Meddelelser om Grønland

Mental Disorders in Greenland. Past and Present

Inge Lynge

Man & Society
21 · 1997

Meddelelser om Grønland

The series *Meddelelser om Grønland* was started in 1879 and has since then published results from all fields of research in Greenland. In 1979 it was split into three separate series:

Man & Society
Geoscience
Bioscience

The series should be registered as *Meddelelser om Grønland Man & Society (Geoscience, Bioscience)* followed by the number of the paper. Example: *Meddr Grønland, Man & Soc. 1,* 1980.

The new series are issued by Kommissionen for Videnskabelige Undersøgelser i Grønland (The Commission for Scientific Research in Greenland).

Correspondence

All correspondence and manuscripts should be sent to:

The Commission for Scientific Research in Greenland
Danish Polar Center
Strandgade 100 H
DK-1401 Copenhagen K

Questions concerning subscription to all three series should be directed to the agent.

Agent

Geografforlaget, Fruerhøjvej 43, DK-5464 Brenderup
Tlf. +45 64 44 16 83.

Meddelelser om Grønland, Man & Society

Meddelelser om Grønland, Man & Society invites papers that contribute significantly to studies in Greenland concerning human beings (such as anthropology, archaeology, arts, economics, education, ethnology, history, law, linguistics, medicine, psychology, religion, social science). Papers dealing with borderline subjects as for instance exploitation of natural resources and environmental research may be referred to one of the series Bioscience, Geoscience, or Man & Society according to what is considered appropriate from an editorial point of view. Papers primarily concerned with other areas in the Arctic or Atlantic region may be accepted provided the observations are considered important in a Greenland context.

Scientific editor – Man & Society

H. C. Gulløv, The National Museum of Denmark, Ny Vestergade 10, DK-1471 Copenhagen K, Telephone + 45 33134411, Telefax +45 33473320

Instructions to authors. See page 3 of cover

ISSN 0106-1062
ISBN 87-90369-10-6

Mental Disorders in Greenland. Past and Present

Inge Lynge

MEDDELELSER OM GRØNLAND, MAN & SOCIETY 21 · 1997

Accepted December, 1996
ISSN 0106-1062
ISBN 87-90369-10-6

Contents

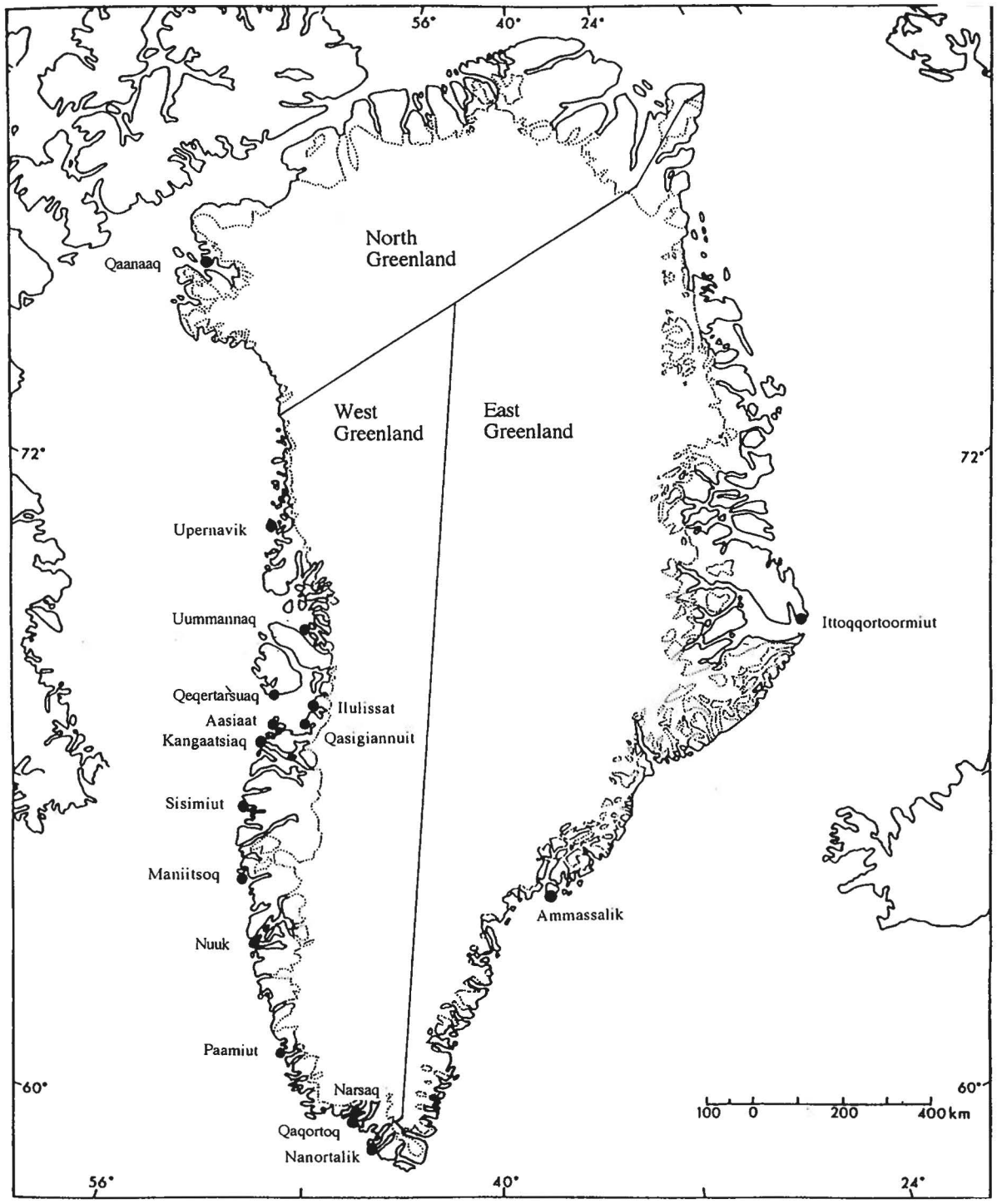


Fig. 1. Map of Greenland

Mental Disorders in Greenland. Past and Present

INGE LYNGE

Lynge, Inge. 1997. Mental Disorders in Greenland. Past and Present. – Meddr Grønland, Man & Society 21, 76 pp. Copenhagen 1997-03-10.

There are mental disorders in all societies, but the forms they assume and the courses they take are influenced by living conditions. The modernization of Greenland has had a profound influence on the lives of both individuals and families. The key to the understanding of many present-day phenomena is to be found in the past, or perhaps rather in the way in which traditional and modern ways of life are interwoven. For that reason, the book starts with an account of the traditional Eskimo way of life, the meeting with European culture and the social developments after the Second World War as seen from a psychiatrist's point of view.

Then follows a descriptive and analytical follow-up study of all Greenlandic patients of 15 and over who were admitted for the first time to a psychiatric hospital or ward between 1980 and 1984. These encompass 289 patients in all, 139 men and 150 women, corresponding to an annual rate of 230 men per 100,000 and 260 women per 100,000 aged 15 years and above. There were most men in the age group 20-24 years and most women in the age group 25-34 years. The most common causes of admission to hospital were suicidal or violent behaviour. Especially the youngest patients had grown up with problematic backgrounds, and of all age groups were those showing most signs of personality disturbances.

24 men and 13 women were diagnosed as suffering from schizophrenia – an annual rate of 41 men and 22 women per 100,000 aged 15 years or more. The average age for both sexes was 22. The low age on first admission to hospital and the high ratio of men to women are similar to the situation in developing countries, while the both clinically and socially serious course taken by the condition follows the pattern in industrialized countries.

In a follow-up seven years later, the men had been in hospital for an average of 161 days and the women 98 days. 29 men and 20 women had died by the time of the follow-up study, of these 12 men and four women by suicide. Of those still alive at the time of the follow-up study, a third of the men and a quarter of the women showed no sign of mental illness. 15% of the men and 10% of the women were chronic patients whose health was seriously undermined.

19% of the men and 6% of the women were guilty of serious crimes against the person. The forensic problems are dealt with separately.

Keywords: Greenland; mental disorder; history; first admission; diagnoses; follow-up; suicide; forensic problems.

Inge Lynge, Sprydet 73, DK-3070 Snekkersten, Denmark

Introduction

Psychiatry is concerned with complicated aspects of human lives, some of which are often difficult to understand without further ado. It deals with bizarre behaviour and experiences that are difficult to share with other people.

Human beings are both biological and social creatures. A study of mental disorders and illness naturally calls for both scientific and humanistic methods and frames of understanding. There is a need for knowledge of biological and psychological as well as cultural and social conditions. Working as psychiatrists in our own culture, we have much experience of society and culture in common with the patients and perhaps do not ask many questions about these, being more concerned with psychological and biological circumstances, though training in social skills and cultural activities is also part of the treatments on offer today.

As foreigners in Greenland, we encounter a situation that is materially, socially and culturally different in many ways. When I first went to Greenland 36 years ago as a doctor at the then Queen Ingrid Sanatorium in Nuuk, there was still much left of the old way of life, although modernization had begun at an increasing rate. My late husband, the Greenlandic artist Hans Lynge, opened my eyes to the background to many kinds of behaviour which seen through Danish eyes might seem to be incomprehensible, superficial or, conversely, over-sensitive, reactions to events that I had scarcely noted.

The job in which I and many others like me have been engaged makes great demands on all concerned. There are various reasons why it has not been felt to be completely impossible: Firstly there have been Greenlandic personnel who have ensured our links with the community, made their mark on our place of work and built bridges between the two population groups; secondly, life in Greenland today encompasses many mixes of traditional and modern ways of life and of Danish and Greenlandic cultures. And finally, we also find many common characteristics in the experiences of the mentally disturbed in different cultures, something that to my mind emphasizes the human core common to all our lives, even if there are admittedly vast differences both material and cultural.

Modern Greenland is undergoing a constant process of change; to adopt an attitude to and to encompass all that is new has become an important task that can take most people's breath away and knock the ground from under their feet. And time after time the question arises: How are we to understand and relate to the huge emotional and behavioural problems emerging in Greenland today, which sometimes express themselves in familiar psychiatric pathological pictures, sometimes in desperate family situations, in loneliness, alcohol abuse, suicide, violent behaviour or murder? The problems have developed to their present level without any of us, Greenlanders or Danes who have lived through the process of change, realizing in depth what was going on and being able to do anything about it.

But behind the desperate signs of cultural conflict, marginalization and alienation flowing from the problems, there is a Greenlandic tone, a sense of humour and a joy in life that makes us listen and convinces us that the fortitude that enabled the Eskimos to survive for thousands of years will also help the present-day Greenlandic population to find their way through the quite different challenges implicit in life in a modern society.

I have tried in this book to present aspects of traditional Eskimo culture and way of life from the point of view of a Danish psychiatrist, with the aim of putting into perspective the phenomena to which present-day psychiatric services must relate. Greenland is going through an intensified experience of the human problems that have come in the wake of the development of the industrialized society. This might be said to act as a concave mirror for our problems, so it might perhaps also help us to see them a little more clearly.

The book falls into two different parts: first a historical account of life in the traditional community and a description of how a grandiose process of modernization has changed life, partly by easing material conditions, but mainly by radically altering the life of the individual. Whereas in the old society people were part of a cohesive whole, today they have to enter into many different relationships which often make conflicting demands on the individual. For those who are strong this provides the basis for growth and development, but the vulnerable can be broken by it.

Part Two concerns a group of people who have been particularly vulnerable as a result of social change: those suffering from mental disorders who have crossed the threshold to hospitalization in a psychiatric ward. It is a scientific study describing a group of patients who were first admitted to hospital between 1980 and 1984 and then going on to examine their condition 7-10 years later. This second part contains more specialized psychiatric material and a number of tables, but it is also written with a view to readers who are interested without having special professional qualifications. It provides material on which to base considerations of future psychiatric services for the population.

PART ONE

Population

Today's Greenlanders are descended from Eskimos or Inuit who immigrated from Canada and Alaska from about AD 1000 onwards. The terms Inuit and Eskimo are used synonymously. The latter has especially been used by archaeologists, historians, earlier anthropologists, and others coming from outside. Its meaning is uncertain, but it presumably stems from North American Indians. Inuk, plural Inuit, means human being and is the word the Eskimo people themselves use, albeit in various forms. Greenlanders use both Inuit and Kalaallit, again a name of obscure derivation.

At about the same time as the Eskimos came across Smith Sound between Ellesmere Island in Northern Canada and the Thule region in Greenland around AD 1000, Norsemen from Iceland began to settle in the southernmost part of Greenland. In 982 Erik the Red was exiled from Iceland for 3 years, deciding to settle in Greenland. He was accompanied by 14 ships, and many more followed. The Norsemen gradually settled in two areas: the East Settlement, which was far the larger, stretched from present-day Narsaq to Cape Farewell, while the West Settlement encompassed the area around Ameralik and the Godhåb Fjord. According to Knud Krogh (1967:52) there were probably 2-4000 Norsemen around 1300, when settlement was at its peak. They lived on agriculture, fishing and hunting, more or less as on the Icelandic farms.

The Eskimos gradually spread from the Thule area; some moved north and east and thence down along the east coast of the country, while others moved south along the west coast. In the summers, the Norsemen went hunting far to the north, and as early as the 12th century they report occasional meetings with "some very small people" whom they called "Skraellings" (Krogh 1967: 120). The Eskimos continued their move south and arrived in the West Settlement at the beginning of the 15th century. 50-100 years later they passed the coast off the East Settlement and continued to Cape Farewell (Jones 1964: 60).

The Norsemen died out; they had disappeared without trace from the West Settlement by the mid-14th century, and it is to be supposed that the last died in the East Settlement about 100 years later. The reason or reasons for their disappearance have never been established with any certainty. Nor do we know how much contact there was between Norsemen and Eskimos. Gwyn Jones (1964: 61) assumes that here as elsewhere the Norsemen would judge themselves superior to the Eskimos, treating them as "natives" and seeking to exploit them. But the Norsemen's way of life as settled farmers meant that their position in Greenland was marginal, especially when the climate became colder. On the other hand the colder climate was an advantage to the Eskimos, whose culture was based on sealing. And indeed, their trek south began after the seals had begun to move south (Jones 1964: 60). Greenlandic legends tell of both peaceful contacts between the two peoples and bloody confrontations between them (Krogh 1967: 128-137). After colonization, the Greenlanders have suggested that they feared that the intention of the colonizers was to extract revenge for the deaths of the Norsemen. So powerful was the memory of the *qallunaatsiaat* (Norsemen) 300 years after they disappeared (Gulløv 1978:41).

In the 16th and 17th centuries contact with Europeans was sporadic. It occurred principally through whalers who in addition to whaling would barter with the Eskimos, whose merchandise such as skins, narwhal (unicorn) and walrus tusks were in great demand. The Eskimos flocked around the whaling ships when they arrived in the early summer; they were accommodating and happy to trade everything they possessed, even their women and stores (Gulløv 1978: 24). Interest in the Arctic regions was also seen in a number of voyages of discovery from the very end of the 16th century. These expeditions, too, left their traces on the Eskimos, not least because several of them led to Eskimos being abducted and taken back to Europe, where they were a great sensation. During the 17th century more than fifty Greenlanders were taken to Europe, especially by Danes and the Dutch (Gulløv 1978: 16). There are many examples of how those abducted tried to escape, or how the population tried to prevent the kidnapping. Thus in 1605 Godske Lindendow landed in southwest Greenland and carried off two Eskimos. The abduction was answered with a hail of stones and arrows, but a salvo from the ship put an end to further attacks (Gulløv 1978: 13). When the Englishman James Hall, who had assisted in the earlier abduction of Eskimos, took part in an expedition to the Holsteinsborg area in 1611, he was recognized by a relative of one of those he had kidnapped, who immediately shot him in the chest with an arrow and killed him (Gulløv 1978: 14). But despite such experiences, the barter trade continued, and this was the situation on the colonization of the country.

The colonization of Greenland

The colonization of Greenland took place in three stages: 1) In 1721 the Dano-Norwegian pastor, Hans Egede, arrived at Hope Island off Nuuk and founded

a trade and mission station, from which during the following 70 years West Greenland was colonized and all West Greenlanders baptized. Hans Egede's original aim was to visit the descendants of the Norsemen and convert them to Lutheran Christianity. But there were none. 2) In 1884 Gustav Holm's umiak expedition made contact with an isolated group in East Greenland. A trade and mission station was established in Ammassalik in 1894, and by 1923 all East Greenlanders had been baptized. 3) The Polar Eskimos in the northernmost part of Greenland, Thule, came into contact with western civilization when Robert Peary undertook a number of expeditions between 1892 and 1909, in the course of which he mapped North Greenland and tried to find the geographical North Pole. He used Polar Eskimos as helpers and provided them with modern weapons, housing utensils, knives, wood for sledges etc., but otherwise tried to adapt to their techniques and to interfere as little as possible with the old fishing and whaling methods. After the "conquest" of the North Pole in 1909 he lost interest in the region, but the population had long ago grown accustomed to the benefits of modern civilization.

Meanwhile, as a young student, the polar explorer Knud Rasmussen had taken part in "The Literary Expedition to Greenland" in 1903-04, after which he maintained his connection with the Polar Eskimos. At their request he established a trading station in 1910. This was soon after a mission station was also established from West Greenland, so that almost the entire population here, too, had been baptized by 1925.

We have, then, the unique situation in Greenland that while the West Greenlanders have more or less been in contact with the European form of life for 270 years, the populations in the north and east lived in traditional Eskimo communities without any major influences from abroad until about 100 years ago.

Especially in West Greenland there has been a considerable genetic mixing with Caucasians, mainly Danes; though some other European whalers also had Greenlandic descendants, especially in Disko Bay and Sisimiut. The West Greenland population is now estimated to have between a third and a quarter non-Eskimo genes, whereas the populations in North and East Greenland are still far less mixed (Harvald 1989). In January 1991 there were 55,553 inhabitants Greenland as a whole. Of these 8,842, mainly representing Danes working there for longer or shorter periods, were born outside Greenland.

Life in a traditional community

There are many sources from which we can derive knowledge of life in the traditional Eskimo communities, but by the nature of things, most of them date from after the establishment of contact with the outside world. A quite special source for knowledge of life in Greenland in the 15th century is to be found in eight mummies, two children and six women, found in two stone-built graves behind an old abandoned settlement in the Uummannak District of Northwest Greenland in 1972. These mummies have been the subject of extensive interdisciplinary studies, the results of which have been published (Hansen & Gulløv 1989) and in a popular form in the book "Qilakitsoq – de grønlandske mumier fra 1400 tallet" (Qilakitsoq – the Greenlandic Mummies from the 15th Century) (Hansen, Meldgaard & Nordquist 1985). Examinations of the skin clothing of the mummies showed that even by that time it had been developed into the perfect form demanded by life in the harsh natural conditions, and known and used right up to the present century in both Greenland and the rest of the Eskimo world. They are also very beautifully made and to our eyes are betoken a clear sense of beauty. The tattoos on the mummies showed patterns found in portraits of 17th-century Greenlandic Eskimos, and still employed by Canadian Eskimos in the 1920s when Knud Rasmussen visited them during The Fifth Thule Expedition.

Knud Rasmussen collected a unique corpus of material on Eskimo culture on his many expeditions. Not least his accounts of the Fifth Thule Expedition which took him from Greenland across Canada to the Pacific in 1921-24, convincingly demonstrated that the extremely scattered Eskimo population had many common features in their way of life, so that Knud Rasmussen was easily able to communicate with the many different tribes and to feel almost at home everywhere. The Eskimos had succeeded in creating a way of life that made it possible for them to survive in the harsh Arctic climate, even if they always lived under the threat of extinction. Without any kind of state organization these people were bound together in a communality of mutual dependence, with powerful emotional ties that were imbued with rituals and rules of conduct, an apparently stable social system, though with built-in potential for conflict and splitting, which was kept under control, at least when times were good.

Among those Knud Rasmussen visited was a group of Iglulik Eskimos in Canada, headed by the shaman Aua. They turned out to be particularly good informants who could answer all conceivable questions about what they did in specific situations, what was allowed and what forbidden. But when he asked them why it was thus, he received no answer. Finally, the constantly repeated "Why?" became too much for Aua. He took Knud Rasmussen out of the tent, pointed to the storm that was raging and said: "To hunt well and live happily, people need calm weather. So why this constant snowstorm and all this unnecessary trouble for those who need to obtain food for themselves and those they love? Why? Why must

people be ill and suffer? We are all afraid of illness. As far as we human beings can see, my old sister here has done no evil. She has lived a long life, given birth to strong children, and now she has to suffer before she ends her days. Why? Why?" After several more examples of incomprehensible adversity he said: "There you see. You, too, are unable to give reasons when we ask you why life is as it is. And so it must be. All our customs come from life and go to life. We explain nothing, and we believe nothing. We fear. We fear the weather on earth, and hunger and sickness; not death, but suffering. We fear the souls of dead people and of animals we have killed, the spirits of the earth and the air. Therefore our fathers and their fathers again have armed themselves with all the old rules of conduct, which are built on the experience and wisdom of many generations. We do not know how, we have no idea why, but we follow them in order to live without care" (Rasmussen 1925, I: 347 ff). To live without care and to ensure the continuance of the family was their common aim. But how did they all manage as it were all to pull together?

The household, that is to say the members of the same family who lived together in the same house, was the primary unit in the community. Professor Robert Petersen from the University of Greenland, Ilisimatusarfik, talks of this: The household could consist of two or three generations. They were self-sufficient in all spheres, and there was a clear distribution of tasks between the sexes. The heads of the household might be the oldest married couple or possibly the oldest man and his mother. They represented the household outside the home, in relation to other households, decided how the catch should be used and who outside the household could be given a share of it. In particular, the husband could take decisions about hunting expeditions and decide where they were to live (Petersen 1993:124).

The pattern according to which the household developed was that sons usually continued to live with their parents, while daughters had to live with their in-laws. This had the advantage that on the basis of their father's teaching the sons knew the hunting and travelling conditions in the area throughout the year. But conversely, when daughters were born it was known that they would probably enter another household, so they were a less popular investment (Petersen 1993: 125). It was not unusual to kill new-born girls. Such killings are dealt with in more detail below.

This family structure has obtained in East Greenland right up to our own times. See chapter on Culture and Society in transition.

Bringing up children

The missionary H.C. Glahn tells of the 18th-century Greenlanders that almost from birth children were trained in the adult life they were to follow in the future. They could be trained in various skills by means of games, and they were gradually assigned such tasks as they were capable of. Boys took part in the meals which the men ate in common, when they heard a great deal about hunting and trapping, learned about the animals and about how they could most easily and safely be caught (Lidegaard 1991: 116-117). Many other missionaries have told about the way in which children were brought up immediately after colonization, stressing the love they received in the form of cuddling and being looked after with great care for the first 3 or 4 years, that is to say as long as they were still being suckled, until the birth of the next child. After this (still according to the above descriptions) they were given food and clothing, but otherwise left to do as they liked and never punished. And the constant refrain is how amazing it was that despite all this the children finally emerged as socially well-functioning adults.

The historian and ethnologist Hanne Thomsen of Ilisimatusarfik, draws a very interesting parallel between this ethnocentric account of children in a hunting and trapping community and the way in which Danish pastors and civil servants viewed Danish peasant children in the last century. Both in the Danish peasant culture and the Greenlandic hunting and trapping culture the children were gradually absorbed into a structure of activities in common with the adults in contrast to the bourgeois Danish culture, in which children's lives were distinct from those of the adults. In these circles, the children had to be educated; educational methods changed over the years, but were always aimed at giving the children "polish" and turning them into "well-brought-up" adults. Many European missionaries did not see the educational component in the way in which adults in the hunting and peasant societies related to the children, introduced them to work and helped them on their way by examples (Thomsen 1992).

From modern times we have an eye witness account of the way in which the culture was learned in the hunting community. The anthropologist Jean Briggs, who has spent several years among the Canadian Eskimos, has given some very valuable insights into upbringing and socialization in a traditional community. She has published numerous works on the subject. Her studies began about 1960 with the Utkuhigsalingmiut, a small group of inland Eskimos living near Back River. This sojourn is described in the book *Never in Anger*, an uncommonly fascinating and highly personal account both of life as formed for the little community in extremely harsh and demanding conditions, and of the special demands that participating and observing this life made on the anthropologist (Briggs 1970). The population was baptized and belonged to the Anglican mission, but lived isolated and retained much of the traditional way of life. Briggs' position as an "adopted daughter" in a family with

several children – the last was born while she was living with them – gave her plenty of opportunity to study family life and the way in which the children grew up and developed. The administration of feelings, including the words they used to describe feelings when she asked about them, compared with the way in which she herself registered them in practice, was one of the principal subjects of Briggs' studies. She followed the upbringing especially of the two youngest children in the family in detail and from many different angles.

Inuit had a clear idea of what demands could be made on children. They were not born in possession of reason (*isuma*), and only when that had developed could one expect reasonable activities of them. People were very attentive of the child's development. There was agreement about what a child should learn and a general expectation that this would take place, but progress was measured individually, and training was dependent on people reacting to the signals emanating from the child itself. In the course of later studies among Utkuhighalingmiut and other Eskimo communities, Briggs achieved a deeper understanding of the complicated socialization processes. Games could be an integral and very purposive part of upbringing; important themes were played through time and time again, for instance concerning jealousy among siblings or the importance of knowing where one belonged, etc. Children had to learn to make observations and to relate to life with all its uncertainties. They were to learn to refrain from showing anger and open aggression, which were the most feared feelings of all. A woman told Briggs that if you used anger as a way of bringing up a child, it would rebound on you and make the child rebel. It was also considered demeaning and was the object of much disapproval if an adult showed anger to a child (Briggs 1990, 1992, 1994).

After living with the little group of inland Eskimos for a year, Jean Briggs herself experienced some very effective methods for ensuring that the rules of good conduct were observed. That summer a group of anglers arrived in their own aeroplane and settled on the opposite bank of the river. Their stay was extremely interesting, but it was also disruptive on the Eskimos who contacted them when possible, traded with them and did everything to fulfil their wishes, including lending them their boats so that they themselves were unable to go fishing and thus had difficulty in securing food.

The adoptive father, who owned one of the boats, once hinted that he no longer wanted to lend the boat out, and so Jean Briggs informed the leader of the anglers of this, at the same time telling them in a cold voice just *how* much of a nuisance it was for the Eskimos not to have the boats at their disposal. When it came to the point, however, the boat's owner could not break the rule of conduct which said that you should "never refuse a request", and the angry expressions Briggs used (which it later turned out had been distorted in translation) were seen by the Eskimos as a crass and dangerous breach of good tone. Jean Briggs provides a very vivid account of the quite special kind of ostracism she experienced, which consisted in everyone treating her correctly, ensuring that she was given food and tea, but in contrast to what had formerly been the custom, they brought the food to her and no longer invited her to take part in their common life together. Nor did they communicate with her any longer, merely answering her with a smile and perhaps a monosyllable, and then slipping away.

Some time elapsed before she realized she was being excluded. Only when she read a letter that was to be sent to the priest who had arranged her stay did it dawn on her that she was no longer wanted. She did all she could to behave correctly, but became so depressed and weighed down by the affair, which lasted for several months, that at first she did not understand when they again tried to approach her, with the result that it was now they who felt rejected, and a vicious circle had been established. She kept a diary record of all that happened and could later reconstruct the course things took, which provided a clear indication of how much of a strain it was to be outside the life of the community, and how her awareness of the importance of behaving correctly was intensified when she was admitted again (Briggs 1970: 274-307). The end of the affair was that after the misunderstandings about the wrong translation had been put right, her contribution was redefined as having been an outstandingly heroic defence of the others in the settlement, and the situation was played through time after time to the great amusement of all concerned.

Jean Briggs found that especially two qualities were valued as characterizing the ideal Inuk: He offered protection and displayed concern for other people and had what can best be translated as reason (*ihuma*). He was a good man insofar as he was protective, and he was grown up insofar as he was possessed of reason. To be protective it is necessary to be aware of the physical need for warmth, food and security in everyone you meet; to offer help and things for which you can see there is a need. You must never refuse a request for help, unless your resources are limited and someone else needs them more than the person asking for them. You must show equanimity in the face of difficulties and disappointments, and not show you feel unhappy or afraid. You must be happy and kindly, not destructive or antagonistic.

In her life together with the Eskimos, Jean Briggs found that they very largely lived up to these ideals, though that did not mean it was easy to live up to them. These were hard-won ways of behaving, not a sign of profound inner equanimity. Undesirable feelings such as antagonism, unhappiness and insecurity existed, but were suppressed or repressed. She found

that an apparently warm, courteous attitude could be encountered both in happy circumstances and as a defence mechanism. The same was true of laughter. It could be used both to express and to deny antagonism. Laughter is a highly valued means of expression. Someone who laughs easily cannot be someone to be feared.

