

IMPACT OF PUBLIC HEALTH RESEARCH IN GREENLAND

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ABSTRACT

In 1992, the Greenland Home Rule Government took over the responsibility for health care. There has since been a growing cooperation between the Directorate of Health and researchers in Denmark and Greenland, for instance by the Directorate supporting workshops and funding a chair in health research. Two health surveys have been carried out in Greenland by the National Institute of Public Health, and a follow-up is being planned together with the Directorate of Health. The results have been widely used by politicians, administrators, and health care professionals. (*Int J Circumpolar Health* 2004;63(3):214-220)

Key words: Greenland, public health, health surveys, health policy

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INTRODUCTION

Compared with rest of the world, Greenland takes an intermediate position with regard to physical health. Life expectancy is several years lower than among the western industrialised countries, ranging around 65 years, together with countries like Thailand, Vietnam and Pakistan, but well ahead of most sub-Saharan countries (figure 1). Like in most other countries, life expectancy is higher for women (66 years) than for men (62 years). The purpose of this article is to describe how Greenland has approached her health problems using the research tool and to illustrate the interaction between the Home Rule Government and the research community.

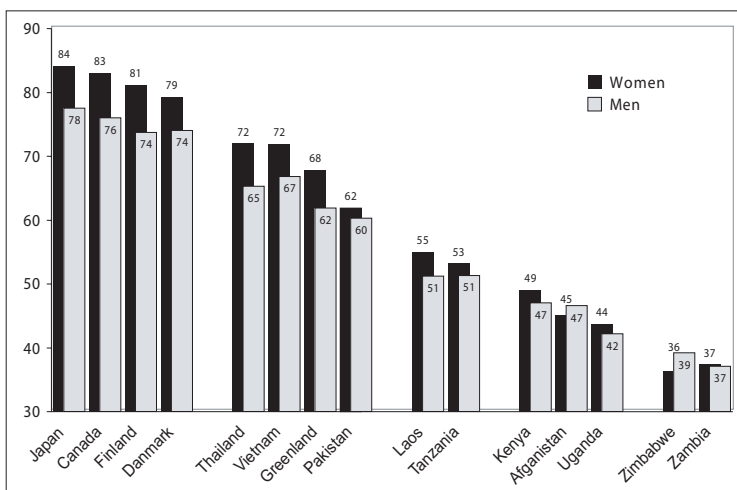


Figure 1. Life expectancy in countries of the world, ca. 1995.

Greenland is a largely self-governing part of the Kingdom of Denmark. About 90% of the population is Inuit and it is important to understand that, when we talk about the (home rule) government of Greenland, it is a fully indigenous government. This means, for instance, that research approved by the ethical review committee for Greenland does not have to be further approved by indigenous groups, or local communities, and that research in co-operation with the government is research with the Inuit – not on the Inuit.

In 1992, the Home Rule Government took over responsibility for health-care in Greenland, and a far-sighted minister of health initiated a general health interview survey in a country that was short of information about health. Information was available about causes of death, infectious diseases, and diseases that had happened to attract the interest of researchers, but basic epidemiological information about the disease pattern and general well-being of the population was missing. This health interview survey became the start of a fruitful interaction between the Home Rule Government and the research community.

Table I outlines some of the co-operative efforts between the government and researchers. Since 1991, triennial congresses on health in Greenland are arranged by the researchers with valuable support from the Directorate of Health. In 1996, the Directorate secured funding for a (Copenhagen- and Nuuk-based) professor of Arctic Health, who is now fully funded by the Home Rule Government. A medical research council was established in 1996, with some (limited) funding, and, also in 1996, the first of a series of seminars for researchers in Greenland and Denmark took place, followed by seminars in 1998 and 2001, and a planned seminar in 2005. Finally, a public health programme is underway with input from the researchers. Special links have been established between the Home Rule Government and two government health research institutes in Denmark, i.e. the State Serum Institute and the National Institute of Public Health. At each of these, a researcher has been employed with special duties towards Greenland.

Table I. Examples of interaction between Home Rule Government and health research in Greenland.

