Children's health in Greenland; interdisciplinary efforts necessary.

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I will present some

- 1. central health characteristics for children in Greenland, along with
- 2. other parameters influencing health;
- 3. initiatives to improve health,
- 4. the necessarity for an interdisciplinary approach to save a rapidly increasing amount of dysfunctional children, and
- 5. research challenges.

Health characteristic for Greenlandic children.

Some facts about the health situation among children and youth in Greenland, compared to other Arctic countries (the data were gathered in a programme: The future for children and youth in the Arctic, with data from 1992-2001):

<u>Infant mortality rate</u>, highest in Greenland, lowest in Norway and Sweden. Compared to the Nordic countries: 4-5 times higher in Greenland in average; twice higher in Nuuk to 7-8 times higher in more remote areas. Indigenous peoples in Canada and USA have figures just a little less than Greenland.

<u>Tuberculosis</u>, 10-fold more prevalent in Greenland than in most other countries, most prevalent among the youth, but also common among the 1-9 years group.

<u>Teen pregnancies</u>, 10% of all -100 annually, in average giving the child a more risky and less stable beginning of life.

Other health problems:

- 1. Weight problems increasing rapidly, and diabetes type 2 seen among children.
- 2. Infections are in general more prevalent (ear, lung).
- 3. Serious dental problems (caries).
- 4. Smoking prevalent (8% of 11 years old, and 65% of 15-19 years smoke cigarettes regularly).
- 5. Allergy rapidly increasing.
- 6. High amount of contaminants, here percentage > safety threshold.

Better health parameters, compared to Nordic countries:

Less cancer
Less congenital disorders
Less drug abuse
Less alcohol abuse
Less fatal injuries

Solvent abuse as Nordic countries (high in USA)

Other figures around the health situation for children:

- 1. Self assessment of health, > 30% of 11 years old girls assess bad health.
- 2. 30-40% go hungry to bed or in school.
- 3. Education: 60% need additional training after the elementary school before continuing education.
- 4. Police reported violence, all ages.
- 5. Police reported sexual abuse, all ages.

The <u>total situation</u> - as shown by the figures shown here - in Greenland, is comparable to other indigenous peoples, and also to many minority groups in the richest countries. Figures show, that among certain immigrant groups in Denmark, a group of 150,000 individuals; the same prevalence of TB, HIV, sexual transmitted diseases, and other infectious diseases, along with suicide, violence, abuse is seen - and even worse health parameters are seen in large groups in US.

Indigenous peoples comprise 6,000 ethnic minorities, comprising 300,000,000 individuals around the world, and the health pattern in Greenland, including low educational level and unemployment are common. What they also have in common is the history: they have either been colonized or lived in a society where they were not able to sustain their culture, including their morality, ethics, faith and beliefs, based on generations experience, and now in a rapidly transition.

Initiatives to improve the health

Greenland Home Rule got the full responsibility of the health sector, 12 years ago, in 1993. Since then a lot of preventive efforts have been introduced, mainly about smoking, drinking, sexual behaviour – as STD, unintended pregnancies and child abuse.

The <u>infant mortality rate</u> was unacceptable, and a more intensive pregnancy care programme was introduced in 2001. The mortality rate has decreased 50%, but is still 2-3 times higher compared to Scandinavia. Pregnant are now taken hand of from the very beginning, not only including physical examinations, but more important is the support in social, educational, psychological matters, making the pregnant ready to take care of the child as well as herself.

The number of $\underline{\text{smokers}}$ decrease. 15 years ago 70-80%; 8 years ago 69%; this year 50%. But many children and youth start smoking -8% of 11 years old smoke, and 65% of 15 years old. 50% of the females quit smoking when they become pregnant. Rather strong public restrictions have come, and are accepted, and most smokers show a high grade of responsibility to their fellows.

<u>Alcohol</u> consumption has been decreasing since 1990, and still is, and is now lower compared to Denmark. The large group of youth has a low consumption, and except few groups of youth, we are not the facing the same drinking problems as youth in Europe. Only very few pregnant have an alcohol consumption at all. The main group of alcoholics is the mid-age group.