Withdrawal was a general defence mechanism. It was used as a defence against and as an expression of unpleasant feelings. Direct confrontation between opponents was very rare. During her first 17 months stay with the Utkuhighalingmiut Jean Briggs heard no quarrels and saw no kind of physical conflict between those living there. She noted over-sensitivity to criticism and similarly a reluctance to criticize. People were afraid of refusing a request and of receiving a refusal themselves. The fear of a refusal made them refrain entirely from making a request.

People showed a great dislike of having questions asked of them, especially questions concerning motives, whether their own or those of other people. It was also often very unwelcome to be asked about others' future activities. No one, not even a child, ought to be forced to explain their actions to anyone if they did not wish to do so. The most unwelcome question of all was "Why".

The Danish naval officer W.A. Graah, who was sent out by the exchequer to map the east coast of Greenland and look for traces of the East Settlement that was spoken of in the Icelandic sagas, travelled by umiak 1828-31 from South Greenland up along the southern part of East Greenland. In his account of that journey, he tells how people lived in close proximity to each other, usually several generations together in a communal dwelling. Each couple together with their small children had part of the household's plank bed, only separated from the others by a skin suspended between them. Non-intervention in what was going on in the neighbouring bed, respect for other people's autonomy, was necessary in such circumstances. Conflicts were avoided and played down as far as possible. Peace was more important than justice. "You clearly sense the extent to which they wish to be pleasing to each other, and how much they fear saying or doing anything offensive or unseemly" (Graah 1932).

Relations between the sexes

Sexual intercourse was considered natural and matter-of-fact, a need in line with sleep and food. People talked freely about sexual subjects. Children were well informed at an early age, and to the amusement of adults they could play games in which they copied adults having intercourse. Children could be given names such as *usuk* (penis) or *utsuk* (cunt). A girl was ready for a man after her first menstruation. A man was mature enough to marry when he could catch sufficient to provide for a wife. Sexual relations between unmarried couples were without commitment, and until there were children, relationships between couples could be dissolved without fuss. But when a woman became pregnant, or better still, when she had given birth to a son, she was given a status in the husband's family.

In sexual respects, the woman was the husband's property. He could arrange to exchange her for a night or longer without her consent. If she resisted, she was beaten. Wife swapping, however, did not merely serve the purpose of sexual variety or the renewal of the family, but it was also practical, for instance in cases when a hunter was to embark on a long hunting expedition while the wife was pregnant or for some other reason had difficulty in accompanying him. In these circumstances he could take another woman with him, while his wife meanwhile took the place of the other. Unfaithfulness on the part of the woman was an abuse of the husband's rights and was severely punished. According to Peter Freuchen, it was just as bad for a woman to sew something for another man without her husband's approval as if she had had a sexual relationship with him (Freuchen 1962: 62).

These rules, however, were set aside during games in which lamps were extinguished, when people coupled freely and anonymously in the dark. Games in the dark could be pure entertainment, but they could also have a cultic significance, in that the *angakkok* could order the lamps to be put out as part of an attempt to placate angry spirits.

But despite the relationship between man and woman, which on the surface was one of dominance and submission, the clear distribution of labour meant mutual dependence, which presumably introduced balance into the lives of most couples. Irrespective of how able a hunter was, it was of no benefit to him if he did not have a capable woman to process the catch and keep his clothing in order. It could entail mortal danger if the skin costume was not perfect and the *kamiks* (boots) warm and dry. And there was no future without children, preferably sons. A gifted hunter might actually have several wives. It might be that one single woman was unable to cope with the entire catch, or perhaps she could not produce (male) children. If a man died, his brother took over the widow and the fatherless children if possible. Conversely, there are also examples of communities with a deficit of women, where one woman had several husbands – cf. the killing of new-born female infants to be discussed later.

Eskimo festivities

Festivity was an important part of life. The eskimologist Bent Jensen has in "Eskimoisk festlighed – et essay om menneskelig overlevelsesteknik" (Eskimo festivity – an essay on a human survival techniques)

described festivity and its social significance (Jensen 1965). There were spontaneous parties, for instance occasioned by visits or unusually good fortune in hunting. They might be marked by an almost ecstatic hilarity: "... for the animals hunted would best like to be caught by happy people". The entire settlement would take part in the festivities, and the meal which the men ate together was the central feature.

A hunter's first catch was a very important occasion, which followed a specific pattern: Everyone must taste the animal caught, which was praised to the skies. The young hunter was the centre of the feast. He was the provider and was the only one not allowed to eat of the catch, but he had to recite a detailed account of the hunt while everyone listened. He was the object of everyone's admiration, and finally the bones were taken back to the sea so that the animal might want to be caught by the same young man again. Implicit in the feast was an encouragement to take an active part in the life of the community.

In my opinion, one important aspect of Eskimo culture was the way in which it accepted and encompassed opposites. The festivity and the sense of community were in contrast to the very harsh and lonely life in the wilderness, not least while hunting from kayaks. Gluttony during the festive meals was in contrast to periods of hunger. But the feasts themselves also introduced contrasts: Legends were often told about sinister happenings and supernatural dangers. Knud Rasmussen tells of a hunting expedition with three Polar Eskimos, describing how, when they had become lethargic from having eaten well, one of them jumped up and started his story: "Now we are all four full and happy. Let me tell you about some people who were hungry and suffering" (Rasmussen 1935, III: 64). And conversely, Knud Rasmussen relates a story told by the Netsilik Eskimo Sâmik, who after giving an account of hunger and resulting cannibalism brought on by despair, added: "Oh, you strangers only see us when we are happy and carefree. But if you knew the dreadful sufferings we must experience, you would also understand why we are so fond of laughing, why we love food and song and dance. – How should anyone who is healthy and well fed be able to understand the madness brought on by hunger. We only know that we all so much want to live" (Rasmussen 1925, II: 129-131).

Dealing with conflicts

Conflicts could quickly become dangerous in a community without higher authority. But the risk or the possibility of a conflict was always present in a small community where both cooperation and competition were part of everyday life. Eckert and Newmark (1980) have analyzed the drum song duels that are peculiar to the Eskimos and which Knud Rasmussen collected during the Fifth Thule expedition. They point out that in contrast to a legal trial in the western world, where the aim is to point out and isolate a guilty party in a conflict, every conflict in the old Eskimo community was a social problem, and the entire community took part in solving it through their participation in the drum duel. There was no question of an attempt to eliminate reasons for the conflict or feelings relating to it, but rather of re-instituting a stable ambiguity in relations between people. There were well-established rules for the course things were to take: Insults, accusations and self-glorification, which were forbidden in everyday life, were permitted here, though they were to be uttered in merriment and "for fun". The attacks had to be accepted with good humour and not be answered. You were not allowed to defend yourself, but only to reply by means of counter-attacks on the challenger. The exchange of songs only came to an end when one of the parties had been made to look foolish or become the object of mockery on the part of those listening, or had become so angry that he could not reply. The merriment of the audience was to drown the bad feelings in the duellists, who were expected to laugh their way out of the hostilities and return to friendly relations. At the same time, the song duel could be interpreted in two ways: as an artistic event and as the delivery of an attack. If you lost, you were guilty of not having performed the song duel well enough in relation to the complainant; but there was no implication of being guilty of the accusations made. It was part of the procedure that the accusations should be delivered in an ironical manner, so that it remained obscure whether or not there were real grounds for complaint, and so that it was possible to continue life as before.

This "peace model" was still the hallmark of the judicial situation in 1949 when a group of Danish legal experts, "The Judicial Expedition", collected material on which to base the introduction of a written criminal code for Greenland (Bentzon et al. 1950; Goldschmidt 1980). A local authority chairman voiced the fear that in their dealings with each other in a small settlement people were always afraid that someone "should feel too insignificant and bad to consort with others". When conflicts arose between people, antagonistic solutions were avoided as far as possible. People were content to pass by the problems in silence or with a modicum of teasing.

Cases brought before the local council or in more serious cases the district court were also often decided on the basis of an overall view of what best served the community and the future. A case in point was a man who was found guilty of having caused the death of another by plying him with spirits so that this other man became drunk and then, on his way home during the night, got lost and was attacked and killed by dogs. In a small settlement in South Greenland, angry fishermen who could not get rid of their catches because the salting house was too small, attacked the

local settlement manager and caused damage to his property. The fishermen were not punished, and the salting house was enlarged instead of the lock-up being built as the settlement manager wanted. When a man in North Greenland was found to be having sexual relations with the settlement's sledge dogs, he was persuaded with the help of the local pastor to marry a woman in the settlement who was known to be extremely dissipated. According to all accounts, the marriage was a success.

While the Judicial Expedition was gathering material for a criminal code for Greenland, Hans Lynge was collecting legends and accounts of life from past times in the northern district of Upernavik. The story of Pupooq's *ilisiineq*, magic, illustrates the force hidden in feelings: Two brothers, both of whom were childless, each had a foster son. The two youngsters were good friends and went hunting together. One day, one of them fell through the ice. The other tried to pull him out, but it felt as though some heavy force was holding on and pulling him further down into the water. Nevertheless, he succeeded in getting the other out, but he was in a sorry state and became a heavier and heavier burden to carry. At last the rescuer discovered that Pupooq, his own foster father and thus the brother of the unfortunate boy's foster father, was pulling at him from behind. He was so frightened at this that he left his friend behind and ran home. On the way, he turned round and saw Pupooq beating the exhausted boy. While this was going on, Pupooq was sitting at home in a trance. The boy's foster father, Pupooq's brother, hurried out to save the boy, but found him dead on the ice. The dead boy's foster father later avenged him by killing Pupooq, but just before doing so he got him to explain why he had killed the boy. It was because the boy had humiliated Pupooq, on two occasions even, by coming to his assistance during a hunt. The previous summer, Pupooq had wounded a large caribou that had escaped from him. But his brother's foster son had shot it with his bow and thereby secured it for Pupooq. During the autumn, while they were hungry, Pupooq harpooned a large walrus with a tusk, but the strap attached to the bladder float broke, so that it got away. Again, the brother's foster son had saved the situation. He rowed over to it and harpooned it. Pupooq had never forgiven him for these humiliations (Lynge 1955: 98-100).

The view of death. Suicide and murder in the traditional community

The shaman to whom reference was made above, the Iglulik Eskimo Aua, also rehearsed the mystery of death for Knud Rasmussen. "We know nothing about it for certain, save that those we live with suddenly pass away from us, some in a natural and understandable way because they have grown old and weary, others, however, in mysterious wise, because we who lived with them could see no reason why they in particular should die, and because we knew that they would gladly live. But that is just what makes death the great power it is. Death alone determines how long we may remain in this life on earth, which we cling to, and it alone carries us into another life which we know only from the accounts of shamans long since dead. We know that men perish through age, or illness, or accident, or because another has taken their life. All this we understand. Something is broken. What we do not understand is the change which takes place in a body when death lays hold of it. It is the same body as went about among us and was living and warm and spoke as we do ourselves, but it has suddenly been robbed of a power, for lack of which it becomes cold and stiff and putrefies. Therefore we say that a man is ill when he has lost a part of his soul, or one of his souls; for there are some who believe that man has several souls. If then that part of a man's vital be not restored to the body, he must die. Therefore we say that a man dies when the soul leaves him. – We believe that men live on after death here on earth, for we often see the dead in our dreams fully alive. – Death and sleep are nearly allied, – in sleep the soul is only linked to the body by fragile bonds" (Rasmussen 1929: 92-93).

No Inuk fears death in itself, for all are convinced that it is merely the transition to a new and better form of life. But there is also this mystery connected with the soul, that as soon as death has deprived it of the body, it can turn upon the living as an evil and ruthless spirit. The soul of a good and peaceable man may suddenly turn into an evil spirit. There is therefore much intricate taboo associated with death. These are to help the dead person reach the realm of the dead.

After death, there are two different places to which one may pass, either up into heaven to the *Uvdlormiut*, or People of Day. The other place to which the dead may come, lies down under the sea. It is a narrow strip of land, with sea on both sides; and the inhabitants are therefore called *Qimiujârmiut,* "the dwellers in the narrow land". Persons dying by violence pass to *Uvdlormiut*; those dying a natural death, by disease, go to *Qimiujârmiut*. It is pleasant both in the Land of Day and in the Narrow Land. – In both places there are plenty of animals to be caught. Anyone having relatives among the *Uvdlormiut* and wishing to join them after death, can avoid being sent to the *Qimiujârmiut*: An old woman froze to death one harsh winter when there was a shortage of food. When her son heard this, he lay down naked on the ice one cold winter's night and froze to death. He loved his mother so dearly that he wanted to ensure that he came to the realm of the dead together with her (Rasmussen 1929: 95).

Many accounts of suicide suggest that they fol-

lowed the same pattern in the various Eskimo communities. As Aua pointed out, there were rules for everything. Customs is perhaps a better word. Customs are internalized, whereas rules are imposed from outside. The Greenlandic expression is *ilerqut. Ilerquvut maligdlugit* means "according to our customs". (Information provided by H.C. Petersen). Suicide was common if you were ill, old, or otherwise incapable of contributing to the community. It was the duty of the closest relatives to help anyone who wanted to take his or her own life, but was too weak to do so unaided. But everyone had the right to decide for themselves. Although it was probably unusual, young people might also commit suicide. Thus Gustav Holm tells the following story from the umiak expedition to East Greenland in 1883-85: A 50-year-old woman was married to a younger husband to whom she was unfaithful, just as she was negligent with her domestic work, and so the husband beat her. Her son avenged his mother by murdering the stepfather. After this, she tricked a powerful *angakkok* into marrying her, although he was already married to her daughter. The daughter was so devastated by this that she drowned herself in the sea (Holm 1972). The others living in the house could only watch and not interfere in what was taking place.

Nor was murder unknown in traditional society. From the period immediately before and during the first period of colonization in East Greenland there are detailed accounts of murder that give an insight both into motives and circumstances and the ways in which the murders affected the small communities. You could kill in order to acquire someone else's character or good fortune in hunting. For this to be achieved, the murdered man had to be cut up and his heart removed in a special way, after which the perpetrator had to eat the tip of the heart. Under normal conditions with good hunting, this kind of thing was scarcely relevant, but when the hunt failed, or during other times of adversity, envy or the urge to survive could gain the upper hand. A chain of murders could be set in motion, but an "equalizing vendetta", a just retribution for an unjust murder, could put an end to further acts of revenge (Sonne 1987).

While the murderer, then, could be a hero doing his duty, there are also examples of murderers whose behaviour today would be classed as signs of madness or some severe personality disturbance. Thus there is the story of Iisimmardik, born about 1860, no impressive hunter, but a brave comrade in his early years as a hunter. Meanwhile, he soon became violent and a threat to his fellows, after which he was given the nickname of Iisimmardik, madman. Iisimmardik committed his first murder on a man whose wife he coveted, and for whom he therefore nursed a feeling of intense anger. When the murder was discovered, he became even madder for a time and threatened everyone. There are accounts of dramatic situations in which during the dark he attempted to kill one of the others living in the communal house. It was impossible to get through to him, and everyone fled from the house except his wife, who called out after a time, saying, "He says he has recovered. He has got his reason back".

Three years after his marriage he had a son. He loved this son dearly and was very proud of him, and as the boy grew bigger, Iisimmardik grew gentler; he was friendly towards his fellow hunters, and his terrible reputation began to be forgotten. When the boy was a year old, the father's joy knew no bounds. But then the boy fell ill and lost weight, and no one knew what was wrong. In his despair, Iisimmardik brought in one shaman after another. They all came to the conclusion that someone had stolen the boy's soul from him. Before long, he died. Iisimmardik then became pale and ill, and his mind became black. He suspected a shaman of being the person who had stolen the boy's soul. This shaman had challenged another to a song duel, and although he was warned about Iisimmardik's evil intent, he went through with the contest. But during the last verse Iisimmardik jumped on him from behind and killed him with his knife. In doing this he committed a serious breach of the rules, as the song contest was sacrosanct, and no killing was allowed while it was taking place. Iisimmardik then killed more people before fate caught up with him in the form of four hunters conspiring to get rid of him. They led him into an ambush, one of them shooting him in the back of the head, after which they all inflicted wounds on him with the knife with which he had himself cut up so many people. Then they scalped him, took out his eyes and turned them in so they should not see while they cut him up. When the murder became known, there was a song feast. This happened in 1892, two years before the mission station and colony were established. This story was first told to and written down by Peter Rosing while he was pastor in Ammassalik and was later adapted and published by his nephew, the artist Jens Rosing (1960).

Killing small babies was not unknown, especially during times of hunger or if the mother died, as its chance of survival was very small. Another form of murder was the killing of new-born baby girls. When on his Fifth Thule Expedition Knud Rasmussen came to the Netsilik Eskimos in King William's Land in Canada, he asked all the women in the settlement of Malerualik how many children they had given birth to, and how many girls they had killed. 18 women had given birth to 96 children, of whom 38 girls had been killed. Although circumstances were presumably different in different parts, here at least it was the custom that girls were killed at birth if they had not been promised beforehand to a family with a son who would need a wife one day. According to Knud Rasmussen, the background to these killings was purely economic and not a sign that the women's importance to the community was underrated. But the struggle for life was so hard

that a single provider was unable to sustain more than the absolutely necessary members of the family. A girl was simply a burden and an expense on the household as long as she could not make a contribution; and the moment she was able to make a contribution she married and left the family. A hunter had to assume that he would only be able to meet the demands hunting made on him for a limited number of years. If he had sons, they would usually be able to help when his own strength began to fail. So it was a case of having as many sons as possible so as not to be forced to put a rope round your own neck at too early a stage. For it was the normal custom that old people who could no longer look after themselves preferred to put an end to their lives by hanging themselves. The moral was as follows: Life is short. It is a case of getting as much as possible out of it as long as you have the strength to do so. Every child is suckled for at least three years, and as long as it is being suckled the women do not normally have any more children. So the parents did not as a rule feel they "could afford" to see three years wasted on suckling a girl when they might otherwise hope to have a boy (Rasmussen 1926, II: 132-134).

The traditional notion of illness

No distinction was made between physical and mental illness. All illnesses were caused by the rape of a soul or by possession. There was thought to be a complex of souls, in that each of the parts of the body had its own soul. A soul could leave the body, or the soul of a dead person could take possession of it. The shaman (*angakkok*) could travel between this world and the spirit world and thus on serious occasions such as illness or poor hunting or fishing discover what was wrong and perhaps suggest procedures for re-establishing order. The most important reasons for illness were the breach of a taboo and witchcraft. In the case of a broken taboo, a complete confession of the breach was a precondition for a cure. In the case of witchcraft, it was a case of finding the guilty person. A witch (*ilisiitsok*) could come into contact with the world of the spirit in the same way as the *angakkok*, but whereas he operated openly and to the benefit of the community, the witch in contrast worked in secret, for his or her own objectives, governed by evil and envy. Both men and women could be witches. They were much feared, and people who lived isolated or behaved in a strange manner were often suspected of witchcraft. If someone fell into a delirious fever, this was a proof that he was a witch who could no longer govern or control his evil.

A nurse by the name of Signe West has given an account of the years between 1933 and 1946, when she was working as the only nurse, and without the help of a doctor, in the Ammassalik district in East Greenland. She states that while she was there, she did not meet anyone with real mental disorders, but several who had feverish fantasies. They were tied to the wooden sleeping bench if they were violent, but the task had to be undertaken by a stranger from another house so that the evil spirit possessing the sick person should not move across and continue in another member of the family. Thus, in 1944 she heard of a woman who had been shut in a house with the door barred so that she could not get out. She had water and food, but no heating. When those living in the settlement heard that the nurse was on her way to fetch her, they hurried to get her dressed and placed on the family sleeping bench along with the rest of the family. For they knew perfectly well that Europeans would not countenance this way of treating their fellows. There were also great difficulties in the hospital. The woman caught pneumonia and was in such a nervous state that she could not utter any coherent words, but uttered a cry at the slightest sound. The student nurses were afraid of her "evil spirit" and would go away from the hospital if they were to look after her. Luckily, she regained her health within a couple of months and could be sent home; but before this happened, the pastor had to talk to the people from her settlement so that they took heed of her mental state (West 1948).

Christianity alters ideas

With the advent of Christianity, suicide and murder were strictly forbidden. Life and death were now in God's hands, and to bear suffering with patience became a virtue. But such a radical change in the understanding of life is not brought about all at once. Thus Knud Rasmussen, again from the Fifth Thule Expedition, tells how he found a camp among the Igloolik Eskimos in Canada where an elderly man who had long been ill with no prospect of improvement had just hanged himself. He and his wife belonged to the Catholic mission, which did not countenance suicide, but on the other hand, according to Eskimo tradition it was his right. He solved his dilemma by asking his wife to lend death a helping hand, but in such a fashion that he should not die during the hanging itself, but should be released from the hide thong that was to strangle him before he finally expired. His wife accordingly assured Knud Rasmussen most earnestly that she had strangled him with the thong, but before he was quite dead she had removed it, and at the same time held up before him a little crucifix, which had been given them by the missionary. Therefore, according to her view, he had really died a natural death; They had only "hurried death up a little, as it is apt to be so very slow at times" (Rasmussen 1929: 97).

Although such a straightforward and serene attitude to death is alien to a European, it ought not to persuade us that there could not be feelings involved with which we could not empathize. Poul Egede notes

in his diary for 1737: "There was a deeply unhappy widower here who had committed the misdeed of throwing his new-born child off a high cliff, closing his eyes so that he should not see its fate. I spoke gently to him, but he excused himself by saying that the mother was dead and so there was no one to suckle the infant. So it was inevitable that it would die slowly; but now, he said sadly, it happened quickly" (Egede 1988).

All accounts suggest that conditions of life for the Polar Eskimos in Thule and the East Greenlanders in Ammassalik were very different at the beginning of colonization. When Knud Rasmussen spent his first winter in Thule 1903-04, he found prosperity everywhere. "The demands they made on life were fulfilled, and a naive joy at being alive expressed itself in their speech and their actions" (Rasmussen 1935; II:94). The use of amulets was decreasing, just as the shamans had gradually forgotten the arts of their forefathers because they had no need constantly to call on the supernatural. On the other hand, there were in the Ammassalik area many *angakkoks*, frequent seances and large numbers of taboos that had to be observed in order to ward off poor catches, hunger and blood feuds. There was also a widespread use of amulets. Between Gustav Holm's 1884 umiak expedition and the establishment of a mission and trading station ten years later, the population had dropped from 413 to 217. Some had died, but most had moved to the Cape Farewell region at the southernmost tip of West Greenland in the hope of finding better living conditions. After the trading station was established, some returned to East Greenland. Many expressed great relief on the introduction of Christianity. Murder was forbidden, and the mission looked after widows and fatherless children, who otherwise had no alternative other than to do away with themselves. But men, too, expressed relief at the new circumstances. Knud Rasmussen tells of his meeting with the mass murderer Audarudaa, baptized Christian Poulsen, who had killed several of his wives while still a heathen. After his baptism – though not entirely convincingly in the eyes of Knud Rasmussen – he described his former actions as having been necessary at the time, but nevertheless expressing relief at having been baptized and living under another, gentler, regime now (Rasmussen 1935, III:282-294).

The history of colonization in West Greenland contains many examples of how different views of life could clash with each other. The historian Finn Gad examines a number of them in his book "Fire detailkomplekser af Grønlands historie 1782-1808" (Four Episodes from the History of Greenland) (Gad 1974). A widow by the name of Kezia, who was 55 years of age in 1799 when the events took place, lived in the now abandoned settlement of Kangeq near Nuuk together with her son Peter who was 27 years old and married with two children, and her 21-year-old unmarried daughter called Agnes. Another family also lived in the house. The entire village belonged to the Herrnhut (Moravian Brethren) mission. Kezia fell ill, and as she believed she was soon to die, she asked her son not to venture out in his kayak any more, as he might capsize and be killed. She wanted him to live exclusively for his family. Kayak hunting was the only means he had of providing for his family, and yet on the other hand, it would be unthinkable simply to ignore his mother's words. The mother's illness grew worse, and the two siblings decided that she must die. According to the record of their subsequent confession, they bound her, bent her double, struck a hard blow on her head and stomach and then strangled her. The inspector of police in Nuuk heard of the case from a "blanding" (half Dane, half Greenlander), and although he himself points out in his report that it was not "his official duty to indict and investigate bloodshed simply between Greenlanders", he had considered it his human duty to undertake an investigation because anything was to be expected of this man Peter who, according to all accounts had repeatedly maltreated his own wife.

The two siblings made no attempt at all to hide the murder, but Peter indicated that he did not feel guilty. It was necessary; their mother was out of her mind. The inspector adopted a very condemnatory and condescending attitude and showed no interest in the background to the murder or its cultural context. To him, a murder was a murder, and he was of the opinion that if Peter could commit one, he could also commit more. At Christmas, when the congregation was assembled at Herrnhut near Nuuk, the inspector had the two siblings tied to a post with notices pinned to their chests bearing the word Matricide in Greenlandic. Here they stood for an hour while he had a large number of young people file past. It was an unheard-of humiliation, to which Peter apparently did not react; he showed no sign of bearing a grudge. However, he later broke into the premises of the trading post, destroyed all their equipment and took some articles away with him, presumably as an act of revenge to compensate him for having lost face as a result of the inspector's punishment. Meanwhile, he was found out, and he immediately confessed and offered to pay for what he had destroyed. But the inspector refused this, and insisted that he should be whipped. Now Peter was humiliated for a second time and made the laughing stock of the others from his settlement. He disappeared without trace after this. It was not known whether he had perished while out in his kayak. Rumour had it that he had become a *qivittoq,* see next section (Gad 1974: 160-165).

The "Dalager murder" of 1805 took a different course. Jacob Dalager, the son of the late Danish merchant C.C. Dalager and a Greenlander by the name of Juliane, was taken ill with a fever and violent pains in his head, and after a few days he became severely confused. He had the idea that he ought to die, for

otherwise he would kill all his family and eat his children. He had been told this in a dream, and the sign was to be that he started eating his own tongue. He first asked his family to nail him into a large barrel, but on his way to the barrel he fled back to the house, where he fell into convulsions, during which he bit off a piece of his tongue; this was seen as a sign that his prediction was correct. He asked his family to kill him. His mother fetched the gun and put it on his brother's lap, so that it was pointing towards him. She put some priming on it, after which it went off without anyone knowing how. It did not kill him, but he whispered to them asking them to shoot him again and now personally made sure that the gun was pointing towards his heart. His mother then pulled the trigger, and he died on the spot. The course of the Dalager case was very different from the Kangeq case. During the investigations, both the inspector for North Greenland and the local missionary were far more understanding. The mother expressed the conviction that God had commanded her to kill her son through the son's own words to her. She was afterwards very much in doubt as to whether the son was safely in heaven, and whether it was a sin she had committed. The missionary refrained from adopting an attitude, and he managed to comfort her (Gad 1974: 165-171).

Conflicts between the old and the new faiths

From the time of the mission there are accounts of severe conflicts between the old and the new faiths: Makorse was a shaman with a dog as his familiar spirit. He had marks around his navel left by the dog's teeth. When he had been baptized, he was ashamed of this and kept it hidden, while he zealously read the Bible. The inner conflict weakened him. People found him weeping, and finally he fell ill. Now he showed the marks from his familiar spirit to the others in the settlement. Later, he lost consciousness, and now from deep down in his chest they could hear singing, the shaman's song from a spiritual journey. As the voice now seemed to be rising through his throat and reach his mouth, he drew his breath deeply and became mad. Now they understood that he had been a secret shaman. A few days later he died and was buried a little way outside the consecrated churchyard (Lynge 1955: 90-91).

Things went better for a female *angakkok* called Akitsiaq. She was the foster daughter of a famous shaman, Mitsuarnianga, who allowed himself to be baptized. After Akitsiaq had also been baptized she became confused and caused a great deal of disturbance for her foster parents at night. They, however, were unusual people, who looked after her and continued to make sure she came to no harm, until she was finally cured. They thought that she had fallen ill because she had not confided in the priest before her baptism and told him she was an *angakkok*.

Mitsuarnianga was, incidentally, the father of Karale Andreassen who was the first East Greenlander to train in the teachers' training college in Godthåb and then worked as catechist (assistant teacher and curate) in the settlement of Kuummiut until his death in 1934. He has told about his foster sister's illness and of life during his childhood, when he first experienced his father's shamanistic seances and thought him immortal. At the age of nine he was baptized along with his mother, and although the family continued to live together, several years elapsed before the father also accepted baptism (Andreassen 1935).