Year	Interaction
1991	1 st NunaMed Congress
1993	General Health Interview Survey
1996	Chair of Arctic Health
1996	Greenland Medical Research Council
1996	First of several seminars for researchers
2003	ICCH12 – international congress
2004	Public Health Programme

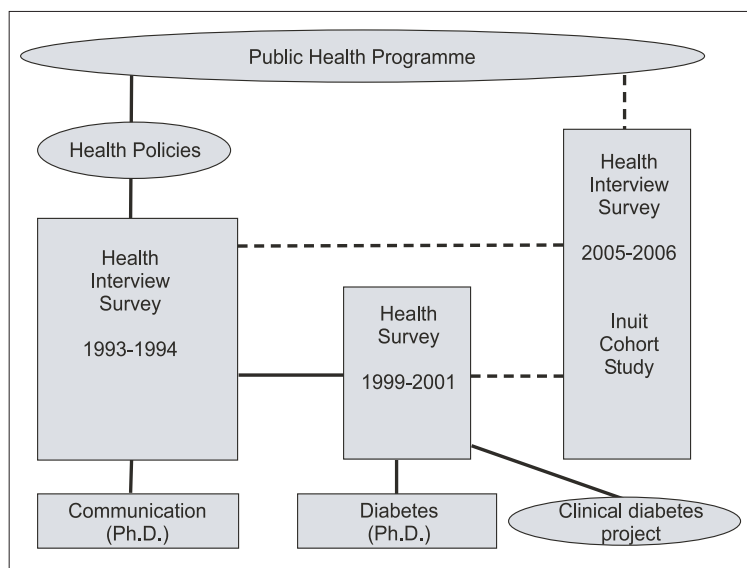


Figure 2. Interaction between the Directorate of Health, Greenland, and the National Institute of Public Health, Denmark.

THE GREENLAND HEALTH SURVEYS

As an example, the research at the National Institute of Public Health and its interaction with prevention and health promotion in Greenland will be presented (figure 2). Two research projects make up the scientific backbone of the public health interaction, i.e. the country-wide Health Interview Survey in 1993-94 and the Health Survey in 1999-2001.

One main outcome of the 1993-94 Health Interview Survey (HIS) was that research and epidemiology were put on the political agenda. The HIS gave actual numbers for things that everybody talked about, such as the proportion of smokers, the prevalence and determinants of

Table II. Prevalence of serious suicidal thoughts according to childhood conditions regarding alcohol misuse and sexual violence. Greenland 1993-94.

Alcohol problems in parental home	No sexual violence (N=1150) %	Sexual violence (N=65) %
Never (N=760)	10.3	21.7
Occasionally (N=355)	18.2	48.0
Often (N=100)	39.8	82.4

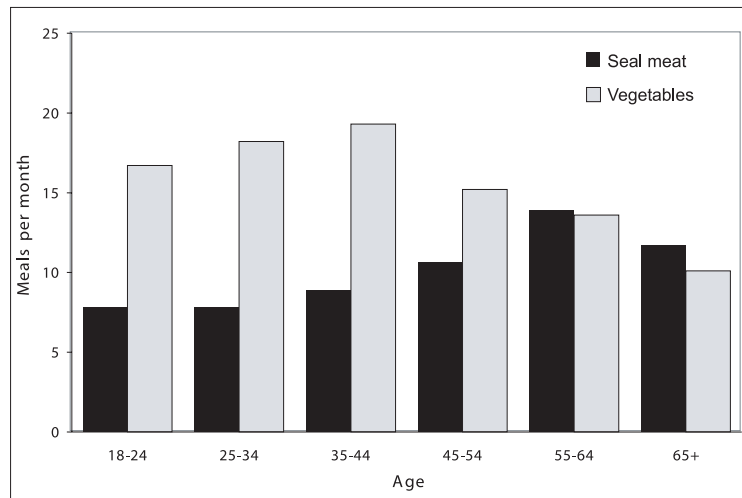


Figure 3. Consumption of seal meat and vegetables (excluding potatoes). Greenland 1993-94.

suicidal thoughts (Table II), the occurrence of diseases that never came to the knowledge of the health-care system, social inequalities, dietary habits (figure 3) etc. The results from the HIS have been included in many political speeches and have had their impact on the way of thinking of the politicians, and we have recently been invited to play a central role in the establishment of a comprehensive Public Health Programme for Greenland.

