target only those Sami patients that eventually experience problems of communication, but all patients.

Sami seats for recruiting Sami physicians to serve Sami patients

A challenge attached to preferential admissions for Sami and other indigenous students is how to delimit indigenous students in the not-too-distant future. Who is approved to be admitted to allocated seats for indigenous medical students in the future? Many indigenous people move to urban areas and the new generations acquire higher education. The research which concludes that minority physicians serve disproportionately more patients of their own ethnic group, and are more apt to serve minority patients, is conducted in urban areas. But it is not proved that minority candidates are more apt to work among minority populations – if these populations live in a rural setting (Wilson et al 2009). We can not expect indigenous physicians from cities to “go back” and serve indigenous people in rural areas, whether it is in American Indian reservations or in the main area of Sami habitation. Is it correct to offer allocated seats to youths who might not have a background from an underserved area?

A starting point for this thesis was to provide a physician workforce that was familiar with Sami language and culture, and avoid perceived cultural and linguistic barriers resulting in under-utilization of health services. An open debate about approaches for training physicians “made for” serving Sami patients and about preferential admission policies for Sami students in health education in the future, should be encouraged. Allocated seats for Sami medical

students might have to be justified in other ways in the future if this government policy is to proceed.

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