However, elements of the old beliefs could also be incorporated into the new: In his book about West Greenland society around the turn of the century and the Greenlandic revivalist movement *Peqatigíniat*, Søren Thuesen (1988) recalls how faith in amulets was continued by placing pages from a hymn book in the kayak instead of, for instance, the tongue of a fox or the head of a raven. There are examples of people cutting out the Lord's prayer from a book, chopping it into bits and giving them to sick people in their food. At that time there was still a strong sense of community in the Greenlandic society, as is suggested by some words of the Danish-Greenlandic pastor Knud Balle: "the hymn book and hymn singing were given with far more weight and significance than was really a good thing according to Protestant understanding. – Communal hymn-singing takes the place of personal prayer". There is a tendency to see Christianity as "something that is done purely by magic, with a distinct predilection for angels, revelations, dreams, signs etc." (Quoted from Thuesen 1988: 52).

Mental disturbance in former times

Pibloktoq – Arctic hysteria

Throughout the whole of the Arctic region various types of mental disturbances have been described which have been given the general designation of Arctic hysteria. The Arctic peoples have each their own term for it: the Sami call it *keavmus* (Seitamo 1984), the Polar Eskimo *pibloktoq*. The most detailed descriptions of *pibloktoq* stem from Peary's expeditions to the northernmost part of Greenland 1892-1909, where at times it assumed an almost epidemic character. *Pibloktoq* has been described as a transitory state of disturbed consciousness, motor disturbance, shouting, screaming, possibly imitation of bird cries,

laughter etc. Anyone who was affected by it often ran naked out on the ice and rolled in the snow, though only seldom coming to any serious harm. The relatives would watch him or (more often) her, but only interfere if the situation developed into something life-threatening. After an attack, which might last anything from a few minutes to half an hour, the person concerned usually fell asleep and then returned to his or her habitual state. Brill (1913) and later Gussow (1960) analyzed a number of cases on the basis of available descriptions. According to Brill, lack of affection and insecurity were essential themes, whereas Gussow talks about a culturally determined panic reaction which at the same time seeks to express control over, denial of and compensation for a feeling of helplessness and extreme fear, which could arise especially on expeditions, under unfamiliar conditions over which the sufferers had no control.

About 1970 in Alaska, Foulks could still find patients with recurrent bouts of Arctic hysteria (Foulks 1972). He applied a broader bio-psycho-cultural view to cases and undertook a thorough examination of ten patients during the course of a year's stay in the area. As a causal factor, he points out that there were few possibilities for avoiding a mutually binding association in the tight-knit small group communities. Physically to turn your back on the community (to walk out into the mountains, become a *qivittoq*) meant death, whereas dissociation, a trance-like condition, was a culturally accepted transient spiritual disappearance, related to the shaman's purposive and consciously determined spiritual journey. A feature common to all ten Arctic hysteria patients was difficulty in maintaining a socially acceptable manner of life and a sense of insufficiency and shame vis-à-vis the others in the settlement. They were otherwise very different from each other; there were both men and women, and the difference in ages was considerable. The background to their reactions could be the loss, or the threatened loss, of a key person, or perhaps they had long experienced some burdensome condition, including a low level of intelligence, schizophrenia-like isolation etc. But Foulks found that biological factors such as severe deafness, organic brain damage, epilepsy or a low calcium content in the blood, to which the diet and the polar darkness could make them disposed, could also facilitate the dissociative condition.

In the Thule region the cases have apparently died out and have not been reported in the form described for many years. It is scarcely a coincidence that Peary and his companions were able to describe so many cases of *pibloktoq*. The presence of the expedition effected great changes in the life of this community. People went to unfamiliar places far from the familiar hunting grounds. Sexual relations between the male strangers and the Inuit women were considered a natural thing, but they may also have given rise to jealousy among the men. A woman's body was at the disposal of her husband, and she was subject to his whims. The reactions of the men if they felt insulted could be violent, and a threat to repudiate a wife could be a catastrophe beyond our understanding. Even today, the threat of repudiation or rejection has led to violent reactions and even to murder. Thus a young woman killed her brother after various occasions on which, while drunk, he had threatened to throw her out and leave her with nowhere to go. Both siblings lived with their father, and after the mother's death the brother had tyrannized the home.

When situations got out of hand, it was somehow culturally accepted to react by having an attack of *pibloktoq*, and the violent outbursts of feeling and physical efforts presumably helped to prevent more radical disintegration. But there is also something self-perpetuating in this form of reaction; when it works, it is repeated with less and less reason. And in addition, when scientists showed an interest, that, too, could also perpetuate the pattern. But with changes in the community, the attacks died out.

Qivittoq – mountain wanderer

Another phenomenon with roots back in the traditional culture has on the other hand occupied people's minds right up to the present day. This concerns the concept of *qivittoq*, a "mountain wanderer". In Poul Egede's 1741 dictionary, the verb *qivippoq* is translated as "to become angry, to take something the wrong way, to travel or leave out of anger" (quoted from Bertelsen 1940:177). To turn your back on society was synonymous with death in the wilderness. In Inuit tradition, after a short time without human contact the mountain wanderer was transformed into a repulsive monster, after which he would be excluded from the human world for all time. In the notion of *qivittoq* there lay also a great remonstrance against breaking out of the community. According to Bertelsen, the first known account of mountain wandering stems from 1841, when a man "had gone off into the mountains to become a hermit because his wife loved another man" (Bertelsen 1940: 171). The concept of mountain wandering has provided the basis for the formation of numerous rumours, at least in the present century. If a kayak hunter had perished without others having been present, the rumour could arise that he had "gone *qivittoq*". It might apparently be quite small things that set a chain reaction in motion and gave rise to the catastrophe: for instance one man had broken a lamp glass. His wife became so angry at this that she happened to say that the glass was worth more than he, after which he disappeared, never to return.

While, as mentioned above, *pibloktoq* can be seen as a temporary flight from the community on an unconscious level – and therefore nothing to which sanctions can be applied – conscious flight was both

feared and forbidden. 20-30 years ago I had several severely depressed patients to whom the idea of *qivittut* was not alien. Thus an elderly woman suffering from a severe depression wanted to burn herself to death, and when she was prevented and then sent with the boat transporting patients to hospital, she tried to throw herself into the sea on the way. She told people that she had to die because 30 years earlier she had put out some food for a nephew after he had "gone *qivittoq*". For a time he came back at night and took the food before finally disappearing completely and never being seen again. The other people from the woman's settlement heard of the case, and they, too, saw her present illness as a result of what she had done then.

Qivittut were presumably known in West Greenland from the start of colonization, but possibly not in other Eskimo communities. Gustav Holm states that the *qivittoq* concept did not exist in East Greenland. They had heard of *qivittut*, but only from West Greenland (Holm 1972: 108). Jean Briggs has said in a private letter that among Canadian inland Eskimos the expression *qivippoq* means "disappointed". It is used in the case of a refusal of something you have been offered, something you have wanted or expected to receive, but did not at first receive. It looks as though increasing importance was ascribed to the concept of *qivittoq* in the colonial era. Thus Christianity received its place in the myth: When the mountain wanderer was transformed into a monster after a time, he always retained a white spot on the palm of his hand. This was the remains of the baptismal covenant that could not be wiped out.

Nangiarneq – kayak anxiety

A third pathological picture rooted in traditional culture is Kayak anxiety, *nangiarneq*. This expression, too, is found in Poul Egede's dictionary from 1750. It is translated as "is afraid at sea or on encountering abysses". The expression is also used of the fear that can come when walking on unsafe ice, afraid that the ice might break, or in a boat on a rough sea. A feature common to these kinds of fear is that you can yourself put yourself in a position that will lead to this reaction, in contrast to the expression *anilaanganeq*, which covers more indeterminate fear. A detailed description of the symptoms in kayak anxiety is found in Bertelsen (1940: 181-190). The victim feels palpitation, pressure in the chest, dryness in the mouth, the legs feel cold as though there is water in the kayak; there are attacks of trembling, a sense of powerlessness, of inability to think or act; the symptoms correspond entirely to modern descriptions of anxiety attacks accompanied by characteristic physical symptoms. In typical cases the anxiety is triggered when the kayak hunter is far out on a sea so dead calm that the horizon has been obliterated and the sky and sea have become one. The condition is/was extremely disabling, as it prevented the hunter from carrying out his work.

Although the expression *nangiarneq* was known before colonization, the condition must be assumed to have been rare. Thus, as far as I know, it is never mentioned by Hans Egede. The mineralogist K.L. Giesecke, who spent seven years travelling in Greenland, records in his diary what he saw as an unusual phenomenon in 1807, when he came across a man in Julianehåb who did not go out in his kayak because of dizziness (Giesecke 1878: 31). After a journey the previous year, Lange notes in 1864 that nervous illnesses only play a fairly insignificant role, though they appear to be on the increase. This applies to headaches, rushing sounds in the ears, palpitation, trembling of the hands and "dizziness in a kayak" (Lange 1864). By the turn of the century kayak anxiety was a common illness affecting up to 15% of all kayak hunters in West Greenland (Bertelsen 1940: 185).

After various theories as to the reason for kayak anxiety had been suggested, such as over-indulgence in coffee and tobacco, and also the possibility of a complaint of the inner ear, the Danish psychiatrist Knud Pontoppidan, who was chief psychiatrist in the Psychiatric Ward in Copenhagen Municipal Hospital, classified it as a phobic condition related to agoraphobia (Pontoppidan 1901). Gussow draws attention to the fact that the condition is reminiscent of the one experienced by pilots losing their sense of direction on solo flights. He associates it with sensory deprivation and with a general tendency among Eskimos to withdraw into themselves in cases of specific forms of stress (Gussow 1963). In most cases the attacks are only, or especially, brought on if sufferers are alone, and before the first attack they have often had some disturbing experience, for instance seen another kayak hunter drowned, lost a close relative or in some other way had a sense of being isolated. In some cases also in our times it has been believed to be caused by witchcraft (Hansen 1995).

In traditional society kayak hunting was an inseparable part of the culture. The decoration of hunting implements, rules for dealing with the catch etc. – all this was related. The real dangers in hunting by kayak were also kept at bay by good training and a close knowledge of how best to deal with dangerous situations. By following inherited customs it was possible, as the Inuk Aua put it, to live a carefree life. With the introduction of Christianity new authorities came on the scene, and they rejected the cultic rituals as superstition. It must also have caused confusion that the concept of the Devil was translated as *tornarssuk*, which was the name of an important familiar spirit. *Tornarssuk* is depicted by means of a stylized hind part of a seal's body and frequently appears as a protective figure, not least on the throwing stick (Kaa-

lund 1979: 30), only to become the Devil in Christian terminology.

The mixture of power over things which the strangers radiated, both through their conviction that they should spread the right faith to the Eskimos, the great ships and the trading goods they brought with them such as guns, and yet their helplessness under alien conditions, must also have led to a certain ambivalence towards the authorities and thereby introduced a new kind of insecurity into life. Birgitte Sonne, however, tells of a case of kayak dizziness in reverse: the *angakkok* Apulu is weakened by his refusal to hold a seance and is overcome by the return of kayak dizziness from which he had otherwise been cured. But then he is baptized and regains his urge and ability to go hunting (Sonne 1987).

Finally, the great increase in the incidence of kayak anxiety must also be seen in the context of its being recognized as a disabling condition entitling people to modest financial support. It is not inconceivable that some cases could have been explained by physical ailments such as a bad heart, organically determined dizziness etc. But a thorough diagnosis was out of the question, and so it might have become a catch-all designation for disabled hunters. According to a medical book from 1923, kayak anxiety gave sufferers precedence when seeking employment in the coal mine in Qutdligssat (Kelstrup 1943). As an exotic mental illness specific to one culture, it attracted great interest among researchers around the turn of the century, as has been said above, which might possibly have increased the tendency to report cases of it.

A Greenlandic health service

According to H.C. Glahn, who lived in Ilulissat in the 1760s, the Greenlanders usually treated demented people either by carrying them out alive or killing them, "which is not so much out of cruelty as from fear of them" (Glahn 1921). Both Glahn and other missionaries tried to show that it was not always so dangerous to be together with deranged people and to convince them that "you ought not to kill them except in the most extreme circumstances, when there is no other possibility of saving your own life".

After the middle of the 19th century a health service was gradually built up in West Greenland, which in time, at least in the towns, was able to take care of the mentally deranged in their most disturbed periods. The notion of possession by an evil spirit could now be changed to the idea that the sick person must be possessed of the Devil. In 1916, when a mentally deranged man was taken to the hospital in Nuuk from a nearby settlement, the entire village was horrified at the thought that the sick man's soul could no longer be redeemed. In tears, his brother went to see the pastor to ask whether the patient had any chance of going to heaven now. (Private information provided by Hans Lynge). In Dansk Medicinsk Historisk Årbog 1994, Nick Nyland states that Jon Bichel, the regional doctor in Egedesminde in 1919, wrote the following report to the Danish health authorities: At Kipingassuq last year there was a case of madness which was seen by the population as possession by the Devil, for which reason they kept the woman tied to her bed until her death, some 6 hours before the arrival of the doctor. The people had intended to bury the body outside the cemetery because of the possession (Nyland 1994: 100).

Those who did not behave violently remained at home, and it is conceivable that the traditional way of life with both care, respect for the autonomy of the individual and the avoidance of conflict had a beneficial influence on certain kinds of mental derangement.

On the background of many years working as a doctor in Greenland at the beginning of the present century, Bertelsen sums up as follows: "Mental illnesses in Greenland seem to me only slightly to diverge from the same kinds of illness in Denmark proper; – [I] was almost surprised at the similarities which are seen in mentally ill patients, at the uniformity generally found for instance in compulsive and maniacal ideas in patients on such widely different levels of culture" (Bertelsen 1940: 200).

Culture and society in transition

One of the fathers of transcultural psychiatry, H. B. Murphy, describes the cultural concept used in transcultural psychiatry as encompassing the values, beliefs and behaviour patterns which a community teaches its members so as better to equip them for life (Murphy 1968). This emphasizes that culture must be seen in relation to the conditions of life to which it is an answer. When the conditions change, culture, too, must change. At all events the customs, values and beliefs which formerly worked well, no longer act in the same way. If, for instance, we look at an Eskimo virtue such as generosity, it worked well in a community where no one derived any benefit from keeping a store of supplies if his fellows died from hunger. To be admired for generosity was a reward in itself, and if people were mean, the community had the well-known sanction of making them look ridiculous. An amusing example is Peter Freuchen's description of how his wife, the Polar Eskimo Navarana, punishes a woman's greed by showering her with gifts (Freuchen 1962: 103). But today, the private economy has long made it necessary to save, and although meanness still exists as a notion, thrift is a new and as yet

not entirely established virtue. Thus generosity can well come to be seen as prodigality and meanness as thrift under changed social conditions.

As an example of a rapid change in life style, brought about by changes in society and entailing far-reaching implications for the population, I will refer briefly to Richard Condon's studies among the Holman Inuit in Canada (Condon 1992). In 1939, the Hudson Bay Company established a trading station in an isolated area 300 miles north of the Arctic Circle in the Canadian Northwest Territories. The very scattered population of Copper Eskimos, who were accustomed to living in the traditional manner, settled there and made this their permanent home during the 1960s. The community underwent a period of speedy development with a school, nursing station, air strip and so on. The birthrate increased rapidly, and a large population of young people grew up. At the start of the study period (1979-89), the young people were characterized by traditional manners of behaviour, mutual tolerance and the avoidance of conflicts, partly through humour and partly through forgiveness and forgetting. But the young people complained of boredom. The introduction of television and radio after the start of the study period brought entertainment and a window on to other ways of life. While the style on the sports ground had hitherto been relaxed, without people being overconcerned about who won – it was more important to have a good time together – all this was now changed. A competitive mentality arose, and games were marked by violent episodes. But outside the sports ground, life went on more or less as before.

In the final phase of the study period the entertainment available had been further increased to offer 5 television channels; sports facilities had been modernized with a trainer and an outdoor sports council that decided on disciplinary arrangements. The young people who broke the rules were now immediately sent off and were quarantined for a period depending on the seriousness of the misdemeanour, which meant that the former methods of resolving a conflict – forgiveness and forgetting – were no longer available. There was actually a tendency for a certain status to be achieved by being sent off. Rough behaviour was becoming widespread in the community, also related to greater affluence and an increased use of alcohol, not least among the very young. All but one of the violent situations which the author noted during his studies were linked to sport or alcohol.

Social change has taken place over a longer period in Greenland, but its manifestations have been very different in different areas. The colonization of East Greenland 100 years ago and of Thule 15 years later provide a unique opportunity to gain an impression both of society before colonization and of the manner in which the new ways affected the community.

The traditional way of life with its serene attitude to death, and with powerful and binding social ties between members of the household and especially those closely related to each other has been retained in East Greenland right up to our times. This finds clear expression in Sara Helm's portrayal of conditions during the great influenza epidemic in 1935-36. The epidemic meant that many women and especially many children were deprived of a provider. The then Commissioner for East Greenland, Captain Einar Mikkelsen, established the Child Care Institution in Ammassalik on the basis of private Danish money. Sara Tønnesen, whose married name was Helms, was in charge of the institute 1936-38, and in an extensive, only partly published study has given an account of the work and described what later happened to these children without a provider. It quickly turned out that the population had a well-established tradition for care, the main principle of which was that children and widows should continue to belong to the house community to which the father had belonged, and that the responsibility for providing for them rested on the closest male blood relative. The Child Care Institute made its contribution taking care to respect this tradition, so that assistance given had the effect of helping them to provide for themselves. The boys were provided with hunting equipment and the girls with sewing implements so that they could help in the everyday running of the house. In summer they received help to enable them to go to the summer hunting grounds and take part in gathering supplies for the winter. Help might also be given for building a house. In the course of a subsequent study of the children helped in the Child Care Institute, Helms found that they had managed as well as a comparable group of children of similar age who had grown up with both their biological parents. The sole exception to this was that more of the provider-less boys who had become hunters had died in kayak accidents than boys who had had their father to teach them the art of hunting (Helms 1988).

As doctors in Ammassalik in 1948-51, Sara and Peder Helms found that the community functioned broadly speaking in the same way as in the 30s. The old people had a meaningful life on the middle plank bed. They looked after the grandchildren and repaired clothing and tools. The children experienced at one and the same time a safe framework and extensive freedom. That life had its risks was a fundamental condition of life, and the possibility of death was accepted instead of its being looked on as an enemy to be avoided – almost at any price. Attempts to put off death were also alien to them. But when next seen in 1980, modernization of the community had made deep inroads: the old people were now referred to the old people's home and thereby isolated from their grandchildren, who were now cared for in institutions during the day and deprived of their former freedom. "And when death approaches, they are admitted to

hospital, where we try to combat it with all the means at our disposal" (Helms & Helms 1979).

In West Greenland, Greenlanders and Danes lived side by side in the towns that had gradually grown up after colonization, while life in the settlements retained more of the traditional manner of life. Alfred Bertelsen, who has already been quoted several times, is an invaluable source of information on health and sickness in colonial times. On the relationship between the sexes in the colonial age he writes: Polygamy was now forbidden, and an age limit was fixed under which you were not allowed to marry. Marriage could no longer be dissolved now. This all happened to promote "morality" as understood by the mission. But it also led to the emergence of a large group of unmarried young men and women who according to Alfred Bertelsen had continued the tradition of free association between the sexes. This became obvious, if not before, when there were epidemics of gonorrhoea, of which he names several examples. It is clear from the widespread nature of this venereal disease that unmarried people of both sexes, widows and married men had a very free sex life, while "it is considerably less common for married women to be extravagant" (Bertelsen 1937: 148-151). In Uummannaq District, the custom continued far into the 20th century of giving the children Eskimo names in addition to their Christian names. From a list of 430 Eskimo names, 11% of them referred to sex life, and in 1910 there was a married couple who were never called anything except *usuk* (penis) and *utsuk* (cunt), although they were baptized Paulus and Kathrine, without the use of these names in everyday life in any way being felt to be offensive (Bertelsen 1937: 149).

There is sporadic information on the prevalence of mental disorders in the colonial age. As was said above, Lange found in 1864 that mental illness was fairly insignificant. In 1949 Ehrström made a study of the incidence of mental and psychosomatic illness among the population in Uummannaq District, encompassing altogether 1073 individuals from the age of 6 and upwards (Ehrström 1951). He found no instances of psychosis, but neuroses, mainly of a hysterical or phobic kind were not unusual. Psychophysiological disorders were rare among those living in the traditional manner, but fairly common among Greenlanders living and working in the colony, in contact with the manner of life and way of thinking of Western civilization. Ehrström considers various possible reasons for these discoveries: A certain ability to verbalize is a precondition for describing psychosomatic symptoms, and this means that to a certain extent educated Greenlanders find it easier to express psychosomatic disorders. But he also found that contact with the Europeans had created a sense of inferiority, in particular in Greenlanders living close to them.

A similar finding is reported from Alaska, where a study in 1968 showed frequent psychophysiological disturbances among Indians in Southeast Alaska, where they lived in large urban areas in close contact with Whites (Foulks 1972: 29).

From colony to county

After the Second World War, a change was effected in the status of Greenland. In 1953, the country became "an equal part of the Danish kingdom", that is to say a kind of county, and an extensive programme of modernization that had started after the Second World War proceeded at an increased rate. The closed country of the colonial age, as far as possible protected against alien influences, was now the subject of profound changes, and whereas inherited customs were followed to a significant extent in the colonial age, new circumstances were now constantly being created in which the old customs no longer worked. There was a greater possibility of choice with demands being made on the individual to adopt a personal attitude in virtually all areas of life. The tasks of the family were changed and reduced in many areas as a large number of new social institutions were established and developed (Lynge 1995a).

Relations between the sexes were also gradually influenced as a result of modernization. While sex life had previously primarily been in the service of reproduction, we can now, in the words of the English sociologist Anthony Giddens (1994) talk of plastic sexuality, liberated from the demands of reproduction. This brings a host of sexual phenomena in its wake; homosexuality and lesbianism also thrive in this modern society; women are no longer prepared to accept men's sexual dominance. We can perfectly well talk of a revolution in women's sexual autonomy. But the consequences for the man's sexuality go deep, and *that* revolution is not yet complete – the growing wave of male violence directed against women, often within the four walls of the home, speaks its own clear language. Nor is the situation entirely resolved for women, of course. Many violent relationships between couples result from both parties being in a state of mutual immature dependence in which they make unrealizable demands on each other. And if they have children, there is no surplus to give them the care and attention they need.

Society is being transformed in many areas. Fishing is being developed and becoming industrialized. While people used mainly to keep to their own immediate areas, they now have to be more mobile and travel to where the fish are, to become seasonal workers etc. Nor is there any longer the same need to live together in large households; on the contrary, a small family is more mobile. The fragmentation of society is accelerating. While the good life formerly clearly resided in the community, there is now a

growing tendency to individualism, bringing with it the potential for personal growth, but also the risk of being unable to keep abreast of the growing demands for schooling and training. The dream of a future is not only fed by life as it is close at hand, but by the image of life deriving from the many new impressions passed on by radio and subsequently by television and video.

The grandiose programme or modernization that swept across the West Greenland towns after 1950, and later across the rest of the country, aimed at rapidly improving health and living conditions with the help of imported labour, and large numbers of Danish seasonal workers invaded most towns. They worked hard and lived in primitive conditions in temporary camps, and there was little in the way of entertainment in their scant free time. Only unmarried workers were employed, so a considerable surplus of young men arose in relation to women. Thus, in 1976 there were 9001 men and 5954 women in the age group 25-44 years, that is to say 1.5 times as many men as women. In Nuuk alone there was a "shortage" of 481 women in the age group 25-44 years. The Danish workers had money and drink; they represented the new age, and many Greenlandic girls were attracted by life in the hutment. Promiscuity increased, and the number of cases of venereal disease grew to monstrous proportions. Thus there were 12,000 reported cases of gonorrhoea in 1975 (Sundhedstilstanden i Grønland 1975). Young Greenlandic men were under pressure. In 1976, Danes accounted for 59% of men aged between 25 and 39 in Nuuk, and 49% in the country as a whole. In the age group 30-34 the Danish share was even greater: 54% of all men in the whole country were Danes. In 1991 there was still a large deficit of women in Nuuk, 531 in the age group 25-44.

The improved conditions of health brought both a fall in infant mortality and a rise in the number of births. In time, children under 15 accounted for half of the population. The community was out of balance.

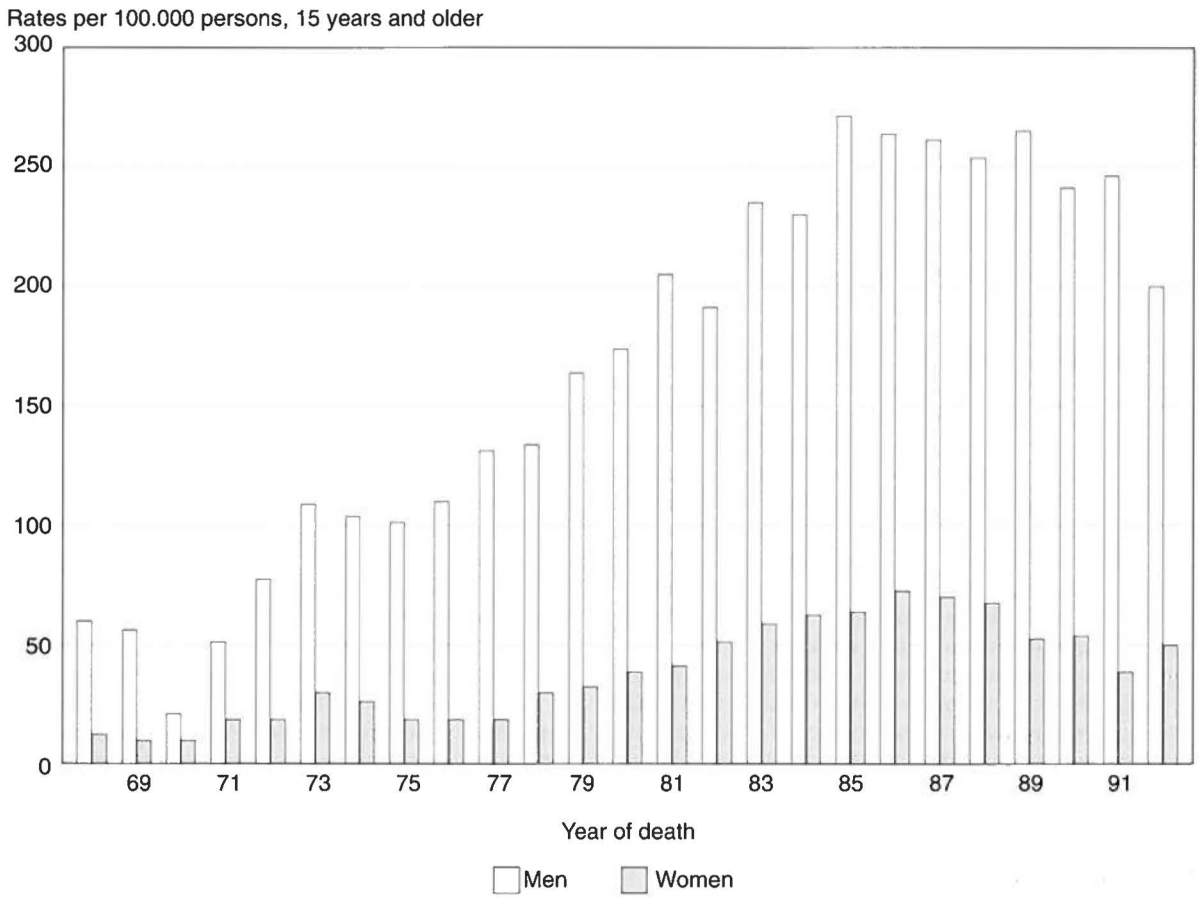


Fig. 2. Suicide in Greenland among persons born in Greenland, 3 years running average.

Suicide

One of the areas in which this imbalance has revealed itself in a manner giving rise to the greatest concern is in the growing numbers of suicides, especially among young men. As was said above, in traditional society suicide was a generally accepted way out when you became a burden on the community on account of illness or old age. But at the same time, it was a deeply engrained feeling in the traditional culture that you did not interfere in the actions of other people, whatever they entailed. After colonization and the introduction of Christianity, suicide became a sin, and according to Alfred Bertelsen, who developed a very thorough knowledge of the Greenland community during the 20 years he was District Medical Officer in Uummannaq, the suicide rate between 1891 and 1930 was one of the lowest in the world, with 3-4 recorded suicides per 100,000 (Bertelsen 1940: 200). But the rate rose to 10 per 100,000 at the beginning of the 1950s, and by the end of the 50s it was 13. During the 60s it went up to about 20 per 100,000, that is to say more or less corresponding to the situation in Denmark. (Sundhedstilstanden i Grønland, Landslægens årsberetninger 1956-68 – The State of Health in Greenland, National Medical Officer's Annual Reports 1956-68). After this, however, there was a rapid rise, which reached its highest point so far in 1990. Fig. 2 shows the suicide rate 1969-91 for the Greenlandic population of more than 14 years of age. During this period the rate has increased fivefold for both sexes, and men are four times as much at risk of dying from suicide as women. The steep rise in the number of suicides has especially affected young men. In 1990-92 4 men in 1000 in the age group 15-29 committed suicide (Lynge 1985, 1994).