At a more tangible level, the HIS included a study of the use of, and satisfaction with, the health-care system, and served as a pilot study for the 1999-2001 survey. Among the most conspicuous findings were the unearthing of the problems related to the use of interpreters in communication between doctors and patients. This resulted in a new, qualitative study, but also in concrete initiatives directed towards the interpreters, the health professionals, and the general public.

The next health survey was conducted during 1999 to 2001 in selected towns and villages on the west coast. It served as a follow-up of certain aspects of the HIS, but primarily as a study of cardiovascular disease and diabetes. The survey was supplemented by a Ph.D. thesis about diabetes in Greenland. Among other things, the study documented the prevalence of diabetes to be higher, in all age groups, than in the general population of Denmark (figure 4). Fur-

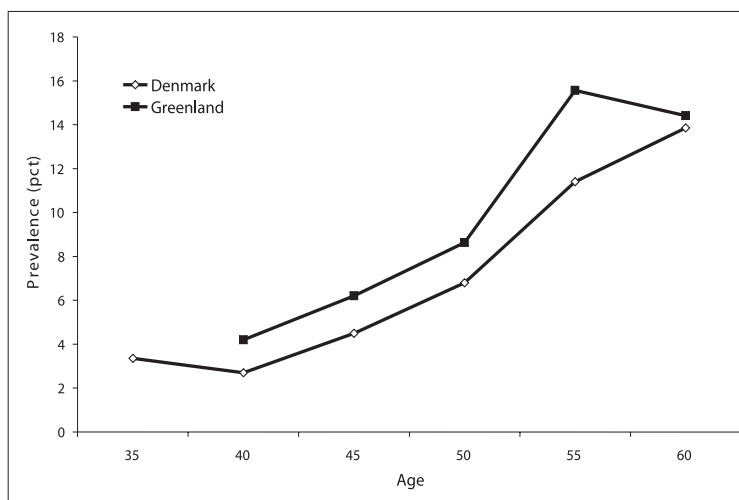


Figure 4. Prevalence of type 2 diabetes diagnosed by oral glucose tolerance test in population samples from Greenland (Inuit) and Denmark, 1999-2001.

thermore, it showed that only 30% of the cases were known. Accordingly, the Primary Health Clinic in Nuuk has established a targeted diabetes initiative.

For a few parameters, the survey was a follow up of the HIS. We are able, with some certainty, to demonstrate e.g. a decrease in smoking prevalences among both men and women, from 80% to 71% among men and from 75% to 70% among women. Furthermore, obesity increased significantly among the Greenlandic women, but not among the men.

FUTURE RESEARCH

As a further input to the strengthening of public health practice in Greenland, a follow-up of the two surveys has been planned. The follow-up of the HIS is planned in close cooperation with the Home Rule Government and will include items such as life style, prevalence of important diseases, and the use of the health-care facilities. This is part of a continuous monitoring of public health and is an important input to future public health programmes.

The primary objective of the follow-up of the 1999-2001 cardiovascular survey is to establish a well defined cohort to be followed for

incident cases of diabetes and heart disease. The cohort will initially be examined for prevalent disease and lifestyle factors, in particular diet, physical activity, smoking and social risk factors. The survey is planned together with colleagues from Canada and other Arctic countries, in order to obtain a larger sample size than any of the countries can muster alone. This will increase the statistical strength of the study and permit more detailed analyses.

CONCLUSIONS

The continued co-operation between the Directorate of Health of the Home Rule Government and researchers in Greenland and Denmark has benefited both parties. While the researchers have the official support of the Home Rule Government and enjoy the pleasure of seeing their results put to actual use, the Directorate of Health has learnt to ask for, and use, science-based knowledge. Given the notorious instability of a small administration and a short-term funded research community, a major challenge is to secure the personal contacts among a seemingly endless succession of ministers, top-ranking officers, health-care staff, and researchers. Both sides should be aware of the need to improve the use of scientific knowledge for prevention, in order to create better health for the people of Greenland.

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