<u>Haemophilus influenza meningitis</u> has been erradicated since immunisation began in the beginning of the '90-ties.

Immunisation against tuberculosis re-introduced 1995, mainly to protect against TB meningitis

Sexual abuse of children have taken place for many years, but have been taboo. 10-15 years ago the magnitude of this horrible disaster began to be known, but it still takes place, and a major effort is to educate children to be aware of situations, which might lead to abuse. And teams of social workers and psychologists are always ready to take hand of those violated by sexual abuse.

A massive effort to stop the fast food and soda pops intake among children and youth has been done the last years through debate in the medias and schools. Probably Greenlanders are genetic disposed to diabetes, and a life with plenty of food, sugar everywhere and much less physical activity make the genes for diabetes come to expression. A rapid increase in prevalence of diabetes among Greenlanders – now 2.5-3 times more prevalent among adults compared to Danes. And diabetes are now seen among children.

<u>Food and general lifestyle guide</u> for <u>0-3 years old</u>, and latest for the <u>4-10 years old</u> group have been introduced, and life style concerning food and exercising is often at debate in the medias.

Many children have not breakfast, and also not lunch. This is probably a matter of time: Lunch in the school will hopefully soon be introduced (maybe also breakfast), like seen in Sweden and Finland.

From 2006 a countrywide <u>public health programme</u> will begin with intensive focus at food, exercise, smoking and drinking, and sexual life. Several thousands will be examined from the beginning and monitored to follow the impact.

So far so good, we are in safe and calm water. We have a well equipped health system – with personal as well as technical skills at international level.

The future.

Increasing efforts and economy will only have marginal impact on health outcome. We can not accept the budget for health to increase – it would be taken from other important areas: education and social welfare, which already are under hard pressure. And in acceptance of that, the health budget has stagnated since 2003, after 70% increase the first 10 years of Home Rule's responsibility for the health sector. Really political courage!

BUT: today we have never had such a large number of children, who are miscared. Never have so many school children, also in the lowest degrees, use for psychologic examination and treatment. The education in the elementary school is simple insufficient, and in the society the social inequality – the gap – increases; never have generations and other human relationships been so fragmented.

Hard facts, which we know give rise to violence, abuse, mental disorders, and diseases.

(Cindy Kiro, Maori from New Zealand): "It is now widely accepted that the major determinants of health are outside the direct influence of the health sector."

If we just sit and wait, are reactive instead of proactive, the demand for treatment at all levels will be of dimensions, which we simply do not have either human or economic resources enough for the coming years

A <u>new concept</u> to prevent the upcoming amount of social catastrophies is needed. This concept was born at a symposium in November last year.

Health and social professionals, teachers, and other working with children met, and the outcome was something like this – based on common responsibility for professionals as well as the whole society to take better care of each other to stop the social deroute. If the Greenlandic culture shall survive, quality must be put into life.

Sectorialism versus interdisciplinarity.

Research

We can use health parameters or risk factors as markers of the health situation, but with caution. When we focus on "bad behaviour" as health parameters – smoking, drinking and sexual diseases, are we often focusing only on the symptoms and not on the cause of the symptom. This could lead to recommendations focusing on treatment of the symptoms itself, which only give a short-term success. Like treating cancer with pain-killers.

The Commission for Scientific Research in Greenland says in The Strategy Plan 2003-2007:

Children in Greenland – Greenland for children. In the health area there is a wish for greater understanding of the social, cultural and environmental causes of the relevant diseases. There is much to suggest that the causes of disease should be sought early in life – in the pregnancy period and in early childhood and youth, when influence and habits can have lifelong effects. Good social and health conditions in youth are important factors for the future of the country, and the time when it is bringing children into the world and during the children's early years.

Epidemiology is in a transition from a science that identifies risk factors for disease to one that analyses the systems that generate patterns of disease.