A similar trend in the incidence of suicide has been observed among Inuit in Alaska and Canada. The first reports of a growing number of suicides among Inuit came from Alaska, where Robert Kraus (1973) revealed a rapid increase after the mid-1960s, exclusively among young people, and principally men. Those he found particularly prone to suicide had received a traditional upbringing and then experienced isolation either because the young people themselves had gone away to school, or because one or both of their parents had been admitted for prolonged treatment in a sanatorium some distance away. Judith Kleinfeldt has followed young Inuit who were pupils in high schools far away from their homes in Alaska, and studied the costs and advantages of this, reaching the depressing conclusion that the greatest number of pupils by far suffered serious social and emotional problems, including suicide attempts. These were not fiascos resulting from individual personalities. The schooling had created a self-destructive attitude to life. The crucial element was that at a critical period in their lives these young people had been separated from their parents and placed in damaging surroundings characterized by disruption, drink and cultural alienation. A subsequent reorganization consciously aimed at developing a sense of identity, with improved facilities for schooling in the local village. In the case of those who still had to go away from home, the intention was now to make the school atmosphere more congenial, to create new links between teachers and pupils and make the boarding wings more homely with a foster mother representing a link with the values and norms learned from home. The result was a notable improvement both in the pupils' well-being and the results of their schooling.

The pattern of suicide among the Inuit in Canada has also developed in a similar way (Rodgers 1982). In a study from 1990, Rodgers points to the importance of viewing suicide and other violent forms of behaviour as signs of stress in a sick society. With examples taken from three different Inuit settlements he concludes that as well as attending to the effects of individual suicides, it is necessary to take an interest in the community as such, to analyse its strengths and weaknesses and to base preventive measures on such a study (Rodgers 1991).

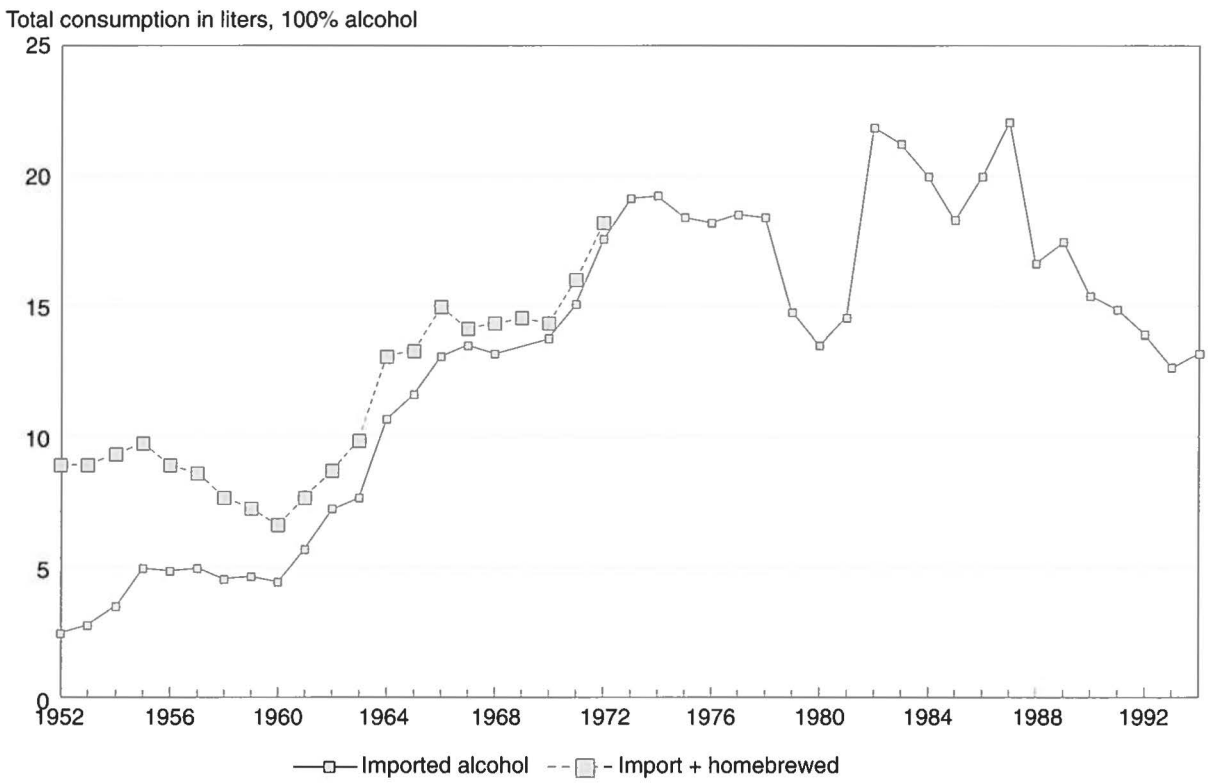
There are many approaches to analyzing a suicide. It is an act that is at once profoundly personal and at the same time strongly influenced by social and cultural forces. We have commented on the cultural aspect: the attitude towards death and the individual's right to make his or her own decision. In the traditional community death was what has been called "tamed" death. Everyone knew what it meant and what awaited after death, and people were accustomed to the thought of having to die (Kleinfeldt & Bloom 1973). When the doctors Sara and Peder Helms were working in East Greenland in the 1940s, the population still had this attitude to death. They were not frightened of dying, but wanted the doctors' help in treating such illnesses as could be treated and in avoiding suffering (Helms & Helms 1979). Today the attitude to death is scarcely so unambiguous. Some suicide notes suggest that the person committing suicide is also thinking of the time after his death: one of them gives detailed instructions for the funeral, another sees life after death as a dream existence now he cannot make the present life work as he wishes. After a short while, most people who are revived after a potentially fatal suicide attempt no longer want to die. A few simply do not remember what made them act as they did. The culturally determined attitude of non-interference probably still has a certain significance. At least some (but by no means all) have shown suicidal tendencies before doing anything seriously about it, but no one has interfered; most people would not know what to do if faced with such signals.

The part played by society in the incidence of suicide was first analyzed by the French sociologist Durkheim, and his views are still relevant to us today

(Durkheim 1897, Swedish edition 1968). He focuses on two dimensions of the closeness of the community: the individual's sense of community and the community's control of the individual. When endowed with a very strong feeling of community, people can sacrifice themselves for the community in an altruistic suicide. If the sense of community is very weak, individualism takes over. The social ego loses the foundation for its existence. Intolerable weariness, a sense of emptiness and depression deprive life of its value, and the egoistical suicide is a reality. The community's control of the individual lies in the culture: the values, manner of behaviour and view of life which a society teaches its members to enable them to live under the conditions obtaining. During periods of rapid change, when society no longer has common rules and values, insecurity, anxiety or unrealistic expectations arise, a state of anomie. Society no longer sets the limits for striving and ambition now, and there are no permanently established norms of behaviour. This implies the potential for both sudden setback and sudden progress.

Suicides today are thus quite different in nature from those occurring in the traditional community. Most are typified by what Durkheim calls anomie, but also by egoism or – to use a word more acceptable today – individualism. A sense of hopelessness and loneliness is characteristic of most people seeking to commit suicide. Sadler and Johnson (1980) have analysed the anatomy of loneliness and produce four dimensions that coincide closely with the cultural concepts applied above and with Durkheim's version of society: Loneliness can be personal, relating to the lack of a close companion. It can be social, deriving from the lack of a sense of belonging to one or more groups; there can be a cultural background, when you are far from your own culture, or when that culture is disintegrating; and finally, loneliness can be about the lack of contact with nature and with the universe, implying a religious dimension, cosmic loneliness.

Suicide notes and other information on the circumstances of those committing suicide suggest that loneliness is often of a personal nature. A broken, conflict-ridden and violent relationship between a couple has often preceded it. In other cases it is a longing for a relationship or for love, a longing of which the chosen



Sources: 1952: Sølling (1974)
1975-94: Nyt fra Grønlands Statistik

Fig. 3. Alcohol consumption in Greenland per person, 15 years and above. 1952-1994.

one is perhaps not aware, a vague dream of happiness that was too far away from the reality of life.

However, the relationship with nature also means much for psychological health. This has most recently found expression in a series of discussions with young people published in a book entitled *Af den indre styrke* (Of Inner Strength) (Folkvar & Hvilsom 1994). In a sensitive and sympathetic way it seeks to identify what has made so many young people commit suicide. Several of the young people interviewed talk of experiencing an inner strength when out amidst nature, a meaning to life which makes it easy to relate to critical situations and to decide on actions. But in the city you become weak, and here it is difficult to make a choice even when it only relates to quite banal and indifferent subjects.

Alcohol consumption

The Eskimos are one of the few peoples in the world who have never made their own alcohol. The Greenlanders made their first acquaintance with alcohol through the Europeans, first through visits from whalers in the 17th century, later through colonization.

Alcohol seems to have given rise to problems at an early stage. At all events, an order was made in 1782 making it illegal to give aquavit to Greenlanders, but 100 years later, when Fritiof Nansen spent the winter in the Godthaab district after crossing the inland ice on skis, the right to supply aquavit formed part of the payment to employees in the colony. Nansen writes of this in *Eskimoliv* (Eskimo Life): "They are now passionately fond of aquavit, both men and women, not because it tastes good, but because it is such fun to be intoxicated, and intoxicated they were, every time an occasion presented itself, though happily that was not terribly often". That it was the intoxication people wanted is emphasized by the fact that those employed by the Trading Station, the *kivfat*, were not terribly interested in the single drink they were given in the morning. They would sometimes hand it to a colleague in order to receive a larger ration in return another morning, sufficient for the effect to be felt (Nansen 1891: 5-6).

Nansen recounts that the Greenlandic women did not show the same animosity when their husbands came home drunk as did the Europeans. On the contrary, they found their husbands amusing. But he adds that: "... with a few exceptions, both the men and the women up there seemed to me to be considerably less obnoxious and by nature far more peaceable in their bacchantic state than people here at home usually are under the same conditions".

Even up to the present day, drunks have been regarded with a certain awe. People have treated them carefully, tried to protect them from the dangers to which intoxication has exposed them. A Greenlandic word for intoxication is *silaeruppoq*, deprived of understanding, another is *aalakoorpoq*, to stumble, to stagger.

In the 20th century it gradually became easier for the Greenlandic population to buy spirits and then also to start brewing beer at home. Access to spirits was regulated by the Danish administration with an attitude that was at once paternalistically protective and used as a reward, so that a certain status became associated with the use of alcohol. After the change of constitution that made Greenland an integral part of the Kingdom of Denmark, the situation quickly became untenable, and after a lengthy debate and representations from the Greenlandic Regional Government, the sale of alcohol was liberalized at the end of 1954.

Fig. 3 shows alcohol consumption at liberalization and during the following years. In 1954 home brewing constituted a significant element, but with easier access to imported beer and spirits, home brewing went out of fashion. Today it is prohibited. During the years immediately following liberalization, the total consumption of alcohol fell, but from 1960 it rose and by the beginning of the 1970s reached an average of almost 20 litres of pure alcohol a year for the entire population over the age of 15. The fall in 1979-81 was due to the introduction of a rationing system, which subsequently was abandoned again. In the 90s the consumption of alcohol has fallen by over a third. This is partly due to a significant increase in excise duty and partly to a period of economic stagnation. However, the continued modernization of society and altered consumer patterns must be assumed to play their part.

In his 1974 thesis, Leif Sølling analyzed alcohol imports, especially during the period 1961-72. He found that the increase in alcohol imports was of the same order as the rise in incomes over the same period. He compared the results of his study with a contemporary Finnish study. The consumption of alcohol in Finland was then less than a third of that in Greenland. Setting out from a 1969 study of consumption, Sølling found that the 10% of Greenlandic households with the highest consumption accounted for 30 litres of pure alcohol per person; men consumed 36 litres, the same level as the 10% of Finnish men with the highest consumption. The great difference in consumption levels resulted from Greenlandic consumption being distributed over the greater part of the population, whereas there were many total abstainers in Finland. Thus, women in Greenland were estimated to consume $^2/_3$ of the amount consumed by men, where in Finland it was only $^1/_5$.

The large consumption of alcohol in the wake of modernization in Greenland has given rise to much concern. Leif Sølling's alcohol studies started on the initiative of the then Greenlandic Sobriety Commission, which in 1971 published a final report partly based on a study of the relationship between a high al-

Table 1. Mental disorders among 1965 Greenlanders, aged 15 years or more, living in West Greenland, 1970.

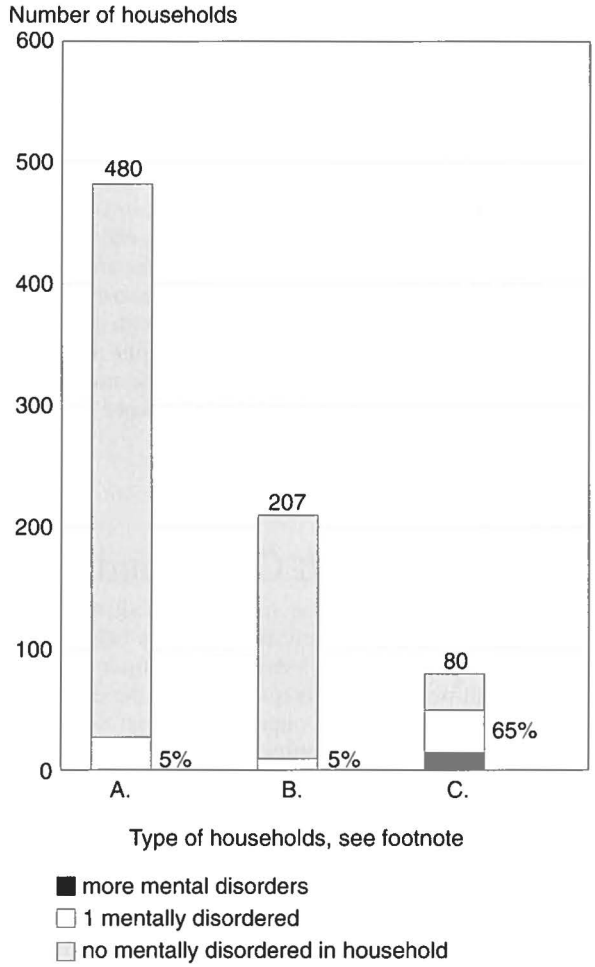
Psychoses		26
Organic	7	
Schizophrenic	7	
Manic-depressive	9	
Not classifiable	3	
Neuroses		30
Personality disorders		39
Mental disorders associated with somatic disease (incl epilepsy)		11
Oligophrenia		10
Alcoholism and problem drinking without other psychiatric diagnoses		73
Alcoholism and problem drinking secondary to other psychiatric diagnoses	52	
Total		189

Source: Lynge (1976).

cohol consumption and social stress (Sølling 1971, 1974). In coordination with this study, the present author undertook an examination of the incidence of alcohol abuse and mental disorder in the same areas (Lynge 1971, 1976).

This study, which covered altogether three areas accounting for just under 2000 persons over 14 years of age, documented 125 cases of alcohol abuse, 64 men and 61 women. Of these, 34 men and 16 woman were accounted alcohol addicts, while in the case of 30 men and 45 women, the alcohol abuse was more episodic in nature. 116 were suffering from other kinds of mental disturbance, 52 of these accompanied by alcohol abuse. The diagnoses are shown in Table 1. These individual diagnoses were combined with information from Leif Sølling's studies of households, so that it was possible to determine whether the persons concerned lived in a household which itself had a high consumption of alcohol and whether there were other sufferers from alcoholism living in a household. Fig. 4 shows that 5% of the households had a member suffering from some mental disturbance (other than alcoholism) irrespective of whether they were households with a high alcohol consumption or not. But in the households where at least one member was an alcohol abuser (type C in fig. 4), there was also a very large concentration of (other) mental disturbances. 65% of these households had at least one member suffering from mental disorder and many had several. So we can talk of a considerable correlation between alcohol abuse and mental disorder, a circumstance that will be further discussed in a later section.

The Sobriety Commission saw it as its task to create an overall evaluation of the alcohol situation and concluded that the high alcohol consumption must be seen as a consequence of the profound changes in society and the community. The alcohol problem in Greenland is not only a question of the attitude or morality of the individual, but of powerful social forces. The Commission placed greater emphasis on proposals for preventing new cases of alcohol abuse than on the treatment of harm already caused, in that more extensive preventive measures would help to reconstruct the whole of the background and thus have a beneficial effect on large numbers of people. The report produced numerous concrete proposals, including recommendations on excise policy, the establishment of local cooperation between social services and health services, a strengthening of the centralized direction of social medicine, targeted information on business and housing support from the loan-giving institutions, the reform of repayment dates to allow for more convenient monthly repayments, and the training of consumer and financial advisers. There was attention to the increasingly difficult employment situation for young people, and in



A. Households without high consumption of alcohol
B: Households with high consumption of alcohol, but no alcoholism
C: Households with at least one person with alcoholism

Fig. 4. Mental disorders in households without and with high consumption of alcohol and in households with alcoholism.

particular there were proposals for legislation to improve leisure opportunities.

The entire catalogue of proposals for a gradual correction of the aberrations resulting from social progress provoked little understanding or discussion, either in the Regional Government or in the population at large. It was rather that the situation was frozen. In contrast to the position before the report, the subject was rarely on the agenda in the following years. It is likely that on a scarcely conscious level, many people had been looking forward to some magical solution that would remove the alcohol problem once and for all, and it was difficult to relate to the complicated reality shown in the report. Perhaps the time was not yet ripe.

But although rapid rise in alcohol consumption has come to an end, the high consumption which has now persisted for many years has left a deep mark. Alcohol-related troubles and illnesses account for a considerable part of the work of the health authorities (Hovesen & Jørgensen 1983; Jørgensen et al. 1984). Over the last 10 years, a number of Danish-speaking Greenlanders have taken part in the treatment of alcoholism on the Minnnesota model, first in Iceland, later in Denmark, and after returning home they have established and played a part in local groups of Alcoholics Anonymous in Greenland. In this way, several prominent figures have become total abstainers and as role models have undoubtedly had a positive effect on attitudes to alcohol-related problems in the community. Nor is there today any doubt that the treatment of alcoholism not only benefits the individual, but the effects spread like rings in the water, to both family and surroundings.

Criminal law in Greenland

The legal situation in the traditional Eskimo community has been discussed above. It has been designated "the peace model", seeking at almost any cost to avoid allowing conflicts to develop to the detriment of communal life. The concept of "a just sentence" has no meaning in this context.

After colonization, an Order of 19 April 1742 introduced a range of fairly broad and vaguely formulated prohibitions and regulations that were administered in a somewhat random fashion by trading station employees (Kriminalloven og de vestgrønlandske samfund 1962 – The Criminal Law and the West Greenland Communities). Under the influence of the colonizers' view of life and in particular Christian ethics, regulations were gradually formulated as to what actions were to be considered criminal, and a practice evolved for reacting to those committing crimes. This case law for criminal acts applied to the Greenlandic population, while Danes and other foreigners were subject to Danish law until the first Act on the Administration of Justice was introduced in 1951. A Greenlandic criminal code applying to all was introduced in 1954 as a result of the change of constitution in 1953, under the terms of which Greenland became "an equal part of the Kingdom of Denmark".

The Judicial Expedition, referred to above, consisting of Verner Goldschmidt, Agnethe Weis Bentzon and Per Lindegaard, spent a year (1948-49) travelling the length and breadth of Greenland gathering details of the legal position hitherto and hearing people's views on it. On the basis of the expedition report (Bentzon et al. 1950), it was decided to draw up a special legal code for Greenland based on the tradition hitherto rather than introduce the Danish penal code. With certain revisions this criminal code for Greenland still applies, although in 1994, in collaboration with the Greenland Home Rule Government, the Ministry of Justice set up a commission to examine the entire legal system and make recommendations for improvements. Its work is expected to be completed in 1997.

The Greenlandic criminal code does not use the word punishment, but talks of measures which, taking into consideration the nature of the deed and the interest of the community in combating such acts, are thought appropriate in order to prevent fresh criminal acts. It thus has no fixed maximum and minimum penalties for specific crimes, but builds mainly on individual preventive measures, paying heed to the perpetrator rather than the crime perpetrated.

On mental abnormalities and criminality before 1950, the legal expedition comments: "– mental illness and mental deficiency and similar conditions play only a small part as crime-producing factors. On the other hand it does emerge in individual cases that the persons concerned were mentally abnormal" (Bentzon et al. 1950). Taken as a whole, it was the view of the expedition that by far the greater part of those who had engaged in criminal activities during the period investigated did not diverge from the norm in a mental sense, since information obtained suggested that with the exception of their criminal activity they had lived like others in the communities concerned. But in the (few) cases of mental abnormality listed, Greenlandic case law before the introduction of the criminal law was characterised by a high degree of uncertainty, not only because people did not know how the person concerned should be dealt with, but also because in most cases suitable means were not available. One case listed is that of a 21-year-old man who had committed a series of crimes and on several occasions had shown himself to be a danger to his surroundings. Among other acts, he had threatened people with weapons especially when under the influence of alcohol. This man had been sent to a Danish psychiatric hospital for observation. There are

no reports of cases in which long-term measures for security or treatment have been applied in the cases of criminals suffering from mental abnormalities. Most cases of mental abnormality have been considered in connection with crimes against sexual morality. In a single, particularly serious case, in which a man had been guilty of rape and indecent behaviour to six girls aged between 6 and 13, he was sentenced 5 years in prison in Greenland. But as he could not endure the imprisonment, the case was re-examined, and he was given the choice of continued imprisonment or castration; he chose the latter, and according to the information available there were no unfortunate consequences and he was never again in conflict with the community (Bentzon et al. 1950: 43).

In 1958 a Greenlander was for the first time sentenced to detention in a secure prison in Herstedvester, Denmark. As the legal basis for this in the original Act was felt to be doubtful, the law was changed in 1963 so as to give a specific basis for a such a step. According to a confidential report from Herstedvester in 1972 nine people had by then been sentenced to preventive detention. During the same period a further four were compulsorily committed to a mental hospital and one to an institution for the mentally deficient. One of those sentenced to a mental institution was a woman, the rest men. An examination of the cases shows that in each instance there was a question of serious, usually repeated, crimes. Those concerned had also shown deviant behaviour in other instances than in the specific criminal acts. Several had experienced clearly psychotic episodes, and for two this resulted in a change of sentence from detention in Herstedvester to detention in a mental hospital in Denmark. 10 of the 14 had experienced alcohol problems. It emerges from the account that committing them to Herstedvester was mainly an expression of the powerlessness of the community, while the account of their actual stay there illustrates a similar impossibility for a closed system like Herstedvester to effect a change enabling them at some later time to cope for themselves in the community, whether in Greenland or Denmark. For those who were committed to a mental hospital, there are certain examples of successful treatment.

A study of the present regulations on measures for dealing with the criminally insane has been undertaken by Lynge & Køster (1985), who have also examined all cases of mental observation in the period 1978-83.

New tasks for the health services

With the modernization of the community, the health services were given new tasks and a more active treatment strategy was assigned to them, initially aimed especially at tuberculosis, which was a great scourge at that time. In 1953, between 6% and 7% of the entire population suffered from active tuberculosis, and it was the cause of a quarter of all deaths.

Later, with the introduction of modern psychopharmacological drugs the focus also fell more on the treatment of mental illness. More patients, including those with less serious mental disorders, were admitted to the district hospitals. For women over 15 years of age the admission rate rose from 9 per 1000 in 1960 to 15 per 1000 in 1980. For men the rates were c. 5 per 1000 in 1960 and 9 per 1000 in 1980 (Landslægens årsberetninger 1960-80 – Provincial Medical Officer's Annual Reports 1960-80). Despite cultural and linguistic problems a start was made on admitting seriously disturbed mental patients for treatment in Danish psychiatric hospitals. Not until 1971 was a psychiatrist (the present author) appointed to the Greenland Health Service, and a small open ward was set up in 1980. However, the number of seriously disturbed patients rose at the same time. As stated in the previous section on the Greenlandic criminal code, several mentally ill persons have over the years committed serious crimes and been sentenced to long-term treatment in a psychiatric hospital; as there was, and still is, no closed psychiatric ward in Greenland, this had to mean admission to a Danish hospital. The contemporary extensive forensic psychiatric tasks are described in a later section.

In 1979, Greenland was given internal self government in the form of the Greenland Home Rule Government and thus gradually assumed responsibility in various public fields; from 1992 this included the health services, which had so far been the responsibility of the Danish State.

In the next section the way in which the Health Service organizes psychiatric services will be described in more detail, and we shall follow a group of Greenlandic psychiatric patients – all those first admitted to a psychiatric ward in the period 1980-1983, irrespective of whether in the Queen Ingrid Hospital in Nuuk or a psychiatric hospital in Denmark – to see how they were faring 7-10 years on.

PART TWO

Psychiatric treatment as currently organized

The Greenland Health Service is divided into 17 health districts, each with its own hospital, from which care of the population in towns and settlements is arranged (Fig. 1). All kinds of patients, including psychiatric patients, are treated, either as outpatients or inpatients. The Queen Ingrid Hospital is both the district hospital for Nuuk and the central hospital for the whole of Greenland. There is a psychiatric ward there (hereafter called DIH/A1) with 18 beds, 2 of which are in secure rooms offering the possibility of detention for shorter periods. There is no closed ward as such. When there is a need for specialized examination or observation, patients are sent to a psychiatric hospital in Denmark, either Vordingborg County Hospital (Amtshospitalet in Vordingborg – AHV) or the Department of Psychiatry in the State University Hospital (Rigshospitalet – RH/O). Particularly dangerous patients (under a security order or when sentenced to treatment in a high security hospital) are placed in the national High Security Unit in Nykøbing Sjælland. Legally enforced mental observations can be undertaken either as outpatients or after admission to DIH/A1, but when security requires admission to a closed ward, this is effected in the ward for forensic psychiatry in Nykøbing Sjælland County Hospital (Amtshospitalet Nykøbing Sjælland – ANS) or this hospital's High Security Unit.

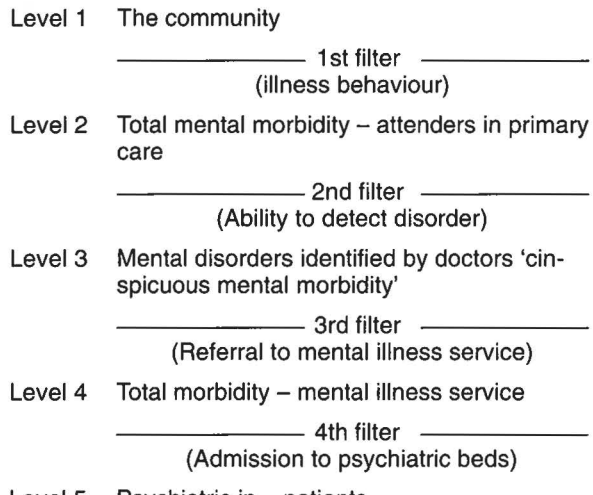
The legal basis for civic involuntary commitment and treatment is the former Danish "Act on the Hospitalisation of Mentally Ill Persons" (Act no. 259 of 27 May 1981), with special provisions for Greenland. These provisions are contingent on the geographical conditions and transport problems in Greenland. Thus it can be necessary, as the first element in an involuntary commitment to hospital to keep a patient in the local hospital or some other appropriate place until travelling conditions make transport possible. It might also be necessary to treat the patient with psychopharmacological drugs in order to calm him sufficiently for the journey to be undertaken without inconvenience or danger to other passengers. In the case of forensic psychiatric patients, the Greenlandic criminal code's provisions for the criminally insane affords the possibility of admitting them for mental observation after a court order and of committing them for treatment in a hospital for the mentally ill. (Kriminallov for Grønland 1979 – Greenland Criminal Code 1979) (Lov om rettens pleje i Grønland 1980 – Law on the Administration of Justice in Greenland 1980).

Arrangements for psychiatric treatment for patients domiciled in Greenland are thus somewhat complicated. Goldberg and Huxley (1992) have generally mapped out the pathway to admission to a psychiatric ward and describe five levels for deciding on the treatment of psychiatric problems. Between these levels there are four filters, cf. Fig. 5. Attempts to apply the levels described by Goldberg and Huxley to Greenland give the following result:

Level 1 (population) and Level 2 (patient in the primary health service) along with filters 1 and 2 correspond exactly to Goldberg and Huxley's model. Level 3 (treatment in the primary health service) can take place in the towns outside Nuuk on an out-patient basis or by admission to the local district hospital. In some cases this is done with consultative help from the psychiatric ward at the Queen Ingrid Hospital in Nuuk, either by telephone or through visits by a visiting psychiatrist. Such visits are rare and depend on resources, as there are many unfulfilled needs and often a shortage of staff. So for patients resident outside Nuuk there is a rather gradual and unsystematic transition to Level 4, out-patient treatment by a specialist. Nuuk is the only place where the general practitioner always has the possibility of referral to outpatient psychiatric treatment. Level 5: admissions to a psychiatric ward, includes all categories of psychiatric wards from the open one in Nuuk to the High Security Unit at Nykøbing Sjælland.

