

Health research in Greenland: start with the children

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INTRODUCTION

This paper is the result of discussion between Jørn Olsen, Henning Sloth Pedersen and Gert Mulvad during the planning of a Health Research Strategy for The Commission for Scientific Research in Greenland.

Public Health in the Arctic regions

For obvious reasons, information on how best to establish an efficient and competent public health system in sparsely populated arctic regions is of great interest in all arctic regions. It is unfortunately an enterprise with a slow start. And experience shows that money alone will not solve all problems. We believe that public health should take a life-course approach, starting at conception, or at best before, at the time of pregnancy planning and focus upon living conditions for children. Most of the determinants of life expectancy are established early in life.

Pregnancy and delivery are a challenge for health planning. The high rate of child mortality and children's diseases in rural areas, as well as few midwives in these areas, often lead to deliveries far from the local community and the family. The family that should be together to plan their new family role and their responsibility for the child.

Health service in arctic regions includes rapid turnover of expatriate health care professionals. Education of local health care workers should start in the Greenlandic school system and later be taken over by the local health education system.

This strategy includes postgraduate education of the staff of health professionals, with a

gradual transmission of responsibility to local staff, especially concerning health promotion together with the local community. Health service research and research-based education are important for this development.

Organisation and logistics are financial challenges for the public health system in Greenland. Telemedicine is one of the answers to some of the logistical health problems. This new technology should be subject to the same evaluation as other technologies (1,2).

Diet and health

Many children still eat the traditional diet, caught, prepared and shared by the family, one important aspect of family life and self-esteem.

But we also hear that food high in the food chain is polluted. In giving proper evidence-based advice all benefits and side effects have to be balanced and given to the public in an unbiased and informative way. Communication of health risks is a great challenge for all of us.

The effects of a western lifestyle, obesity and the central fat pattern are associated with several cardiovascular risk factors including diabetes, hypertension and dyslipidemia – diseases that seem to be on the rise in the arctic region, probably as a function of a westernized diet and an increasing frequency of physical inactivity.

We know now that omega-3 fatty acid is a gift from the sea. A great amount of evidence from epidemiological studies and clinical trials supports the use of this food item to reduce the risk of coronary heart disease, including membrane stabilisation, inhibition of platelet aggregation, etc. (3-7).

Infection

After World War 2, a measles epidemic, tuberculosis, sexual transmitted diseases, and hepatitis have been described.

Infections are still common, especially acute respiratory infections, HIV, Chlamydia, tuberculosis, and hepatitis, and we see an increase in food-borne infections. HIV and tuberculosis require continued monitoring and research to be under proper control (8,9).

Registrations

Registration and research is important for health care planners who want to make sure they are heading in the right direction.

Annual Reports from the Chief Medical Officer in Greenland, Cancer registration, Researches register, etc. are important tools in health service planning and in health research. These reports should include time trends and predictions. They should also include data on the trends of the most important determinants of health, smoking, alcohol use, obesity and employment.

At present a large set of data is collected on health and social conditions in Greenland. We suggest that this data source is used more for the benefit of the population. We believe it is important to make easy access to this information possible for all researchers with a legitimate interest in using data for the common good. (1).

Social story

A teenager in Nuuk tells her own story:

When parents are drinking and beating their children they have to be stopped, before the children feel they have lost those who should help them to navigate in life. It is not good for a child to feel alone and without family support.

A single parent without a job has to have a job here in Nuuk.

Parents ought to spend more time talking with their children. Maybe it would help.

Some children are sniffing. These conditions have to be taken care of.

In Greenland, as anywhere, the family is important.

Without family support children are left alone and serious health and social impairments may follow.

Social studies and public health research

Greenland has public health problems which require a long-term strategy for disease prevention and health promotion adapted to the local circumstances.

Living conditions, e.g. health standards and housing, schools and education as well as social relations should be studied further.

Lifestyle diseases, the incidence of dental diseases, mental health, various forms of cancer, as well as infectious diseases are important in relation to the well-being and health of the population.

Social studies and studies on public health should be designed to accommodate the specific need for research in Greenland (10,11).

The effort should, in a broad sense, concentrate on the conditions under which children grow up. We propose new research under the theme:

Children in Greenland – Greenland for children

Far too many people in Greenland die or fall seriously ill at an early age. Death and diseases are often a consequence of a long sequence of exposure to unhealthy habits or social conditions.

Many chronic diseases have developed over long periods of time. Unhealthy behaviour often starts in childhood and may cause major health problems that may not be manifest for many decades.

There is an increasing body of knowledge to indicate that the causes for chronic diseases may be found early in life; during pregnancy, when all organs are formed, or during early childhood, where habits and social conditions may have a lifelong influence.

It is necessary to understand the social, cultural and environmental causes and interactions better in order to set up a preventive effort that works.

The position of the family and the definition of family responsibilities are key in this process.

Time has come to concentrate the effort where it will have the greatest and most long-lasting effect. There are good reasons to focus upon children, and children have always had an impact in Inuit culture. It should be possible to get consensus for intensifying our research effort to make children in Greenland healthier and better educated to take part in the society.

Part of the research programme should focus on families who are planning to have children.

Research should have a longitudinal perspective and should provide possibilities for intervention studies. Information about health care or health promotion cannot be directly transferred from one society to another. Context, economic means, personal resources, etc., should all be taken into consideration when formulating the programmes to implement under scientific scrutiny. (12,13).

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