The psychiatric service for Greenland faces a number of special problems or challenges, most of which, however, are common to all specialist areas. They can be summed up as follows:

- The population lives in very scattered, small settlements.
- Society has undergone a rapid process of modernization with very different levels of modernization in different areas.
- The health service is to a large extent manned by Danish doctors and nurses, some of whom are appointed for short periods and have no knowledge of the population for which they are working.
- The system for psychiatric treatment really lacks cohesion, both because of the vast distances in the country and because all patients needing prolonged stays in closed wards must be referred to a hospital in Denmark.



Sources: Goldberg & Huxley (1992)

Fig. 5. Pathways to psychiatric care. A model for the study of mental morbidity.

Earlier studies of the pattern of admissions to hospital

The number of admissions and the use of bed-days in the period 1984-88 are listed by Lynge (1991) and emerge from Tables 2 and 3. Four times as many patients are admitted to DIH/A1 as to a psychiatric hospital in Denmark, but 60% of the beds occupied are in Denmark. In other words: Hospitalisations in Denmark are often of very long duration.

Transfers from Greenland to a psychiatric hospital in Denmark are analyzed by Køster et al. (1986). Over a period of five years, 1978-82, 117 patients were transferred to Denmark. 84 were transferred once, 33 on several occasions. Altogether there were 147 transfers from Greenland to Denmark in the period studied. Some of the patients were also transferred between Danish hospitals. In the general medical statistics forming the basis for Tables 2 and 3, transfers between Danish hospitals are also counted as individual admissions, which explains the higher numbers of admissions in Table 1. Just under a third of transfers to Denmark were voluntary, a good third were involuntary commitments, and the last third derived from the criminal code. On the background of the number of beds occupied, the study concluded that if future admissions to Danish hospitals were to be avoided except for those requiring special care in the High Security Unit, capacity in Greenland should be increased by 14 beds, of which at least half should be in a closed ward.

Table 2. Psychiatric admissions 1984-88.

	Average number per year
in Greenland	
District General Hospital	470
Queen Ingrid's Hospital/psychiatric department	192
in Denmark	
Psychiatric hospitals	52
Maximum Security Ward	2

Sources: The Danish Psychiatric Register (Munk-Jørgensen et al. 1993) and Greenland's Health Service.

Table 3. Annual usage of beds 1984-88.

	Average number days	Number beds in use with 85% occupancy
in Greenland		
District General Hospitals	3600	12
Queen Ingrid's Hospital/psychiatric department	6314	20
in Denmark		
Psychiatric hospitals	8846	28
Maximum Security Ward	1452	5

Sources: The Danish Central Psychiatric Register (Munk-Jørgensen et al. 1993) and Greenland's Health Service.

However, although it is thus possible on the basis of the studies summarized to gain an impression of the extent of psychiatric services in Greenland, more questions arise. What is the background to and the direct cause of the admissions? What are the characteristic pathological pictures? And what course do they take? On what basis is the decision taken as to whether hospitalization should be in Greenland or Denmark? Are there particular problems or circumstances that increase the risk of contracting a mental disorder requiring admission to hospital? How do the patients fare after admission?

A follow-up study

The following will present a study attempting to answer these questions. The method chosen is to follow a group of patients domiciled in Greenland from their first admission to a psychiatric ward at least 7 years previously and to see how they have fared.

The study encompasses all the patients who were first admitted to a psychiatric hospital or psychiatric ward, whether in Greenland or Denmark, in the period 1. January 1980 – 31. December 1983, and who were domiciled in Greenland at the time of their first admission. This group was taken from the Central Psychiatric Register in the Department for Psychiatric Demography in Aarhus (Munk-Jørgensen et al. 1993).

The present author has examined records of all

psychiatric admissions, registering conditions encountered during childhood and youth, and social conditions and circumstances relevant to the first admission and any re-admissions. On the basis of records from the first admission, it has been possible to compile lists of the patient's symptoms using the Item Group Checklist from SCAN (WHO 1992) as schedules for assessment.

The date of the follow-up study is

1. the date on which the information for the follow-up study form (undertaken in the period 1/5 91-1/3 92) was obtained or
2. the date of death

The address at the time of the follow-up study was obtained from the Ministry of the Interior National Computer Register.

The persons were traced, data from hospital records etc. collected and the subsequent follow-up study undertaken in the period May 91 to March 92, that is to say more than seven years after first admission to hospital. Status at follow-up was worked out on the basis of information in ward records and outpatient records, supplemented with oral information from key individuals in the Health and Social Services and (in the case of patients held under a court order) the Correctional System. For the patients held under a court order, information on possible criminal recidivism was taken from the criminal records in Greenland. In addition to information on civil status, numbers of children, living conditions and finances, the clinical condition was divided into 5 groups: 1) No mental symptoms, no relapses. 2) No mental symptoms, but one or more relapses. 3) Slight impairment, mild neurotic or personality dysfunction. 4) Moderate to severe neurotic or personality dysfunction, residual symptoms after psychosis. 5) Severe impairment, chronic psychotic, impaired intellectual and emotional functions (Bertelsen et al. 1989). Information on causes and manner of death have been taken from death certificates. The diagnosis at the time of the follow-up study is the result of an overall evaluation of the information on the clinical pathological picture and its course and is coded according to the WHO diagnosis list, International Classification of Disorders, ICD8.

The study is particularly interested in Greenlandic patients. These are classified as patients at least one of whose parents is a Greenlander.

Patients diagnosed with schizophrenia and manic-depressive psychosis were as far as possible contacted personally with a view to a structured clinical follow-up study with SCAN, PSE-10 (WHO 1992). This part of the study was undertaken in collaboration with Jonna Jacobsen, and an article on schizophrenia has been published separately (Lynge & Jacobsen 1995). The present author was chief psychiatrist in the DIH psychiatric ward in the period during which the cohort was constituted, and Jonna Jacobsen at the time of the follow-up study.

Table 4. Number of first admissions, by year of admission.

	Men	Women	Total
1980	47	26	73
1981	24	49	73
1982	36	41	77
1983	32	34	66
Total	139	150	289

Results of the Study

During the four-year study period, 289 Greenlanders domiciled in Greenland, were admitted to a psychiatric ward for the first time (Table 4). This corresponds to an annual first admission of 230 men per 100,000 and 260 women per 100,000 over the age of 15. Provided that the pattern of admission is unchanged over a prolonged period, it is possible to deduce that about 6% of the Greenlandic population, in more or less equal proportions of men and women, are admitted at least once before reaching the age of 35, and 10% of all men and 13% of all women at least once before reaching the age of 65.

Men cross the admission threshold at a slightly lower age than women (Table 5). The highest rate for men is among those aged between 20 and 24, which in fact is the same age group as has the highest rate for completed suicides, while women have the highest admission rate in the age group 25-34 years (Fig. 6).

In Denmark in 1987, 218 men and 205 women per 100,000 head of population over 15 were admitted for the first time. (Institute for Basic Psychiatric Research, Department for Psychiatric Demography, Report on Central Registration 1987) (Statistical Reports for Denmark 1987). But the difference in age both for admissions and for the population as a whole are very different in the two populations. Table 6 shows that during 1980-83 nine more men and 43 more women were admitted in Greenland for the first

Table 5. Age at first admission.

Age	Men	Women	Total
15-19	33	18	51
20-24	39	27	66
25-34	34	52	86
35-44	16	22	38
45-54	7	13	20
55-64	5	9	14
65+	5	9	14
Total (N)	139	150	289

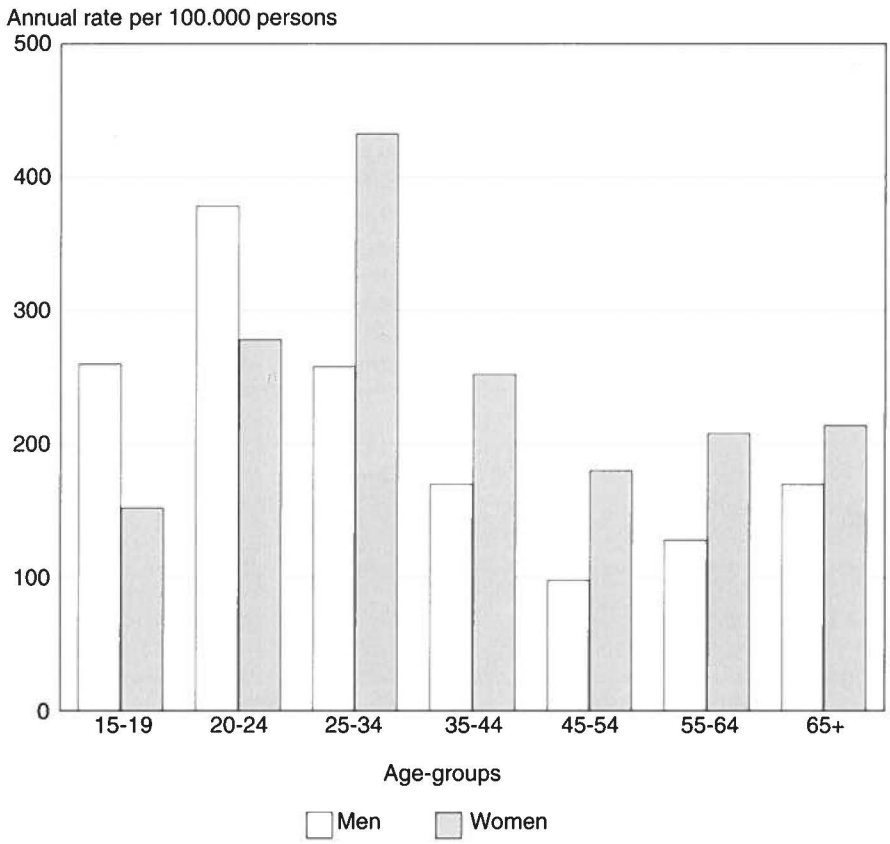


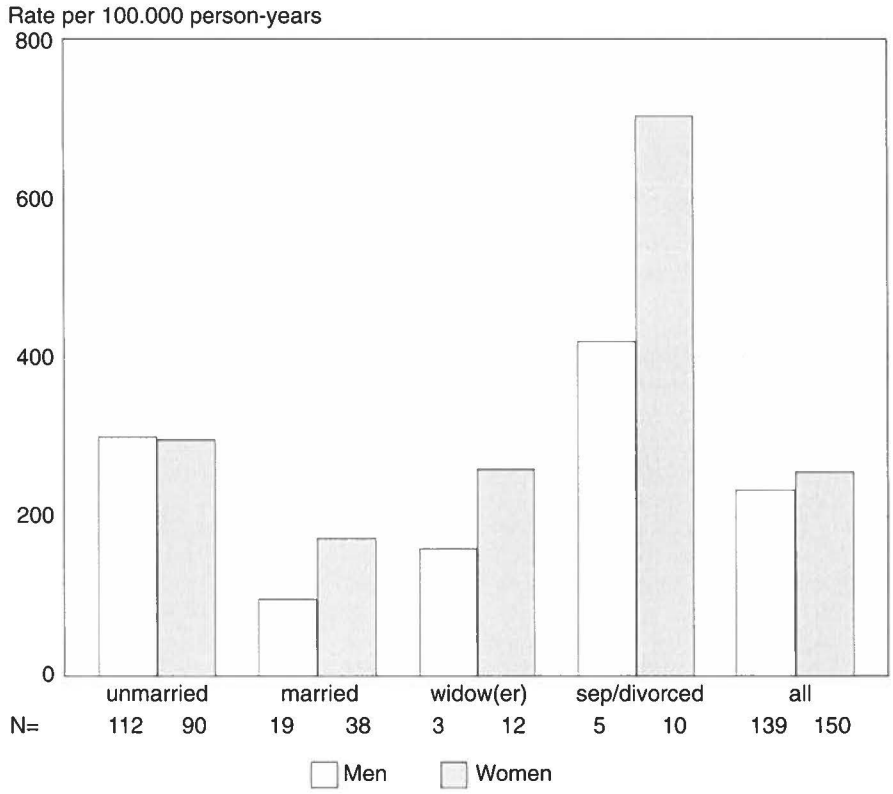
Fig. 6. First admission to a psychiatric department or hospital 1980-83. Greenlanders, all diagnoses. Age and gender.

Table 6. Age-standardized comparison between first admissions in Denmark and Greenland.

Age	Incidence rate per 100,000 in Denmark*)	Greenland's population	All admissions of Greenlanders 1980-84		
			Observed	Expected	+/–
Men		N	n	n	n
15-19	142	3215	33	18	+15
20-24	248	2601	39	26	+13
25-34	253	3347	34	34	0
35-44	253	2403	16	24	– 8
45-54	199	1829	7	15	– 8
55-64	147	1005	5	6	– 1
65+	230	743	5	7	– 2
All age-groups	218	15143	139	130	+ 9
Women					
15-19	116	2992	18	14	+ 4
20-24	157	2455	27	15	+12
25-34	193	3044	52	23	+29
35-44	214	2208	22	19	+ 3
45-54	219	1839	13	16	– 3
55-64	175	1104	9	8	+ 1
65+	271	1064	9	12	– 3
All age-groups	205	14706	150	107	+43

*) Sources: Department for Psychiatric Demography, Aarhus, Annual report 1987 and Denmark's Statistical Information 1987.

Fig. 7. First admission to a psychiatric department or hospital 1980-83. Greenlanders, 15 years and above. Marital status.



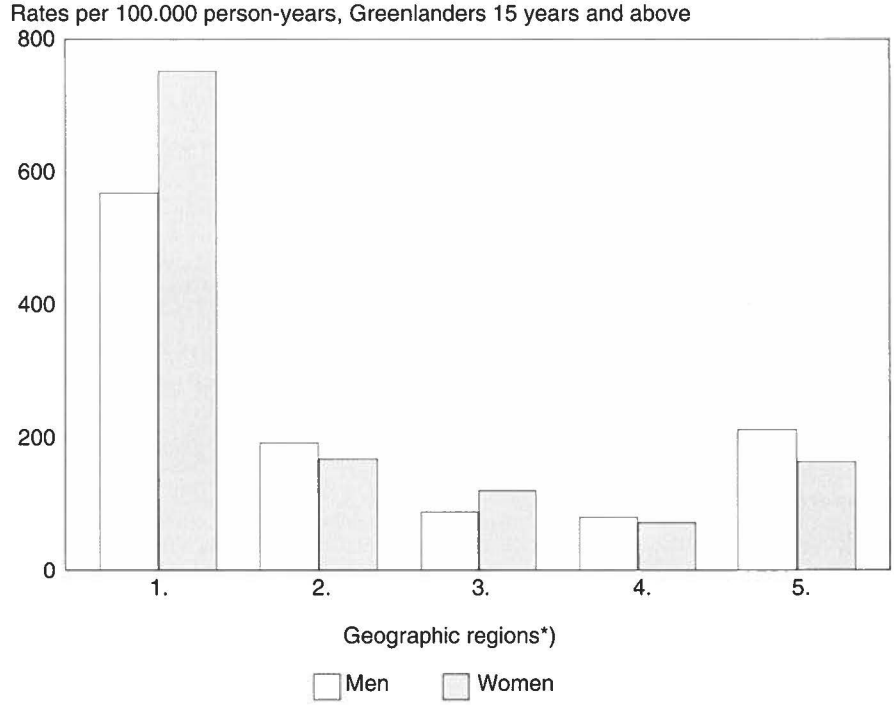


Fig. 8. Place of residence at first admission to a psychiatric department or hospital 1980-83. Greenlanders, 15 years and above.

') 1. Nuuk; 2. Towns, West Greenland; 3. Villages, Southwest Greenland; 4. Villages, Northwest Greenland; 5. North and East Greenland. (Bjerregaard 1991:38).

time than would have been the case if the admission rate for the different age groups had been the same in Greenland as in Denmark. In the case of men, 28 more were admitted in the age group 15-24, but 19 fewer of 35 or more. In the case of women, the difference between the Danish and Greenlandic admission rates was even more striking. In Greenland, five fewer over 44 years were admitted, but 48 more in the age group 15-44. In the age group 25-34, the admission rate for women in Greenland was more than twice that for women in Denmark.

For all age groups taken together, unmarried men and women have the same admission rate, while the slight preponderance of women in relation to men in Greenland is found among those who are married or have been married (Fig. 7).

The patients come from all over Greenland, but mostly from Nuuk (Fig. 8). The Queen Ingrid Hospital in Nuuk acts partly as a national specialist hospital, partly as a district hospital for Nuuk, for which reason a number of milder cases which in the other districts are only treated in the local district hospital, are admitted to the psychiatric ward in Nuuk. But there is otherwise a very great difference in the frequency of admissions from one local authority to another, a difference for which there is no unambiguous explanation (Table 7). On the one hand there might be a question of chance variations, on the other practices on admissions might have developed differently. One of the reasons for such a difference could be the distance from Nuuk or rather the conditions for travel, but there is no clear pattern. There seems to be a certain accumulation of serious mental disorders in certain areas, but the numbers are small.

The patients were as far as possible admitted to DIH/A1, and only when there were urgent reasons was the first admission to a psychiatric hospital in Denmark. Thus 84% of the men and 95% of the women were first admitted to DIH/A1 (Table 8). However, of these, 10% of the men and 3% of the woman had to be transferred to a psychiatric hospital in Denmark, partly for security, partly because special needs for examination and treatment could not be met in DIH (special neuroradiological examinations, long-term treatment in the psychiatric ward for young people etc.). 8% of the men and 9% of the women had a physical illness that led to transfer to the somatic ward. All in all, only about $^{2}/_{3}$ of the men, but $^{4}/_{5}$ of the women were exclusively admitted to DIH/A1 for their first hospitalization.

Table 7. Admission rates by municipalities. rate/100,000, 15+ years

	Men	Women	total
Nanortalik	73	163	114
Upernavik	75	165	118
Paamiut	85	90	88
Qasigianguit	85	170	128
Qaqortoq	105	180	143
Kangaatsiaq	123	73	99
Aasiaat	157	238	197
Tasiilaq	162	152	157
Uummannaq	169	33	106
Illoqqortormiut	172	0	83
Maniitsoq	178	155	166
Narsaq	188	145	166
Sisimiut	220	115	169
Ilulissat	225	143	185
Avanersuaq	400	315	359
Qeqertarssuaq	508	212	358
Nuuk	*544*	*715*	*631*
Whole of Greenland	230	255	242

Table 8. Place of first admission.

	Men	Women
Queen Ingrid's Hospital, psychiatric department, Nuuk, Greenland	117	143
University clinic, Rigshospital, Copenhagen	6	4
County Hospital, Vordingborg, Denmark	7	0
County Hospital, Nykøbing Zealand, forensic psychiatric department	3	0
County hospital, Nykøbing Zealand, maximum security ward	3	0
Other*)	3	3
Total (N)	139	150

*) Another County Hospital, psychiatric department, during temporary stay in Denmark.

Reasons for admission

Many factors influence the decision to admit someone to a psychiatric ward. People experiencing serious psychological problems for the first time will rarely have any points of reference to help them to acknowledge the problem as psychiatric. Whether it is a case of depressive thoughts or symptoms, anxiety, uncontrollable anger, delusions, hallucinations, distorted or exaggerated sense impressions or the experience of a lack of demarcation with the surrounding world, a splintered, chaotic world, these experiences can be interpreted in many ways, as expressions of physical illness, signs of moral degradation, God's punishment, or the result of persecution or other external influences (witchcraft). The process leading to consulting a doctor will most often be a combination of the reactions of the patient on the one hand and those surrounding him on the other; and it will often depend on the experiences of relatives and their views on mental illness, whether the patient's behaviour and experiences are interpreted as something that ought to be treated or whether they are regarded as a fate to be lived with, or whether the family refuses to adopt an attitude to this incomprehensible situation and turns out the patient from the family environment. The

Table 9. Cause of admission.

	Men	Women
Suicidal acts and/or threats or acts of violence.	74	63
Symptoms without recorded (self)destructive behaviour	48	80
Detoxification	8	3
Other	9	4
Total (N)	139	150

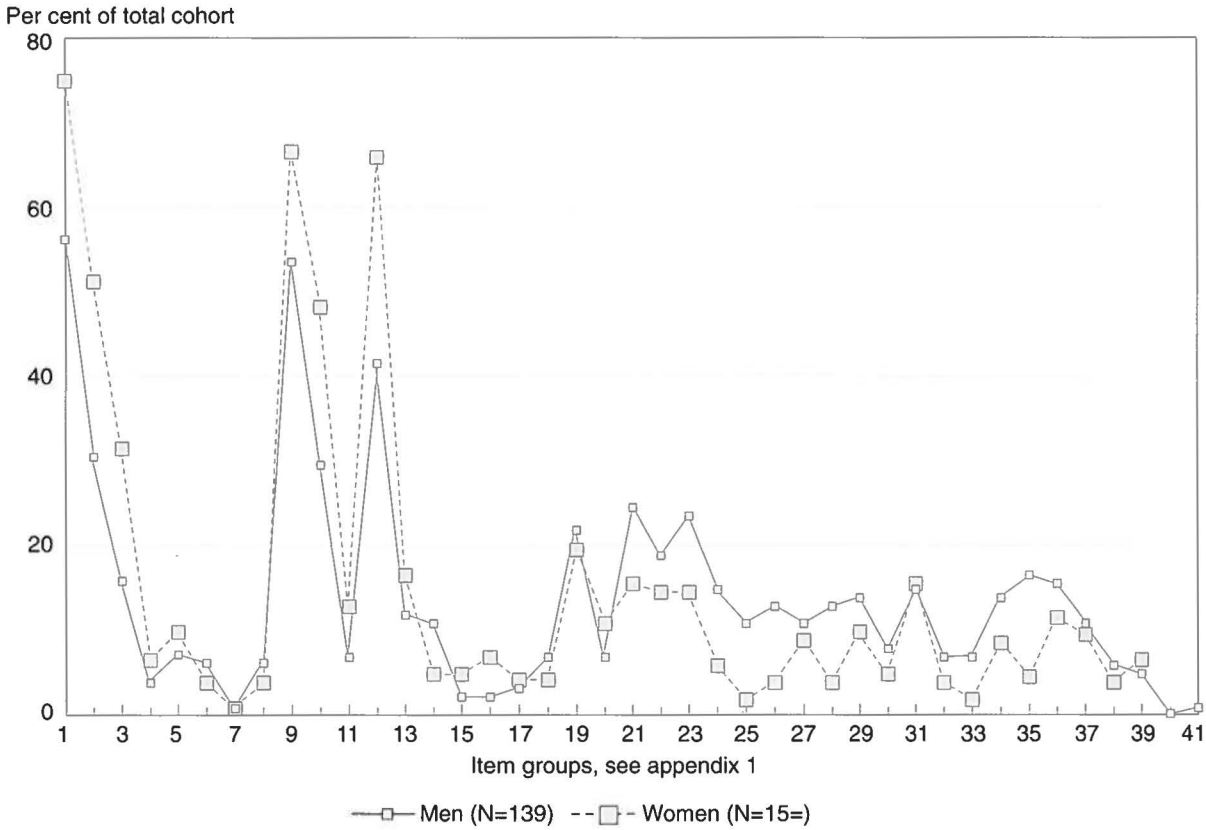
Table 10. Suicidal problems at first admission.

	Men	Women
Only suicidal threats without attempts	21	34
Suicide attempts	20	16
Means:		
Self-poisoning (tablet ingestion)	7	8
Shooting	8	0
Strangulation/hanging	3	2
Cutting/stabbing	1	4
Drowning	1	2

circumstances are presumably far more complicated than here suggested. Deep-rooted respect for the autonomy of the individual makes it extremely difficult to interfere, for example by persuading the patient to consult a doctor if he does not ask for help.

What are the tasks which in practice are left to the psychiatric ward? Are they mainly protecting the surroundings from dangerous behaviour, or protecting the patient from self-destruction? Do symptoms that are not accompanied by particularly dangerous behaviour, but perhaps are painful for the patient, provide a cause for admission? Or is it rather the bizarre element, incomprehensible to those around the patient, that constitutes the motive force?

On the basis of the records it has been noted whether the patient has shown destructive or self-destructive tendencies before admission. Independently of this it is registered whether the admission has (also) been justified by other symptoms of mental disorder. The drawback with such a retrospective assessment is as usual that it is impossible to be sure that missing information means that the phenomenon has not



p< 0.05 for sex difference:
Item groups 1, 2, 3, 9, 10, 12, 14, 16, 24, 25, 26, 28, 33, 35

Fig. 9. Symptom profiles at first admission to a psychiatric department or hospital 1980-83. Greenlanders, 15 years and above.

been present. So the findings will be minimum statements.

A review of reasons for admissions appears in Table 9. A third of the men and half of the women were admitted on account of mental symptoms, without there being any question of dangerous behaviour, while a good half of the men and 42% of the women had shown behaviour that was dangerous to themselves and/or others.

Thus, 41 of the men and 50 of the women had shown suicidal tendencies before their admission. Of these, half of the men and a third of the women had made unambiguous attempts to take their own lives. 40% of the men had tried to shoot themselves, while the commonest method for the women was to take an overdose. The methods can be seen in Table 10. Among the non-criminal patients, 30 men and 17 women behaved violently or threateningly in connection with their admission ($p<0.005$). 16 men and 11 women had shown both suicidal and violent behaviour. For 8 men and 3 women detoxification and treatment for alcohol abuse were the only reasons for the first admission, but several had alcohol problems in connection with some other mental disorder. Alcohol problems will be dealt with in a later chapter.

The symptoms that can be read from the records for the first admission have been registered on the basis of SCAN's Item Group Checklist (IGC). A description of the individual subjects in the IGC can be found in Appendix 1. A profile of symptoms has been worked out on the basis of how great a proportion of the patients were registered with the symptoms indicated. Fig. 9 shows symptom profiles for men and women respectively. Significantly more women showed nervous and emotional symptoms (IGC 1, 2, 9, 10 and 12). In addition, more women had delusions about their own bodies (IG14) and several a sense of an increase in mental tempo (IG15), while more men had psychotic symptoms such as hearing hallucinations without an accompanying change in mood, disturbed thought patterns, delusions about being guided from outside, speech disturbances together with a shallow and inadequate level of emotion in the context (IGC24, 25, 26, 28, 33 and 35). All in all, these differences in symptom profiles suggest that more men than women were suffering from serious psychotic symptoms on first admission.

Although many patients expressed threats of suicide or violence, or even suicidal or violent acts, as a reason for admission, only a small number of them were involuntarily committed to hospital (Table 11). Among the formally voluntarily admitted there were, however, 10 patients who were not able to decide on admission, in three instances on account of a violent emotional reaction, while seven were confused and very disturbed in connection with acute brain damage (drowning, falls, apoplexy etc.). Two were voluntarily admitted as a substitute for being placed under arrest. One of them became psychotic while in police custody. He was accused of arson, but the charge was later dropped. A woman was charged with attempted murder and was as a result sent for mental observation. For 19 men and 7 women, the first admission was the direct result of a court order requiring mental observation. The forensic psychiatric patients are described in a later section.

Table 11. Type of admission

	Men	Women
Voluntary	112	141
Involuntary, urgent treatment required	0	1
Involuntary, danger to self or others	8	1
Legal requirement for observation	19	7
	139	150

The path to admission

A brief duration of symptoms before admission could either suggest that the threshold for admission is low, or that the pathological picture has from the start contained elements indicating that observation is necessary. Many factors contribute to the decision to admit a patient, in addition to the pathological picture the patient's own attitude and the resources of those around him to provide care and support. A low admission threshold cannot simply be considered an advantage, as it can mean that out-patient treatment has not been sufficiently tried before a decision on admission is taken. Conversely, at least if there is no qualified out-patient treatment on offer, a high admission threshold implies that those close to the patient are subjected to a heavy burden and are often overcome by uncertainty, anxiety and powerlessness in the face of the bizarre elements in the patient's behaviour. If the situation reaches the stage of moving in a dangerous direction before admission is effected, the memory of this will understandably enough be able to affect the attitude towards the patient when he returns home after being discharged, especially if the relatives have been unable to observe the improvements in his condition and have not been brought into the plans for the discharge.

62% of the men and 68% of the women had re-

Table 12. Treatment before first admission, divided by address in or outside Nuuk municipality.

	Municipality	
	Nuuk	All other municipalities
With treatment before first admission	67	121
No treatment before first admission	64	37
Total	131	158

Table 13. Duration of symptoms before first admission, divided by address in or outside Nuuk municipality.

Duration of symptoms	Municipality: Nuuk	Municipality: All other municipalities
Less than 1 month	53	19
1 month-½ year	23	30
½-1 year	9	13
1-5 years	16	37
More than 5 years	7	25
Total	108	124
No information	23	34

X2=35,2 df 4 p<0.000001

Table 14. Duration of symptoms in relation to treatment before first admission. Whole country.

Duration of symptoms	No previous treatment	with previous treatment
Less than month	45	27
1 month-½ year	16	37
½-1 year	1	21
More than 1 year	8	77
no information	31	26

p < 0,000001

ceived treatment before admission, either from the district doctor or a psychiatrist or both. Rather surprisingly, it turned out that fewer from Nuuk than from the rest of the country had received treatment before admission (47% of the men from Nuuk as against 71% of the rest, and 56% of the women from Nuuk as against 80% of the rest). Table 12 shows the figures for both sexes together. Even in the places most difficult of access, that is to say the settlements in East and North Greenland, 29 out of 38 (76%) had received treatment before admission, i.e. the same percentage for both sexes together as in the rest of the country outside Nuuk. Part of the explanation for the lack of treatment in Nuuk might be that the threshold for admission in Nuuk is lower than for the rest of the country on account of the easier access to the hospital; outside Nuuk, the situation has to develop very dramatically if treatment in the local hospital is not to be attempted first. The duration of the illness before admission is also far less in Nuuk than in the rest of the country (Table 13). The longer the symptoms have lasted, the greater is the probability that the patient will have received treatment before admission (Table 14). But if we divide the patients according to whether they live in Nuuk municipality or outside Nuuk at the time of admission, it emerges that although even in Nuuk there is a clear relationship between the duration of the symptoms and treatment before admission, the citizens of Nuuk received treatment before admission less often than the others, irrespective of the duration of the illness (Table 15). A comparison of the reasons for admission shows that significantly more people from Nuuk threatened or attempted suicide immediately before admission, whereas fewer threatened violence or acted violently. (Figures not shown).

Living conditions before admission

Over the last hundred years Greenland has seen a movement from settlement to town. At the turn of the century, 80% of the population lived in settlements, but by 1980 that proportion had been reduced to 20% (Harmsen 1979). The way of life has presumably always been somewhat different between town and settlement, and the difference has not decreased since modernization, which for many years only affected the towns. Helene Brochmann has described life in a settlement in the Disko Bay area around 1990 after a year's stay as a temporary teacher in the school there. Her book gives the impression of a community with an element of communal life. There was daily contact between homes so that people were always informed about events both great and small. Everyone took part when there was an occasion calling for celebration; people took an interest in each other. There were many practical tasks such as fetching water, and there was a need for everyone to participate in everyday life etc. (Brochmann 1992).

In her thesis, *While we are waiting for health*, Tine Curtis focuses on the women in one settlement, and in particular on the way in which they collaborate in looking after small children. Her field studies are from 1991, and at that time in the settlement concerned there was still a well-functioning network encompassing most families with small children. And where there were difficulties, the health visitor came into the picture as a valuable professional supplement.

Table 15. Duration of symptoms and proportion (%) of patients, having had treatment before first admission, divided by address.

Duration of symptoms	<1 month		<½ year		<1 year		1 year +		No inf.	
	n		n		n		n		n	
Address in Nuuk	53	28%	23	59%	9	89%	23	83%	21	(48%)
Address outside Nuuk	19	63%	30	80%	13	100%	62	94%	34	(41%)

OR (Mantel-Haenszel, weighted) 0.27 (c.l. 0.13-0.58)

On the basis of 3 years as a teacher in a small settlement in South Greenland, Per Langgaard has described social life, which in the 80s was still largely based on traditional alliances; for instance, those who were born in the same year (*peqatigiit*), on the same date (*inuueqatigiit*) or who had the same name (*ateeriit*) were still seen as having a special relationship to each other that obliged them to behave in a certain way. To be called after a dead person (*atsiaq*) still meant a special relationship to the dead person's family etc. These alliances retained and strengthened the social relationships and served among other things to keep inter-personal friction down to a minimum. Langgaard also discusses the disadvantages of settlement life, especially for the young, who after a life with extensive freedom in the settlement find it difficult to fit into the modern schooling system in the town, and easily fall into the role of a loser (Langgaard 1986).

Table 16. Proportions (%) of the total population and of the study cohort born in a village.

Year of birth	Total population	Study cohort	RR	(95% c.l)
<1949	66%	59%	0.73	
1940-49	60%	50%	0.67	
1950-59	47%	31%	0.50	
1960+	32%	31%	0.97	
All years (stratified)			0.69	(0.54-0.88)

Table 17. Proportion (%) of patients with normal conditions of life in childhood according to place and year of birth.

Year of birth	Town	Village	OR	(95% c.l)
<1940	91%	87%		n.s
1940-49	74%	72%		n.s
1950-59	40%	69%	0.30	(0.10-0.87)
1960+	28%	44%	0.48	(0.16-1.40)
All years	45%	66%	0.42	(0.24-0.76)

excluding patients with no information about conditions of life in childhood.

Birthplace; abandoned towns and settlements as against those still inhabited

In the period during which the cohort was born, there still existed many settlements which have since been abandoned. The only town to have been abandoned is Qutdligssat, the mining town on the northeast side of Disko Island, which had to go when the mine was closed in 1972. Before Qutdligssat was abandoned, a good deal was written about the anticipated difficulties for a population being forcibly removed. A film was made of the removal, and a working group was set up to monitor the progress of the former citizens of Qutdligssat. However, it is difficult today to gain an impression of how the former citizens have fared, so it seemed relevant to discover whether links to the place of birth could be found in the enrolment of psychiatric patients and the progress made by them.

Six men and seven women were born in Qutdligssat, corresponding to 5% of the cohort. For a number of years around 1950-70, 6% of the Greenlandic population over 14 years of age lived in Qutdligssat, and in 1953 Qutdligssat accounted for 6% of all births in Greenland, so that there is nothing to suggest that people born in Qutdligssat are over-represented in the study.

12 men and 29 women were born in a later abandoned settlement, corresponding to 9% and 19% respectively of the entire cohort, while 39 men and 35 women (28% and 23% respectively of the cohort as a whole) were born in a settlement that is still inhabited. The odds in favour of the men having been born in an abandoned rather than still inhabited settlement are 0.37 (95% c.l. 0.15-0.90). We have no explanation for this difference in sexes. If it were due to a higher death rate among men from settlements, it would be expected also to apply to those from settlements still inhabited.

The risk of being admitted to hospital was less for those born in a settlement than for those born in a town, *notabene* if they were born before 1960. For the youngest, the risk was the same whether they came from a town or a settlement (Table 16). If we compare the conditions in which the patients grew up (a description of the variables used follows in the section on childhood conditions), it is equally rare for the older ones to have been exposed to lack of care or violence in the home, while in the case of the younger ones born after 1950 there is a greater proportion in the towns who have been brought up in poor conditions (Table 17). This difference was also found in those born after 1960. But an increasing number of the youngest residents in settlements have had to leave their settlements during childhood or puberty to go to school in the town, where they have lived in school accommodation, a situation which has led to many reverses for young people from settlements (Langgaard 1986: 304). Even if settlements still appear to have benefits for small children as they grow up, traditional life scarcely motivates young people to prepare for life in modern society.

Conditions of life in childhood

The modernization of society brought in its train profound changes both in the structure and the role of the family. It used to be the case that more generations lived together. In 1880, a household consisted of 9.2 persons on average; in 1960 that had fallen to 5.6, and

in 1990 it was 2.8 (Bentzon 1968; Grønland 1990) And whereas in the traditional community, life in all its aspects had been organized around the home as its centre, individuals today must often see their lives divided between home, workplace, politics, church life, leisure activities etc. Divided loyalties emerge between concerns for partners, children, parents, workplace etc., and these are conflicts which people often lack the means of solving.

An example: A 35-year-old woman, divorced with two school-age children living at home, was admitted to hospital after attempting suicide by overdose. She had been given the tablets by her doctor because of insomnia. After coming round, she said that she was an office worker with a permanent job. She had been divorced from the children's father because of his intemperance and had obtained her own flat for herself and the children after a very difficult separation, during which he often visited them and created a sense of insecurity in the home. But soon after she and the children had had peace restored to their lives, her parents arrived from a small settlement that was in the process of being abandoned. The parents saw it as a matter of course that they should live with their daughter and moved in without warning. They were depressed at having to leave their settlement, and drank a good deal. She could neither refuse her parents nor take them to task. While she was thus feeling totally helpless, a letter arrived from the school telling her that her son was playing truant, and requesting a meeting with her. Her suicide attempt was probably mainly a cry for help, and in this case it was possible fairly quickly to obtain a flat for the parents and help them make to their own way in the town, and also to establish a support arrangement for the son's schooling. Nevertheless, the story illustrates both helplessness in the face of the changed family hierarchy and the difficulty people encounter in understanding and formulating their problems themselves.

The childhood home

It was recorded whether the patient has lived at home with both biological parents, with one of them or in a foster family, or possibly been adopted or placed in an institution. Information is available on the childhood homes of 261 of the 289 patients. Many of them have known several different homes in their childhood. They may have lived with their parents for some years, then, after the parents' divorce or the death of one of them, living with the one remaining, which was usually the mother. Or they might have been placed with a foster family, possibly their grandparents or other family members, or perhaps, under the auspices of the social authorities, with an unrelated family. Finally, they might have been placed in an institution. On the basis of this information it has been possible to construct a variety of "childhood homes": 1) all childhood spent with both biological parents, 2) with one of the parents, at least for part of childhood, 3), with a foster or adoptive family, at least for part of childhood, 4) in an institution for at least a year. The last of these reflects the most "unnatural" childhood home, living for the whole of childhood with both parents being considered the most natural. It is particularly in the case of the older patients that a certain amount of information is lacking. The childhood home can be seen in Table 18. In Fig. 10, the childhood home is divided up according to age on first admission. Only just over a third of the youngest, that is to say those who were admitted for the first time before reaching the age of 20, grew up with both parents throughout their entire childhood, while almost two thirds of those over 45 did so. 30% of the youngest have spent

Table 18. Early home.

	Men		Women	
With both biological parents for the whole childhood	60	48%	79	58%
With one biological parent, for at least part of the childhood	16	13%	15	11%
Adopted or in foster home	25	20%	19	14%
Institutionalized	24	19%	23	17%
Total with information about early home	125	100%	136	100%
No information	14		14	
Total	139		150	

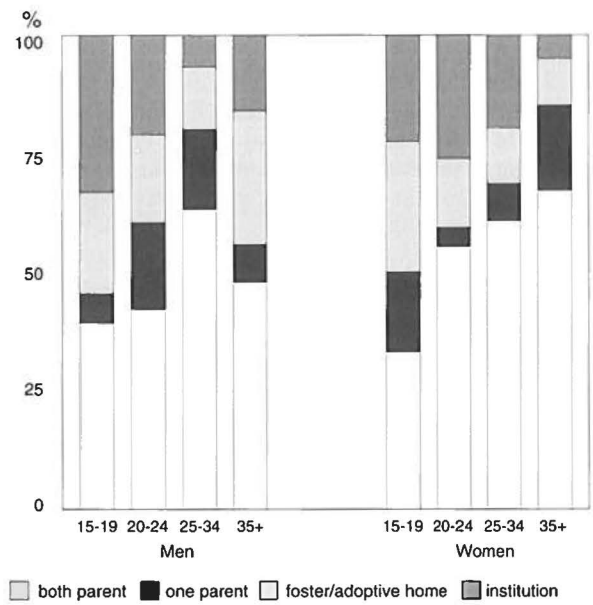


Fig. 10. Early home and age at first admission to a psychiatric department or hospital.

part of their childhood in an institution, while this would apply at most to 5% of those who were 45 or more on first admission.

The quality of the childhood home

Where it can be seen from the records, it has been noted whether the childhood home was characterized by disharmony or alcohol problems, whether the child has been seriously neglected in a more passive manner (insufficient care, neglect), whether there have been serious or repeated cases of violence (not necessarily resulting in physical harm to the child, but such that it has experienced the atmosphere in the home as violent), and finally whether there has been any question of sexual abuse. In cases in which the patient has experienced various childhood homes, for instance living at first with its parents and later with a foster family or in an institution, it is the conditions in the most unfavourable place that have been registered. If the information has only come to light during a subsequent spell in hospital, it has still been included if it seems reliable. The author has personally known many of the patients and judges the validity of the information recorded to be good in cases where it has been taken into account.

The childhood environment is graded according to a scale from 1: "no problems" 2) "disharmonious atmosphere" (not necessarily, but in practice mainly, resulting from alcohol abuse), 3): "neglect" (serious, but mainly passive neglect, lack of care) 4: "violence and/or sexual abuse". There was (as yet) no particular interest in incest and other kinds of sexual abuse of children when the records on which the study is based were drawn up. So it is mainly spontaneous information from the patients that lies behind these figures. In the cases of 117 (84%) of the men and 119 (79%) of the women there is information on the conditions in which they grew up. It will be seen from Table 19 that 53% of those on whom information is available grew up in apparently unproblematic conditions. Again there are considerable differences in age, as there is a significantly lower percentage of cases in which the youngest patients grew up in conditions that could be described as being free from problems. Fig. 11 shows the quality of the childhood home categorized according to age on first admission and for each sex independently. Especially the women in the age group 20-24 grew up in unfavourable circumstances. 12 women – that is to say 10% of those about whose childhood we have information – were subjected to sexual abuse. They were all under 35 years of age on first admission. In the case of the men there is information concerning sexual abuse in three cases.

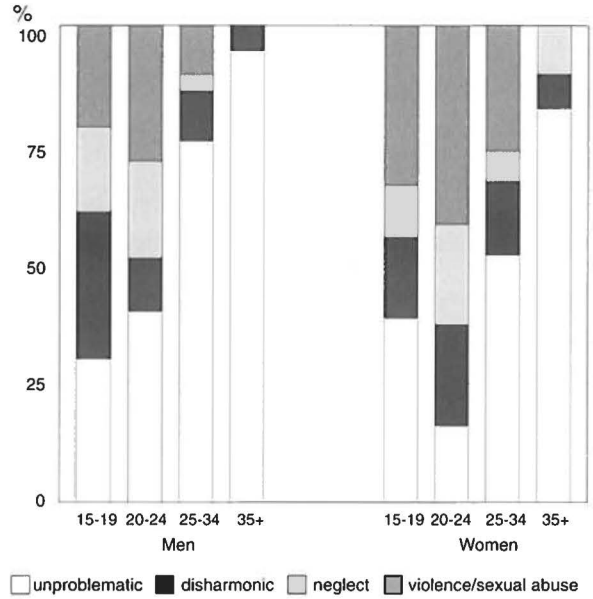


Fig. 11. Quality of early home and age at first admission to a psychiatric department or hospital.

For 236 patients there is information about both the place and the circumstances in which they grew up. Having lived with biological parents while growing up is no guarantee of a childhood without problems. Irrespective of where they grew up, it is especially the younger and youngest patients who have grown up in unfavourable circumstances. Not only have they less frequently spent the whole of their childhood with their biological parents, but even in the cases of those who have done so, their upbringing has more commonly been fraught with problems. In Fig. 12 the childhood home and conditions while growing up have been combined and shown in relation to age on first admission and broken down according to sex. There is a very clear correlation between age and conditions of life in childhood. For all age groups over 20 the women have had difficult backgrounds significantly more often than the men. In the case of the large number of older patients about whom no information is available, they have been treated as though they divide up in the same way as those about whom we do have information. In addition to alcoholism there is especially a question of organically determined condi-

Table 19. Conditions of life in childhood.

	Men		Women	
No problems	64	55%	59	50%
Family disharmony/alcohol problems	17	15%	19	16%
Neglect	14	12%	13	11%
Violence and/or sexual abuse	21	18%	28	24%
Total with information about conditions of life in childhood	116	100%	119	100%
No information	23		31	

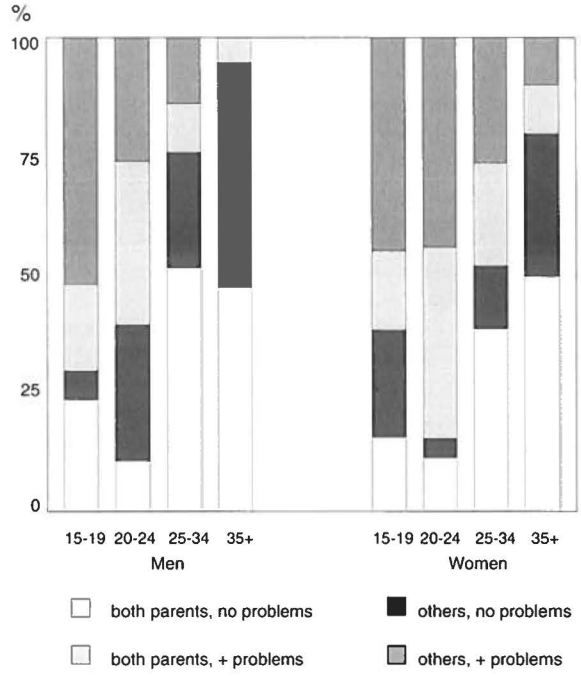


Fig. 12. Conditions of life in childhood and age at first admission to a psychiatric department or hospital.

tions where the circumstances of growing up have scarcely been of significance for evaluating the pathological picture, and where the patient has often been unable to provide any information on the subject.

Social grouping on first admission

In their study of the sickness pattern in Upernavik 1979-80, Bjerregård & Bjerregård (1985) have divided the patients into social groups corresponding to the 5 classes of the Institute for Social Research (Kamper-Jørgensen et al. 1980). Group I+II: those with a university training, politicians, teachers, self-employed running large companies, salaried employees in charge of 10 staff. Group III: salaried employees in charge of fewer than 10 staff, nurses, police officers, social advisors, clerical staff, smaller independent craftsmen and shopkeepers. Group IV: skilled workers, hunters, fishers, unskilled workers in permanent employment. Group V: casual workers, small boats fishermen and hunters, those who get through somehow. In the Bjerregårds' categories, persons from households in which no one has work are registered as non-classifiable. In this study, the same categorization has been used, though those of no occupation are included in Group V.

Table 20. Social groups.

	Cohort		Upernavik's population*)	
	n	%	n	%
Social group I+II	1	0.3	62	8
Social group III	35	12.1	312	42
Social group IV	111	38.3	307	42
Social group V	141	48.6		
Unclassified			56	8

*) Source: Bjerregaard & Bjerregaard 1985.

A comparison between this cohort and the results from Upernavik (Table 20) shows that the psychiatric patients are strikingly underprivileged, even when compared with a relatively poor area such as Upernavik. If the unclassified persons from Upernavik are included in the lowest group, this means that half the population belongs to social groups IV + V, whereas the figure in this cohort is 87%.

The significance of such a grouping in a society undergoing such great change as Greenlandic society is open to debate. However, even in Greenland, a low social status measured in this way relates to a number of other problems: The patients in social group V are younger on first admission (in the cases of both men and women) and have more frequently been placed in a foster family, adopted or put in an institution for at least part of their childhood. They have more frequently grown up under difficult conditions. Among those who have grown up in unproblematic circumstances, the proportion with a low social status is c. 1/3 scarcely very different from the population as a whole and at least corresponding to the population in Upernavik.

Relationship with pregnancy and birth

10 women were admitted while pregnant or within the first year of a birth; of these, six were in the actual puerperium from one month before to three months after the birth. For eight of the ten women, this was their first time in hospital, while two had been admitted before. One of the women turned out to have an extrauterine pregnancy, while all the others proceeded to a normal birth. Only two of the women have since given birth to more children; neither of them was hospitalized in connection with these subsequent births.

During the period 1980-83, 3403 children were born to Greenlandic mothers. For admissions during the actual puerperium, this gives a rate of 1.8 per thousand. It must be assumed that there are other minor cases admitted to local hospitals, so that all in all the rate of admissions during the puerperium is perhaps not very different from the 4 per thousand

quoted in a textbook by the Swedish professor, Jan-Otto Ottosson (Ottosson 1983: 40).

Altogether 18 of the total of 350 female admissions during the seven-year investigation period were linked to pregnancy and/or birth. This is 5% of all female admissions. Half, or 2.6%, took place in the actual puerperium. But most of the women concerned had far more admissions unconnected with pregnancy or birth. Of the ten patients, seven developed a chronic mental disorder with moderate to severe impairment, while two had a similarly chronic, but milder neurotic disorder at the time of the follow-up examination.

Diagnoses

According to Goldberg & Huxley (1992: 54), classification of diseases simplifies three tasks: carrying out clinical work, producing homogeneous groups for the purpose of research and keeping records for the health service administration. Critics of diagnosis systems draw attention to the labelling function: The very fact of having a serious diagnosis established, for instance schizophrenia, will create negative expectations and thereby become a self-fulfilling prophecy of a bad prognosis. But the significance of the diagnoses naturally depends on how they are used. The converse can also be the case: Failure to recognize more deep-seated problems behind an apparently temporary disorder means that patients will not be given the treatment and support which might have improved their prospects for the future. This point of view can at least be applied to cases of schizophrenia in Greenland, the serious course of which will be described below.

In the present study, the classification of diseases has been undertaken in two ways: on the one hand there is a discharge diagnosis for all patients, and on the other, on the basis of the information collected at the time of the follow-up study, the author has added a revised diagnosis which attempts to gather together the essential or common elements in the pathological picture. In this way we are able to discover cases of schizophrenia and manic-depressive illnesses that have started in an atypical fashion and consequently are not included if we only consider the diagnosis on first admission. It becomes more problematical when, for instance, there is a question of a reactive psychosis. As its background, such a condition can have a serious personality disorder, though it will not necessarily do so. An example is that of a man who was originally admitted with a reactive psychosis. Some time later he was re-admitted, and this time the diagnosis was schizophrenia. After a further couple of years he was committed for mental observation on account of a particularly brutal murder. There was no sign of psychosis now, but the picture was one of profound personality disorder. Nor was there any sign of psychosis during the follow-up examination. In this case, personality disorder was entered as the follow-up diagnosis.

Table 21. Main diagnoses.

	At first admission		At follow-up	
	Men	Women	Men	Women
Schizophrenia	7	3	21	9
Manic-depressive psychoses	2	4	4	12
Organic dementia	5	4	5	6
Psychoses and non-psychotic mental disorders associated with other diseases (incl. epilepsia)	13	12	16	10
Reactive psychoses	14	18	4	10
Neuroses	10	38	8	33
Personality disorder	31	12	39	25
Oligophrenia	3	4	3	5
Alcoholism	15	11	21	22
Drug addiction	1	0	1	0
Unclassifiable psychoses	12	7	2	2
Other diagnoses	26	37	15	16
	139	150	139	150

Table 21 shows the principal diagnoses on discharge after first admission. In addition there is a revised diagnosis, the follow-up diagnosis, as already explained. This is based on all available information concerning the course taken by the illness, also deriving from any re-admissions.

76 of the 139 men and 78 of the 150 women received the same diagnosis on first admission as in the follow-up. Conversely, then, there was a change of diagnosis in the case of 63 men and 72 women. These changes are the result of both the above-mentioned changes in pathological picture and the general uncertainty concerning the application of this non-operational diagnosis system, in particular on patients in a situation culturally and socially very different from that of the usual Danish psychiatric patient.

Table 22 shows follow-up diagnoses for 32 patients who on first admission were diagnosed as suffering from reactive psychosis. Seven turned out to be suffering from schizophrenia and four from a manic-depressive disorder, while in the case of eight patients

Table 22. Follow-up diagnoses for 32 patients, who at first admission had a diagnosis of reactive psychosis.

Schizophrenia	7
Manic-depressive psychoses	4
Reactive psychoses	8
Neuroses	1
Personality disorder	5
Alcholism	4
Other diagnoses	3
Total	32

Table 23. Follow-up diagnoses for 19 patients whose psychoses were not classifiable during first admission.

Schizophrenia	7
Manic-depressive psychoses	1
Organic dementia	1
Reactive psychoses	2
Personality disorder	3
Alcoholism	3
Not classifiable psychosis	1
Other	1

Table 24. Follow-up diagnoses for 54 patients with transitional disturbances at first admission.

Schizophrenia	1
Psychoses and non-psychotic mental disorders associated with other diseases	2
Reactive psychoses	2
Neuroses	6
Personality disorders	16
Alcoholism	7
Other diagnoses	20
Total	54

reactive psychosis had to be seen as the most important aspect of the pathological picture.

Similarly, Table 23 shows follow-up diagnoses for the 19 patients whose psychosis could not be classified on first admission. Seven of them had developed a schizophrenic psychosis. 54 patients on first admission were estimated to have a transitory situative disorder (affective reaction). The follow-up diagnoses are listed in Table 24. 16 patients showed clear signs of personality disorder, while 20 still had to be listed as suffering from transitory disorders.

Schizophrenia

The schizophrenias are a group of serious mental disorders affecting basic functions such as contact with other people, the form and contents of thought, volition and actions and emotions. There is still uncertainty as to whether there is a question of a single disorder with various manifestations or a group of disorders with certain common features making it natural to group them together under a single heading.

The WHO has undertaken great deal of work to coordinate schizophrenia research in different parts of the world by developing tools for research (WHO 1992) and formulating operational diagnostic criteria for mental disorders (WHO 1994). A number of international studies suggest that schizophrenia is found in all societies with a fairly consistent frequency except for certain areas which show a particularly high or low frequency. A high frequency in a geographically isolated region of northern Sweden (Böök et al. 1978) is explained on the basis of particular genetic circumstances. In other areas exhibiting a high frequency, for instance Western Croatia, among Tamil-speaking Indian students in Shanghai and Canadian Catholics, Murphy points to cultural circumstances, more precisely to a conflict between the cultural heritage and the present social situation, as a possible etiological factor (Murphy 1968). Also the low incidence among Hutterites in the USA is partly explained on the basis of cultural circumstances in the very homogeneous, closely integrated, non-urbanised Hutterite community (Eaton & Weil 1955). Perhaps the view of Böök et al. in 1978 still covers the situation: "Schizophrenia is not a disorder, but a phenomenon which is more or less closely related to a large number of pathological mechanisms influencing the functions of the brain".

The first person in Greenland to make an estimate of the incidence of schizophrenia was Alfred Bertelsen, who in his *Medicinsk Statistik og Nosografi* (Medical Statistics and Nosography) from 1940 points out that: "Of patients with endogenous mental illnesses, I have most frequently encountered manic-depressive psychosis. Schizophrenia is at all events not common" (Bertelsen 1940: 200). This pattern is immediately reminiscent of that applying to the Hutterites.

The Danish concept of schizophrenia is traditionally rather narrow in the sense that the diagnosis is often made only after a longish period of illness. In their studies of the counties of Århus and Viborg, Munk-Jørgensen & Mortensen (1989) found that only half of schizophrenic patients had their diagnosis established during first admission. So in their calculations of incidence they also included patients who only had schizophrenia diagnosed during the follow-up period. The same method of calculation has been used in the present study. There is in addition an estimate of whether, at the time of the follow-up examination, in view of the information compiled on the pathological picture and the course the illness has taken, the patient can be seen as suffering from schizophrenia. From the published results of earlier studies (Lynge & Jacobsen 1995) the following should be noted:

Of the 289 patients admitted for the first time, 37 (24 men and 13 women) were diagnosed as suffering from schizophrenia on at least one occasion. Of these, the diagnosis was made on first admission in the case of nine men and three women, while the other 25 were only diagnosed on subsequent contact with the Health Service. In the follow-up study, the diagnosis of schizophrenia was clearly confirmed in 30 cases. Of the seven who did not have the diagnosis of schizophrenia confirmed in the follow-up examination, one had been operated on for a cerebral aneurysm and now only had modest signs of organic cerebral damage. Five had had recurrent psychoses including paranoid, affective and hallucinatory symptoms further complicated with periodic alcohol and/or cannabis abuse. During periods when the psychotic symptoms were not present, all showed signs of severe personality disorders, while one showed no sign

Table 25. Annual rates for first admission for schizophrenia (per 100,000 persons, 15 years of age or more).

	Men			Women		
Diagnosis of schizophrenia at	n	Rates	95% c.l. for rates	n	Rates	95% c.l. for rates
First admission	9	15.2	7.0-28.9	3	5.2	1.1-15.2
Follow-up*)	21	35.5	22.0-54.2	9	15.6	7.1-29.6
During any admission**)	24	40.5	26.0-60.3	13	22.5	12.0-38.5

*) Those patients in whom the diagnosis of schizophrenia was confirmed at follow-up.
**) Number of patients who, at least once in the study period, have had a diagnosis of schizophrenia.

of mental disorder apart from slight difficulty in making contact. He had no difficulty coping in society without drawing attention to himself. The rates of first admission for schizophrenia, arranged according to when the diagnosis was made, can be seen in Table 25.

If we examine the symptoms entered in the records and those registered at the follow-up examination, many of the schizophrenic patients had bizarre delusions, often with a religious content, and with several related to traditional Eskimo concepts. Thus one young man maintained that he had an *angakkok* in his stomach who spoke to him. Another said that God had trodden on him and killed him, but that he had been revived afterwards. He could travel throughout space and visit other galaxies. Another young man had been bewitched and thereby mentally damaged by someone from his native town. He himself had killed God by means of telepathy. One was convinced that a woman whom he named had reduced the size of his penis by means of witchcraft. A young man was constantly drinking water and spitting it out again to the accompaniment of violent grimaces. He said that God was dying, and that he himself was to take His place in heaven. But first the Devil had to be driven out of his body, and this he was doing with the help of the water.

The symptom profiles for the symptoms entered in the records on first admission can be seen from Fig.

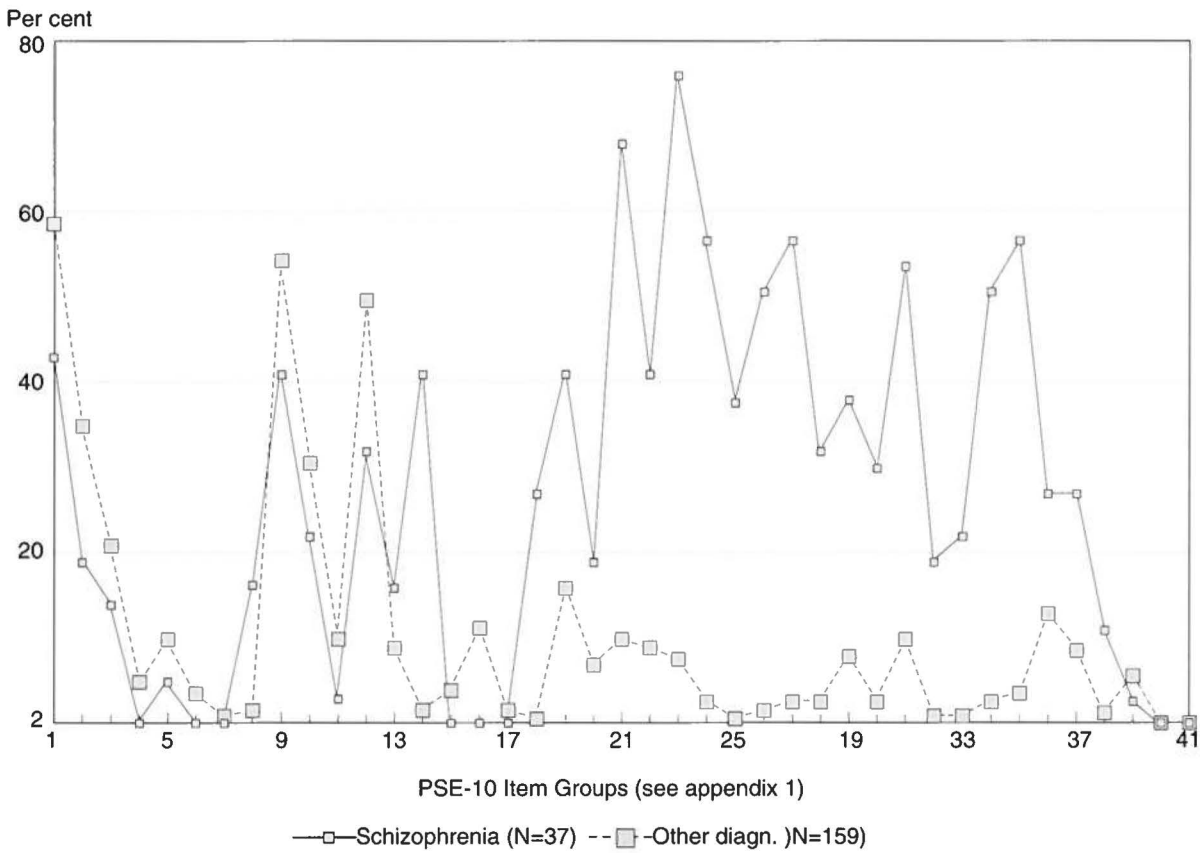


Fig. 13. Symptom profiles at first admission for schizophrenics and for all other diagnoses among the age groups 15-34 years.

Table 26. Age at first admission and hash abuse. Schizophrenia and control group.

	Age at first admission	
	Hash abuser	non-hash abuser
Men		
Schizophrenia	20.3	22.3
Control group	21.7	23.1
Women		
Schizophrenia	20.2	22.9
Control group	24.3	24.9

13. For the sake of comparison, the symptoms have been added for patients in the age group 15-33 years who at no time were diagnosed as suffering from schizophrenia. There were altogether 159 patients, hereafter designated the control group. It emerges that in the two groups there are similar numbers suffering from less specific symptoms such as anxiety, nervousness and depression, while the control group had far fewer psychotic symptoms proper. A comparison between the schizophrenia group and the control group showed moreover that significantly more schizophrenics had suffered from hash abuse, and insignificantly fewer from alcohol abuse before first admission (Table 27). The hash abusers were admitted for the first time at a slightly lower age than non-hash abusers, irrespective of whether they belonged to the schizophrenia or control groups. The average age on first admission for the different groups can be seen from Table 26. Other differences between the schizophrenia group and the control group are indicated in Table 27.

Of the 37 patients diagnosed as suffering from schizophrenia, six were dead by the time of the follow-up study, five by suicide and one from a blood disease. Among the 31 still alive, 24 (13 men and 11 women) were personally examined by means of an extended interview, Present State Examination (PSE-10) from SCAN (WHO 1992). This internationally tested and recognized psychiatric interview also worked well in Greenland. The questions were felt to be relevant, and most patients showed relief at the thought that there were words for many of their strange experiences. Information was gained on psychopathological conditions which despite many, often protracted, stays in hospital had not previously been described.

Table 27. Comparison between the schizophrenia and control groups.

	Schizophren. n=37 %	Controls n=159 %	Odds Ratio	(95% c.l.)
Male sex	65	50	1.9	(0.8-4.3)
Father Danish (men)	21	6	3.9	(0.8-18.6)
Father Danish (women)	0	3		not defined
Psychosis in the family	28	10	3.4	(1.3-8.7)*
Born December-February	43	23	2.6	(1.2-5.5)*
Born in a town	73	59	1.9	(0.9-4.3)
Address in a town at first admission	97	89	4.6	(0.8-∞)
Early home with both biological parents	49	51	0.9	(0.4-2.0)
Early home with at least one biological parent	62	62	1.0	(0.5-2.3)
In foster home/adopted/institutionalized	38	38	1.0	(0.5-2.1)
Problems in early home	57	52	1.2	(0.6-2.5)
No education	81	77	1.3	(0.5-3.5)
Unmarried at first admission	92	67	5.5	(1.8-23.4)*
Childless at first admission	86	60	4.2	(1.6-12.7)*
No paid work before first admission	77	46	4.0	(1.7-10.0)*
Hash abuse before first admission	35	8	6.1	(2.5-14.8)*
Alcohol abuse before first admission	35	50	0.5	(0.3-1.1)
Symptoms > 1 month before first admission	88	57	5.6	(2.0-19.5)*
Suicidal thoughts or threats before first admission	16	18	0.9	(0.3-2.2)
Suicide attempt before first admission	3	20	0.1	(0.0-0.6)*
Threats or acts of violence	38	30	1.4	(0.7-3.0)
Alive at follow-up	84	91	0.5	(0.2-1.6)
Among those alive at follow-up:				
Married	6	24	0.2	(0.0-0.9)*
Has paid work/employment	13	47	0.2	(0.1-0.5)*
Incapacity pension	71	14	15.3	(5.7-42.2)*
All with income from social support (including pension)	84	40	7.8	(2.6-24.7)*
Has children	29	68	0.2	(0.1-0.5)*
Lives with family/relatives	42	66	0.3	(0.1-0.8)*
Recovered at follow-up, with or without relapse in the study period	6	39	0.1	(0.0-0.5)*

* $p < 0,05$

The results of the study could be summed up as follows: Schizophrenia appears in the Greenlandic population with pathological pictures known in other parts of the world. However, there are certain special circumstances which must be emphasized:

1. The rates discovered on first admission are twice as high as in the studies from Århus and Viborg counties (Munk-Jørgensen & Mortensen 1989). The high rates were *not* due to less serious cases being counted in Greenland. Patients were on average hospitalized for 21% of the examination period, and at the time of the follow-up examination 46% of those still alive were suffering from a chronic mental disorder, both percentages corresponding quite closely to those in the groups studied by Munk-Jørgensen & Mortensen.

2. In all cases, the age on first admission was under 34, on average 22 years, the same for men and for women. In the Århus-Viborg study it was 28.5 for both sexes together (Munk-Jørgensen, Mortensen & Machon 1991). In a study of all first admissions for schizophrenia in Denmark in 1972, undertaken on the same basis as the Århus-Viborg study, the age on first admission averaged 30: 27.4 for men and 33.7 for women (Munk-Jørgensen 1986: 174). In the WHO Ten-Country Study (Jablensky et al. 1992), 21% (8-43%) were more than 34 on first making contact with the health service on account of the mental disorder; the lowest number of older patients was in developing countries. An examination of the symptoms in patients aged more than 34 in the cohort as a whole does not suggest that there were schizophrenic patients among them who had simply not been diagnosed. On the other hand, there were three men and two women, all under 34 on first admission, whose diagnosis was reactive psychosis or unspecified psychosis, but who in a different diagnostic tradition might well have been included in the group of schizophrenics.

3. The ratio of men to women was 1.8 to 1. In the WHO Ten-Country Study referred to above (Jablensky et al. 1992), the ratio of men to women was 1.2 to 1, but with major variations between countries (2.0 – 0.5) and between age groups (1.6 among 15-24-year-olds and 0,5 among those in the age range 45-54). In

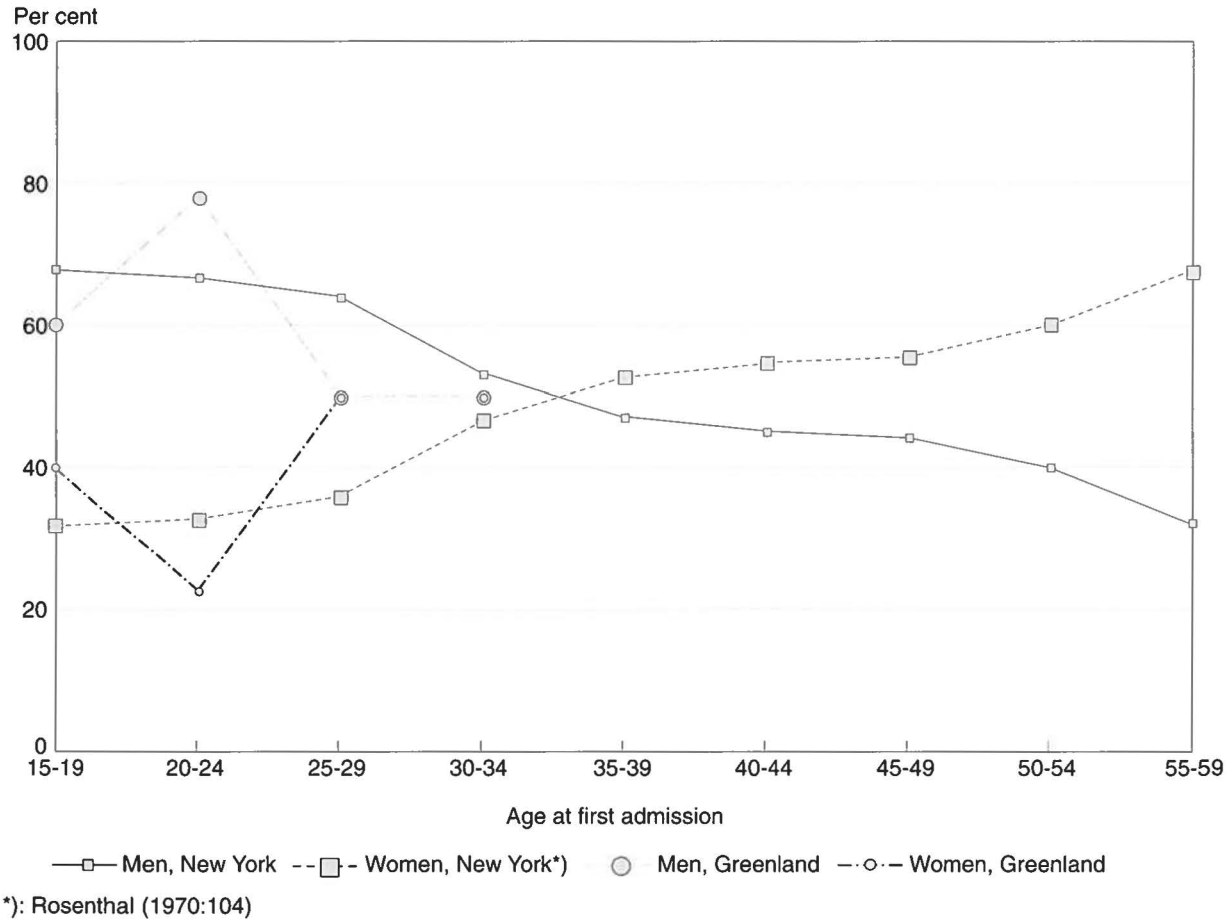


Fig. 14. Relative proportions of males and females among new cases of schizophrenia at different age groups.

Greenland the ratio of men to women was highest among the youngest (2.2 among 15-24-year-olds and 1.0 among those aged 25-34). According to Hamprecht et al. (1992), the high ratio of men to women in many epidemiological studies can be traced back to a number of imperfect sources such as uncertainty about the size of the background population, uncertainty as to whether all admissions have been included and uncertainty as to whether some re-admissions have been counted as first admissions. Finally, an age limit has been applied in some studies so that only patients under 45 years of age on first admission have been counted. This means that those admitted for the first time after the age of 45 are not included in the figures, and these are mainly women. A study from Mannheim which took these imperfect sources into account showed no difference between the sexes (Hamprecht et al. 1994). The imperfect sources mentioned are not relevant to the present study, which is based on well-defined areas of population and includes all age groups. The data allowing identification of individuals excludes the possibility of including re-admissions.

However, the study cannot determine whether some schizophrenics are never admitted and if so, how many and in what age groups. We have thus no reliable explanation as to why all were under 34 on first admission. Was it because conditions during their childhood and youth hastened the development of pathological symptoms requiring admission to hospital? Is the pathological picture in older people so restrained that admission is never considered? Or have the older women left the country before being admitted for the first time? We have no information to suggest this last hypothesis. But neither can it be entirely excluded. A graph showing the percentage of men and women among first admissions in the various age groups from New York State Mental Hospital in 1933 (according to Rosenthal 1970: 104) illustrates the problem (Fig. 14). I have added the figures for the Greenlandic cohort. And although the figures from Greenland are small, the trend is clear: There are the same differences based on gender among those under 35 as there are in the New York statistics. But we still lack the figures for older people, which in the material from New York show a growing percentage of women with increasing age.

4. The course of events was as bad as, or worse than, the worst examples in the WHO study: 1/5 of the men committed suicide on average 4-5 years after first admission. Among those alive at the time of the follow-up examination, 6% had been pronounced cured and 46% were chronically ill. Altogether, it could be concluded that schizophrenia in Greenland occurs with the same frequency and with the same early onset of the illness and with the same gender differences as in the developing countries, while the course taken by the illness, with a high incidence of chronicity, resembles that in industrialized countries.

We still lack the crucial knowledge to interpret these depressing results. Jablensky (1987) has put it thus: "The WHO studies [have] only pointed to the possibility that the chronically disabling forms of schizophrenia are less frequent in technologically less complex cultures than in communities that impose upon their members complex, conflict-filled and possibly confusing demands concerning knowledge and ways of thinking".

Manic-depressive illness

Manic-depressive illness is the other major psychosis group in the diagnostic system. This represents a group of mental disorders characterised by periodic changes in mood, psychomotor tempo and self-evaluation. All three areas can be in the raised or lowered, manic or melancholy mode. Hybrid forms can be found, and there are gradual transitions from normal variations to clearly morbid disorders which distort the concept of reality. Both in the manic and depressive phases there can also be a case of psychotic symptoms such as hallucinations and delusions, which mean that the pathological picture can be confused with other mental illnesses such as schizophrenia or reactive psychosis. Minor depressions can be wrongly interpreted as neuroses.

Manic-depressive illness is also found in all communities, although there are greater variations than is the case with schizophrenia. Thus in the area of northern Sweden where the incidence of schizophrenia was unusually high, Böök found the lowest risk of manic-depressive illness, 0.07%, while in Iceland Thomas Helgason has found an incidence risk of up to 2.18% for men and 3.23% for women. In Denmark, Fremming has found a risk of 1.2-1.6%. The gender ratio is the opposite of that for schizophrenia: Among younger people there are mainly women, among older people mainly men (all figures quoted from Rosenthal 1970: 202-206).

The best-known example of relatively high incidence of manic-depressive illness along with a very low incidence of schizophrenia is Eaton & Weil's (1955) study of the Hutterites, a closely integrated community held together by religion and tradition. They found that 53 out of a population of 8,542 persons had or had had a psychosis, and of these 39 were of a manic-depressive type.

As stated above, Alfred Bertelsen notes that of endogenous mental disorders, the manic-depressive are the most common in Greenland (Bertelsen 1940: 200). In the 1970 prevalence study to which reference has also been made previously, among 1965 persons over 14 years old in West Greenland, Lynge found nine manic-depressives (five men and four women) corresponding to an age-corrected prevalence of 0.9%

(Lynge 1976). In the same study, the prevalence of schizophrenia totalled seven cases, or 0.5%. How great a part genetic considerations, socio-cultural circumstances and diagnostic uncertainty played in these differences are questions so far not answered.

This study led to the following results: On discharge after first admission, only two men and four women were given manic-depression as their primary diagnosis. In addition, one man and one woman had it as a secondary diagnosis. On subsequent admissions and in the final revision of the diagnoses, altogether six men and 12 women were found to be suffering from a manic-depressive illness. This gives an annual rate for first admission of one per 10,000 men and two per 10,000 women On the assumption that the admission frequency remains constant for the different age groups, the risk of being admitted at least once to a psychiatric ward for manic-depressive illness before reaching the age of 65 can be estimated at 0.35% for men and 1.2% for women, but the figures are small.

The average age on first admission for a manic-depressive illness is 25 for men and 33 for women. For the remainder of the cohort, it is 29 for men and 34 for women (ns). A comparison with the remainder of the cohort shows no statistically significant difference relating to childhood conditions. The different geographical regions are more or less equally represented.

At the time of the follow-up, half the manic-depressives and 24% of the remainder were married (p=0.02). 41% of manic-depressives and 33% of the rest had spouses/partners on first admission, while this was the case with respectively 50% and 39% on discharge. 56% of manic-depressives and 52% of the others had children at the time of first admission while at the follow-up examination 72% and 61% respectively had children. That is to say that with regard to social relationships it is a far more normal group than the schizophrenics.

One of the women, but none of the men had died by suicide during the study period. In view of the fact that manic-depressive illness implies a very high suicide risk in Denmark, it is surprising that only one of those who committed suicide in this cohort was diagnosed as such. The case story is discussed in the section on suicide.

The symptoms described in the manic-depressive patients' admission reports are shown in Fig. 15. The

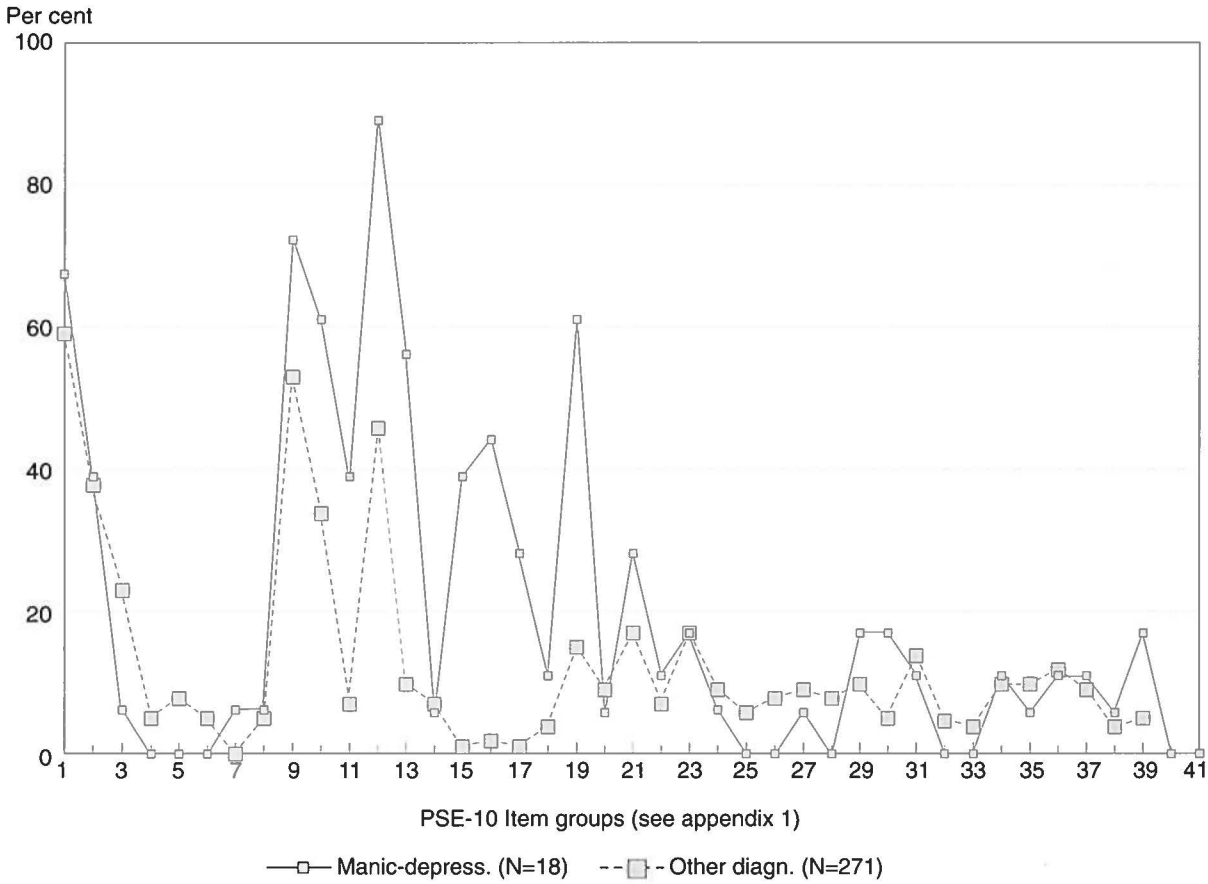


Fig. 15. Symptom profiles at first admission for manic-depressives and for all other diagnoses.

symptoms are categorized partly as depressive mood, reduced physical function, physical delusions and motor retardation, partly as the experience of an increased pace, increased subjective functioning, hyperactivity and an all-embracing mood. But in the case of several of the patients, the illness started atypically and only later developed into a recognizable form.

Case history: A 21-year-old unmarried woman was voluntarily admitted on account of a suicide risk. She had previously functioned perfectly well and had taken a diploma as a technician. Within a few weeks she became mentally unstable, began to drink heavily, left her work and flat without anyone interfering with what she was doing, but finally visited the district doctor who had her admitted as an acute case to a psychiatric ward. At first she seemed depressed, but remarkably energetic, and soon afterwards her emotional level was raised, although she was very prone to outbursts of anger. She was treated for alcohol withdrawal and then briefly with neuroleptics to subdue the psychological symptoms. The side-effects upset her, and at the same time she did not want the sense of elation to disappear. However, she settled sufficiently for her to be discharged at her own request after 17 days.

At the time of the follow-up examination she had been re-admitted once for mania brought about by problems resulting from the serious illness of a child. Apart from that, she had managed well despite personal tragedies. She was functioning excellently during the systematized interview and had a good understanding of psychological problems. She said that she was rarely in an entirely neutral mood. Her moods varied between being slightly elated and slightly subdued, both lasting for several months at a time. She herself described her condition as slightly elated at the interview, and she also seemed to be in a good mood, full of life, but with plenty of self-control and showing no signs of illness. Not even when her condition "went over the top" did she want any medical treatment. She had tried the usual medicines, but found the side-effects too great. However, neither did she hide the fact that life was much easier for her when she was in a slightly elated state. Her need for sleep was reduced, she had a surplus of energy and was managing what in reality was a particularly demanding everyday life better. But it could all go wrong, in that she could become too energetic, her thoughts could run away with her, and she could have difficulty in concentrating on a subject. Then she could experience an exaggerated self-confidence and a heightened sexual urge. But each year she also had depressive periods when she isolated herself, felt herself to be worthless, reflecting and reproaching herself with all she had done while in an elated state. She would lose all desire for sex, need a great deal of sleep, and find her energy at a very low ebb. She feared the depressive periods and would like to have them treated with anti-depressants. Although the variations in mood have not been eliminated, she has had a great deal of benefit from regular professional talks about how to tackle the serious problems in her everyday life.

Organically determined mental disorders

Two men and four women were suffering from senile dementia. With all the uncertainly implicit in small numbers, this suggests that each year 0.7 men per thousand and 0.9 woman per thousand, all over 65 years of age, are admitted for the first time for senile dementia. In Denmark the incidence measured in this way in 1987 was slightly higher for men, 1.1 per thousand, but of the same order for women, 0.9 per thousand. Three men and two women were admitted with vascularly determined dementia, which corresponds to an annual rate for first admissions of one per thousand for men and 0.5 per thousand for women over 65. In Denmark the corresponding figure was 0.2 per thousand for both sexes. The population over 65 constitutes 4% of Greenlandic men and 5% of Greenlandic women. In Denmark it constitutes 13% of all men and 18% of all women. We must note that if the age distribution in the two populations had been the same, the occurrence of senile and vascularly determined dementia would scarcely be less in Greenland than in Denmark; it may even be that slightly more people are admitted with vascularly determined dementia in Greenland. But as a smaller proportion of the population is over 65, the problem does not yet affect the psychiatric wards to the same extent as in Denmark.

16 men and 10 women had a psychological disorder resulting from physical illness. These were not particularly old people, the average age being 37 years, and ranging from 17 to 73; in the rest of the cohort it is 31 years, ranging from 16 to 83. It is a mixed group including such ailments as serious consequences of near-drowning, fractures of the skull, operations for brain tumours and for intracranial aneurism. They constitute 12% of the men and 7% of the women in the cohort. In Denmark, this group of patients constitutes 7% and 6% respectively on first admission. The men are those suffering from the greatest incidence of serious traumas, which might explain the greater proportion of men in the Greenlandic patient group than in a corresponding Danish hospital population.

With one sole exception, all the senile and vascularly determined dementia patients have died, while most of the other patients with organically determined disorders who were alive at the time of the follow-up study are seriously incapacitated, several needing a

great deal of care. The organically determined psychological illnesses constitute altogether 15% of male admissions and 11% of female admissions, but 25% of days spent in bed by men and 9% of days spent in bed by women.

Reactive psychoses

Reactive psychoses are acute mental illnesses, triggered by some distressing experience or life situation, possibly in connection with physical impairment. Depending on the symptoms, they are broken down into emotional, confusional and paranoid syndromes.

It can be difficult to decide whether an incipient psychosis is of a reactive, benevolent kind, or whether there is a question of a more serious condition, for instance schizophrenia or a manic-depressive illness. This uncertainty is also reflected in the present study, not least in the case of a number of schizophrenics. Thus one woman was admitted 8 times diagnosed as suffering from a reactive psychosis before a diagnosis of paranoid schizophrenia was established. At the follow-up study she presented a very typical picture of chronic paranoid schizophrenia, and this was confirmed by the above-mentioned Present State Examination.

On first admission, 32 patients, 14 men and 18 woman, were diagnosed as suffering from a reactive psychosis, but a further 13 have been diagnosed as such on a subsequent admission. In all, 45 patients have been diagnosed during one or more periods in hospital as suffering from a reactive psychosis. Of these 45 (26 woman and 19 men), five women and seven men were also diagnosed as suffering from schizophrenia and four women and one man from a manic-depressive illness.

There remain 28 patients, 11 men and 17 women, who, also with hindsight, are now seen to have been admitted on one or more occasions for a reactive psychosis. They form a mixed group ranging in age from 18 to 55 on first admission, and in personality from an absolutely well-functioning woman, who was struck by an ethical/moral conflict that laid her low without any of those closest to her noticing the first signs, to a very immature, emotionally labile person who time after time was overcome by anxiety and anger. The pressures giving rise to a psychosis do not vary much from those found in Denmark. One man became psychotic in the police cells after having been arrested, accused of arson. The charge was later dropped. A married woman with a two-year-old child became pregnant again and had complications meaning that she had to remain in bed for most of her pregnancy. Her husband had a very long working day, and the couple had drifted far apart. During her period in bed, isolated and starved of stimulation and with worries about the future, she developed a depressive psychosis which disappeared quickly after admission to hospital with consequent discussions and a general tidying up of her circumstances.

Alcohol can in several ways increase the risk of developing a psychosis. The actual drinking can create or exaggerate the conflicts and problems that are the driving force in a psychosis. But alcoholism also produces a physiological effect that increases the risk of a psychosis possibly entailing both psychological and physical factors. During the follow-up study, three (27%) of the men and two (13%) of the women had developed alcoholism as the most important feature of the pathological picture. Three men and one woman were given a secondary diagnosis of alcoholism, so altogether 55% of the men and 19% of the women were diagnosed as suffering from alcoholism. The roles of alcohol and of unresolved conflicts and losses in developing a reactive psychosis are sometimes indistinguishable. It may be that some of the patients receiving a primary diagnosis of alcoholism at the follow-up study already had alcohol-related psychoses even on first admission.

Three case histories: A married woman aged 23, born and bred in an outlying settlement. She was the youngest of six siblings and was brought up as a boy, which was said to be not unusual in this place. She had always lived with her parents, and continued to do so also after marrying. She had always been very quiet by nature, but became more noticeably so after the death of her mother when the young woman herself was only 21. Married to a solid husband, employed in the local shop. Two months before her first admission to a psychiatric ward she gave birth to their first child in the local hospital. She was a little prone to tears around the time of the birth, and after her return home she complained of severe headaches and dizziness. She was re-admitted to the local hospital, where increased blood-pressure was noted. Psychologically, she seemed to be odd, inhibited, convinced she was going to die.

The patient was admitted to the psychiatric ward for observation for post-natal depression. On admission, she was somewhat withdrawn, speaking only in monosyllables, and was difficult to understand. Here she expressed no thought of dying and on the surface she did not appear to be depressive, though showing some signs of anxiety, and she was preoccupied with the death of her mother in 1981. Although contact via conversation remained limited, it was possible to have discussions with her about the birth, the confinement and her relationship with her husband. The physical examination revealed nothing abnormal and provided no explanation for the increased blood pressure. Even though she showed no sign of depression when she was admitted, during her stay in hospital she became happier and more spontaneous. She could now look forward to going home again. After a period of observation, the patient was treated with moderate

doses of anti-depressant, and this continued for a time after her discharge.

Some years later, this patient had two more children, this time without psychological complications. At the follow-up study (according to information provided by the local health service) there were no signs of mental illness.

A woman of 31 was admitted for observation for recurrent reactive psychoses. Her parents died while she was small, and the patient grew up with her grandparents, who died when she was 14 years old. After this she moved in with her eventual husband, who according to her own account started the relationship by raping her. Especially during the early years, this partner was violent and prone to drink. She has on several occasions been admitted to the local hospital on account of his ill-treatment; she has tried to leave him, but each time has been fetched back home. The husband was very jealous, accusing her of unfaithfulness, removed her coil and refusing to countenance an abortion when she became pregnant for the fifth time. She herself also drank a good deal during the early years, but she had stopped a couple of years before her first admission to hospital. By then the couple had five children, of whom four are alive. Their finances were and are in a sorry state, the husband fishes and hunts, supplementing his income with domestic crafts, but the possibilities of earning money are very limited, and his drinking has not improved the situation.

From the age of 21 there have been periods of anxiety during which the patient has been afraid of being together with other people. During the last year or so before her admission, there were several instances of brief withdrawal, when she would sit and stare into space. One instance of this was noticed in the local hospital, others by the nurse in the settlement from which she came. She has also been seen standing with a vacant look in her eyes and holding a knife over her newborn child. While in hospital, the patient said that she has often thought of shooting her husband and the eldest son, in the latter case because he had once taken the gun from her when she had thought of shooting herself. She seemed rather nervous and anxious, but was not obviously psychotic. She was discharged and sent home, but again admitted to the local hospital six months later after attempting suicide by overdose. This time she was determined to seek a divorce, but could not find anywhere for herself and the children to live. Meanwhile, her husband now changed his behaviour and stopped drinking, becoming calm and gentle and treating her with care and consideration so that when going for a psychological check-up a couple of years later she indicated she was happy in the marriage. 10 months previously, she had had yet another child. She still had times when she suffered from nerves, slept badly and was tired and anxious due to the family's dire poverty. The children are described as undergoing a normal development, nice and showing no signs of problems, the oldest aged 9, 13 and 14 helpful in the home.

A 32-year-old man was hospitalized for mental observation after killing his two small daughters and then shooting himself in the face, an action which he survived, though with severe lesions to the lower part of his face. He did this in reaction to the fact that his wife, the children's mother, had left the family home. It was viewed as a depressive reaction, and in particular there were no signs of manic-depressive mental disorders. He appeared to be somewhat introspective, but was functioning well. He was committed to a psychiatric hospital, and during his time there he underwent numerous operations to reconstruct his face. After these were completed, the arrangement changed to out-patient treatment and the patient had found work and a home of his own, he committed suicide by shooting himself in the chest. In the intervening period there had been no signs of mental disturbance or changes of mood other than were to be expected in consideration of his unfortunate situation.

Neuroses

Neuroses are mental disorders in which the concept of reality is preserved. In the sense in which the diagnosis is used in this group of patients, it encompasses a not particularly well defined group of nervous conditions. Most characteristic of them is inhibition in self-expression caused by some anxiety which might at first sight be inexplicable or linked to specific situations. The anxiety can be associated with various neurotic symptoms, hysterical or obsessional etc, while depressive symptoms are also common. There are gradual transitions to the normal problems of life. Patients with neurotic conditions are usually treated as out-patients, but in the case of acute collapse, admission might be indicated. Ten men and 38 women were diagnosed as suffering from neurosis on first admission. When the diagnosis was revised, one of the men and two of the women were suffering from a manic-depressive illness, while one man and four women were found to exhibit personality defects. In the cases of three women, the admission had been caused by a transitory situative disturbance (affective reaction). The diagnosis of neurosis was confirmed in the cases of six men and 26 women, while a further two men and seven women were diagnosed as suffering from a neurosis in the follow-up study. They had almost all been seen as transitory disturbances (affective reactions) on first admission.

The average age on first admission was significantly higher than for the remaining patients, 38 years as against 24 for personality defects (see next section) and 32 for the remainder.

Five of the eight men and 12 of the 33 women had threatened or attempted suicide before admission.

The reason/reasons for the other admissions are not clear, but were probably an interplay of several factors in the patient's life situation in general. There was a preponderance of women born in a settlement.

Hospital records indicated that patients diagnosed as suffering from a neurosis had significantly less often grown up under problematic conditions than the other patients. Thus, none of the six patients under 25 years of age had grown up under conditions suggesting lack of care, violence or sexual assault.

One man has died by suicide, and two women have died of illness. None of the 38 alive at the time of the follow-up study had been admitted over the last year, but ¾ of the women and just under ½ the men showed periodic symptoms. 40% were undergoing out-patient treatment. Nevertheless, ⅔ of them were in full-time employment. Six women were living alone, and one in a rest home. All seven men and 24 of the women lived together with partners and/or children.

Personality disorders

The latest edition of the WHO international classification of diseases (IDC-10) defines personality disorders as "extreme or significant deviations from the way in which an average person in a given culture feels, thinks, understands and in particular relates to others". Already on the basis of this definition it becomes difficult to make a diagnosis in a society in transition. It is a matter of a not clearly defined group with a diminished ability to accept disappointments and a tendency to react impulsively. Fini Schulsinger describes them in this way: They cannot carry out long-term plans because they are disturbed by excitement states with which they cannot cope without undertaking something. As a result, they become unstable, short-sighted and impulsive. They cannot learn from unfortunate situations that are harmful to them and others, and they repeat inappropriate actions as though they had never already experienced the consequences of them (Schulsinger 1980).

31 men and 12 women were diagnosed as having personality disorders on first admission, 39 men and 25 women at follow-up. 20 men and seven women received the same diagnosis on the follow-up as at first admission, while four men and one woman had developed schizophrenia, one woman a manic-depressive illness, two men and one woman alcoholism. In the case of two men the personality disorder was secondary to, respectively, long-standing treatment with suprarenal cortex hormones and to epilepsia. In the cases of three men there was nothing specifically abnormal.

Apart from the 20 men who received the same diagnosis on first admission and on follow-up, a further 19 men were diagnosed as suffering from personality disorder at follow-up. For two of them the diagnosis on first admission was reactive psychosis, one psychosis provoked by hash, two psychosis with uncertain aetiology, four alcoholism, eight affective reaction and two no certain diagnosis at all.

Altogether 25 women were diagnosed as suffering from personality disorders at the follow-up study; of these seven had been so diagnosed on first admission, while four on first admission were diagnosed as suffering from a reactive psychosis, four from neurosis, one from hash provoked psychosis, and nine from an affective reaction.

More patients diagnosed as suffering from personality disorders have had a problematic upbringing than any other diagnosis group. There was of course a relationship between age on first admission and the conditions in which the patients were brought up, and a greater number of young people were diagnosed as suffering from personality disorders. But in Fig. 16 it can be seen that the difference between the childhood circumstances of patients with personality disorders and the rest is found in all age groups. Perhaps this finding should not surprise anyone: A childhood environment marked by disharmony, alcoholism and neglect scarcely imbues trust in parental figures or any sense of coherence and consistency in life, all of which are important foundations for the social development of personality.

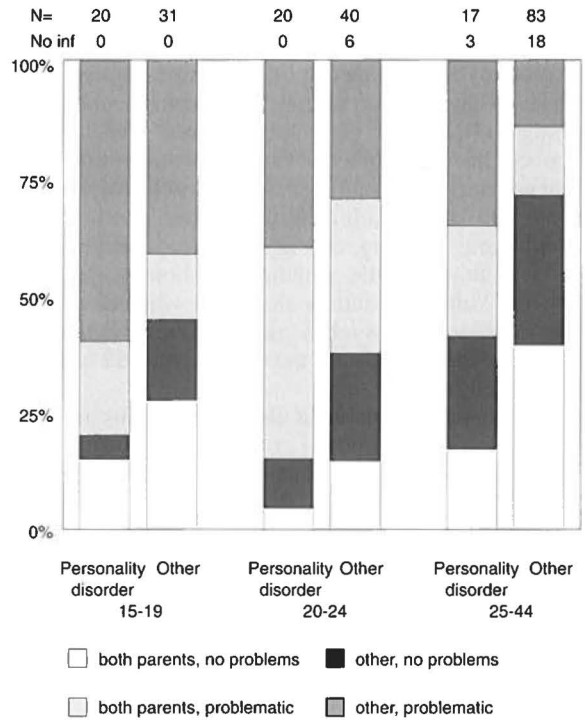


Fig 16. Conditions of life in childhood and age at first admission to a psychiatric department or hospital. Comparisons between personality disorder and all other diagnoses.

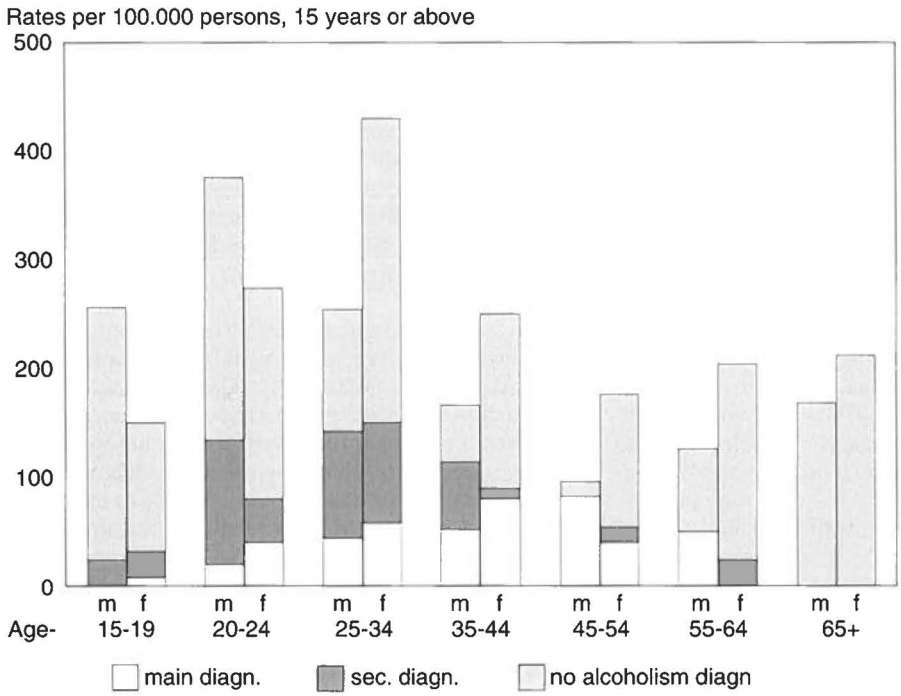


Fig. 17. Alcoholism at follow-up by gender and age at first admission.

Alcoholism

With the high consumption of alcohol in the community it is to be expected that many psychiatric patients will have alcohol problems. Alcoholism is the result of a process during which alcohol, personality, family and society influence each other. In some cases, alcohol consumption produces problems in the very young without there being a question of well-defined alcoholism, which in an advanced form brings with it dependence, increased tolerance and possibly physical damage. A psychological illness can also intensify problematic drinking, and in an acute situation it can be difficult to decide whether psychological symptoms are "only" caused by alcohol or whether there is also some other psychological problem behind it. Here, the course taken by the alcoholism will be decisive.

All degrees and forms of alcohol problems are seen in a psychiatric ward. Thus altogether ten men and seven women required withdrawal treatment during their first stay in hospital. Three of the men showed signs of delirium tremens, and if all admissions in the period under review are included, altogether five men and two women were admitted at least once for delirium tremens, while one man and two women were admitted for alcoholic hallucinations.

Altogether 21 men and 22 women were given a primary diagnosis of alcoholism at the follow-up. In addition, 34 men and 21 women received a secondary diagnosis of alcoholism. This means that 15% of the men in the cohort received alcoholism as a primary diagnosis and 24% as a secondary diagnosis, in all 39%. For women the numbers are 15% and 14% respectively. Table 28 shows the number and Fig. 17 the rates for first admission in the various age groups for those diagnosed as suffering from alcoholism at the follow-up study. It is especially in the case of the

Table 28. Age at first admission for patients with alcoholism as main or secondary diagnosis at follow-up.
m: main diagnosis s: secondary diagnosis

		Men			Women	
Age	Total cohort	m	s	Total cohort	m	s
15-19	33	0	3	18	1	3
20-24	39	2	12	27	4	4
25-34	34	6	13	52	7	11
35-44	16	5	6	22	7	1
45-54	7	6	0	13	3	1
55-64	5	2	0	9	0	1
65+	5	0	0	9	0	0
Total	139	21	34	150	22	21

Table 29. Main diagnosis at follow-up for patients with a secondary diagnosis of alcoholism.

	Men	Women
Manic-depressive psychosis	0	1
Psychosis and non-psychotic mental disorder associated with other diseases	4	0
Reactive psychosis	3	0
Neurosis	2	8
Personality disorder	22	9
Oligophrenia	0	1
Drug addiction	1	0
Other diagnoses	2	2
Total	34	21

young that alcoholism is a diagnosis secondary to another psychological illness. "Pure" alcoholism has only led to admission at a later age and in the case of men accounts for a percentage increasing with age until they reach 55. Thus six out of altogether seven men in the age group 45-54 were diagnosed as suffering from alcoholism. In the case of women, apart from the very youngest, the proportion is fairly consistently about a third of admissions until the age of 55. If admission practice remains unaltered for a longish period it is possible to calculate the risk of being admitted for alcoholism before reaching the age of 65 as 2.4% for men and 2.0% for women. If the secondary diagnoses are taken into account, this becomes 4.7% for men and 3.7% for women. The primary diagnoses for the 55 with a secondary diagnosis of alcoholism can be seen from Table 29. In the case of men, the largest group consists of personality disorders, while for women it is neuroses.

What significance for the development of alcoholism does growing up in a home with alcohol problems have? Women with a primary or secondary diagnosis of alcoholism had significantly more often than the rest grown up confronted with alcohol problems, neglect and physical violence in the home. In the case of the men, it was not possible to demonstrate any clear correlation, but in a number of cases the circumstances are not known (this applies to equal numbers of men and women).

The information available on alcohol problems on first admission (whether ending in an alcohol diagnosis at first admission or not) has been noted and compared with the final diagnoses. There was information that patients were suffering from alcohol problems in 128 cases, 74 men and 53 women. Of these, 44 men and 31 women were diagnosed as suffering from alcoholism at the follow-up. Apart from the case of one woman, alcohol problems were already noted on first admission in all those whose primary diagnosis was alcoholism at the follow-up. But conversely 31 men and 22 women, that is to say a good 40% of total numbers, for whom alcohol problems were noted on first admission, showed no signs of alcoholism at follow-up.

On the use of psychiatric beds

Seven patients were discharged within twenty-four hours of being admitted and have not since been re-admitted. They were all admitted for affective reaction, but soon calmed down and showed no signs of mental illness. At the follow-up study, which was based on information contained in the health service out-patient records and possibly knowledge of the patient on the part of the social services, one of them was prone to episodic alcohol abuse and two showed signs of mild neurotic behaviour or personality disorders, while the last four had not later shown signs of psychological disorders.

The average duration of the first admission according to whether patients were only admitted on the one occasion or on several occasions, is seen from Table 30. A good third were re-admitted, irrespective of the duration of the first admission. The highest number of admissions for one patient was 26 over the space of seven years. The number of bed days for this patient was 1128, which means that the admissions averaged 43 days in duration. This was a case of a young woman with a paranoid psychosis complicated by alcohol and hash abuse. At the time of the follow-up study she was receiving out-patient treatment with large doses of medicines to combat psychosis, living in her own flat and visiting the department almost daily. She was scarcely able to enter into more binding commitments for stays in a day clinic, but came and went as it suited her. She was in receipt of Greenlandic invalidity benefit. She suffered from severe personality disorders and paranoid notions were easily provoked in

Table 30. Duration of first admission and total number of admissions in the study period

Number of admissions	Duration of first admission									
	1-6 days		7-30 days		31-90 days		91+ days		Total	
	n		n		n		n		n	
1	35	66%	80	61%	51	58%	10	59%	176	61%
2-5	15	28%	39	30%	32	36%	5	29%	91	31%
6+	3	6%	12	9%	5	6%	2	12%	22	8%
Total	53	18%	13	45%	88	30%	17	6%	289	100%

Table 31. Total duration of all admissions in study period, by gender.

	Men	Women	Total
1-6 days	21	18	39
7-30 days	39	55	94
31-90 days	39	47	86
91-365 days	25	18	43
366-1825 days	14	11	25
1826+ days	1	1	2
Total (N)	139	150	289

Table 32. Average number of days hospitalized in study period, divided by age at first admission and by gender.

	Total cohort		
	DIH/A1	Hospitals in Denmark	Total
Men			
15-19	54	199	253
20-24	75	61	136
25-34	47	107	154
35-44	36	0	36
45-54	156	0	156
55-64	20	5	25
65+	296	0	296
Total			
Men	69	91 *)	160
Women	75	24 *)	99
Women			
15-19	180	117	297
20-24	74	35	109
25-34	66	10	76
35-44	42	6	48
45-54	30	0	30
55-64	21	0	21
65+	18	0	18

*) One way analysis of varians p=0.01.

her. However, in consideration of very turbulent periods earlier in her life, during which she showed clear signs of being dangerous, this was a satisfactory improvement.

The total duration of admissions distributed according to sex is seen from Table 31. 133 patients (47%) were hospitalized for less than a month, whereas 9% were in hospital for more than a year during the seven years after the first day of admission.

The average duration of a stay in hospital is seen from Table 32. Men had spent 1.6 times as long in hospital as women, 160 and 99 days respectively. Longer periods of hospitalization were spent by men in psychiatric hospitals in Denmark The most striking feature in the review of the duration of admissions is the great differences between the age groups: 15-19-year-olds of both sexes were hospitalized for much longer than the older patients. All in all, patients aged between 15 and 19 account for 37% of the total bed days (and 18% of all admissions). The boys had spent 78% and the girls 40% of their time in hospital in Denmark. On the other hand only a small number of the older patients (those over 35 on first admission) had been in a Danish hospital. These figures indicate that generally speaking, the very young people admitted are very seriously in need of treatments requiring extensive resources, and that during the period under review Greenlandic hospitals could not offer them a satisfactory range of treatments.

Deaths during the study period

21% of the men and 13% of the women had died by the time of the follow-up study (Table 33). The higher mortality rate among the men was in particular due to suicide, which will be dealt with in the following section. One woman was murdered, while four men and two women died in accidents. In three cases it has not been possible to ascertain whether death was due to an accident or suicide (overdoses of medicine and/or alcohol). 12 men and 11 women died from illness. Those dying from illness had a higher average age on first admission than either those who were alive at the follow-up or those who died from suicide.

Suicide

Throughout the world, psychiatric patients are particularly susceptible to suicide. According to a survey by Nordentoft and Rubin (1992), Hessö found, in a Scandinavian study, that the suicide rate was between seven and 22 times greater among psychiatric patients than in the background population. In Denmark, Weeke (1979) in a review of the years 1969-76 found that mortality through suicide among manic-depressive psychiatric patients of both sexes hospitalized for the first time was 2.9% over 7¾ years, or 0.37% per year. This means that the suicide rate among these psychiatric patients in Denmark at that time was about ten times as high as in the population as a whole.

In this study cohort, 12 (8%) of the men and four (2.7%) of the women committed suicide during the study period. A comparison with both sexes together shows that with the same observation period as in Weeke's study, that is to say 7¾ years from the day of first admission, 4.8% of the Greenlandic cohort had committed suicide, corresponding to a rate of

Table 33. Causes of death.

	Men	Women
Suicide	12	4
Murder	0	1
Accident	4	2
Illness	12	11
Cause of death not stated	1	2
Alive at follow-up	110	130
Total (N)	139	150

Table 34. Suicide in the study cohort and in the remaining Greenlandic population 1981-90.

Age at death	Cohort n	Remaining population n	RR	(95% c.l.)
Men				
15-19	2	70	1.99	(0.51-7.76)
20-24	3	145	1.33	(0.44-3.98)
25+	7	173	6.56	(3.20-13.42)
	Mantel-Haenszel weighted RR		2.77	(1.60-4.81)
Men 15 years or more				
total	12	388	3.48	(2.01-6.03)
Women 15 years or more				
total	4	91	4.44	(1.68-11.94)

0.6% a year, that is to say figures that are about 50% higher in Greenland than for a group of patients in Denmark who appear to be particularly prone to suicide.

However, in the background population, the difference in suicide rates is far greater. In Denmark it is c. 35 in the case of men and 18 in the case of women, and in Greenland it is 250 for men and 50 for women respectively, all figures uncorrected for age, but applying to 100,000 head of population over 15 years. So for men, the suicide rate in Greenland is seven times that of Denmark, and for women three times as high. But if we only consider the 15-24-year-olds, the suicide rate among Greenlandic men is about four per thousand, and among Danish men 0.13 per thousand, that is to say 30 times higher in Greenland. Lower down the scale, we find the same difference among women: 0.88 per thousand Greenlandic women and 0.03 per thousand Danish woman aged between 15 and 24.

So while in Denmark there is a very high mortality rate through suicide among psychiatric patients in relation to the population as a whole, this difference is smaller in Greenland. Table 34 shows the relative risk of suicide for the cohort's psychiatric patients as compared with the rest of the Greenlandic population in the various age groups. The male psychiatric patients run three times as great a risk of committing suicide as the male population as a whole, and the women four times as great a risk. But there is a great difference between the different age groups. Only among those who are 25 and above is the risk significantly greater in the patient group. For those aged between 20 and 24, who have by far the highest suicide rate, the risk is only increased insignificantly, with 1.29 in the patient group. Conversely, this means that young people in Greenland as a whole are almost as much at risk from suicide as the young people who are admitted to a psychiatric ward.

How are those committing suicide different from that part of the cohort who were alive at the follow-up? It has been demonstrated in several studies (Nordentoft & Rubin 1992), that an earlier intention of committing suicide or attempts at suicide increased the risk of suicide both among the schizophrenic patients (Dingman & McGlashan 1988) and among a group of psychiatric patients who were not divided up according to diagnosis (Pokorny 1964).

In the present study, threatened or attempted suicide is only registered if relevant at the time of admission. 41 (29%) of all men and 51 (34%) of all women had expressed thoughts of suicide or carried out suicidal actions immediately before first admission. Of these, five men, but no women, have subsequently committed suicide. That is to say that, taken in isolation, threats of suicide or suicidal acts at the time of first admission have only increased the risk insignificantly for men and not at all for women of committing suicide in the study period. In the case of the women it is tempting to say: on the contrary: If suicidal thoughts and actions are cries for help, then it might be that hospitalization has prevented a negative development.

A considerable time elapsed between the first day of admission and the suicide, on average 1041 (167-2861) days in the case of the men and 1845 (1222-3120) days for the women. None committed suicide in immediate connection with the first admission.

The highest suicide rate was seen among schizophrenic men: five out of 24 schizophrenic men committed suicide over ten years, corresponding to 2% a year. Figures from Houston, USA (Pokorny 1964), showed an annual suicide rate of 456 per 100,000 patients suffering from schizophrenia on first admission, that is to say 4-5 times lower than in this study. Caldwell & Gottesmann (1990) have examined a large number of statistics on suicide rates, especially among schizophrenics, and conclude that the risk of suicide is as high among schizophrenics as among patients with affective disorders. With observation periods of up to 17 years, 10-13% commit suicide, that is to say despite a longer observation period "only" just over half the number of schizophrenic men from this study. Only one of the five schizophrenic patients was clearly psychotic at the time of the suicide. The others all appeared to be free from symptoms. Two men committed suicide after being sentenced to committal to respectively a maximum security psychiatric unit

and a psychiatric hospital in Denmark, in one case after almost two and in the other almost one year's unbroken hospitalization. On the information available, they showed no obvious psychotic symptoms, but were reacting to the hopelessness of their situation as patients committed by court order and with the prospect of what was expected to be a prolonged period of hospitalization before them. Nordentoft & Rubin's conclusion (1992) that "- suicide among psychiatric patients and in particular among schizophrenic patients is associated with periods of depression and melancholy, realistic thoughts on their own situation rather than with active psychotic symptoms" applies also to these patients.

Only one patient, a woman, could with certainty be diagnosed as manic-depressive. She committed suicide at the age of 29. She had grown up with a single mother, a grandmother and an aunt under what seemed to be secure conditions. The mother had left to take a course of training while the girl was between two and five years old. She first met her biological father when she was nine, and established no close contact with him. At the age of 12, school in Denmark. Good practical training, well liked, well functioning until the age of 26, when she showed signs of manic-depressive psychosis. She was hospitalized for severe depression, improved and was discharged for continued out-patient treatment in her home town. Condition never completely satisfactory. She was re-admitted several times, committing suicide three months after her last discharge, in circumstances that have not been reported.

This patient could presumably have benefited from a longer psychiatric psycho-therapeutic treatment contact, had it been possible to arrange for one. In other cases, however, we have to accept that treatment might well be able to reduce the psychotic symptoms, but not entirely to cure the disorder:

A single man aged 23 was admitted to DIH/A1 for schizophrenic psychosis characterized by disturbed thinking, voices giving commands, bizarre delusions and formal speech deficiencies. His dead grandmother speaks to him and comments when he does anything wrong. He has grown up with a single mother and a succession of different stepfathers. The mother nervous and suffering from attacks of hysterical paralysis. The home characterized by alcohol, disharmony and violence, and at the ages of 11, 12 and 13 the patient was sexually abused by various men. His younger sister sexually abused by a stepfather. The grandmother died when he was six; his stepfather committed suicide when he was nine, an uncle was murdered when he was 18 and his grandfather committed suicide the same year. He apparently improved while in hospital, but in spite of what in our eyes were very inauspicious conditions, he insisted on being discharged to live at home, obviously being close to his mother. He suffered a relapse and was re-admitted on several occasions. Finally, he accepted admission to a day-care institution, but did not settle. He several times expressed the feeling that it would be best if he committed suicide. He comes from a different planet and feels unwanted in this one. Takes part in a holiday camp, but leaves it and on his way home disappears without trace from the boat in calm weather, so that suicide was the most likely explanation.

There are cases of suicide that quite clearly point to the need for extra attentiveness when a patient is discharged after having tried to commit suicide, even if it might seem that everything is in order: A 21-year-old man from a small town entered hospital after a suicide attempt in a student hostel in Nuuk where he was living while undergoing training. He was born outside wedlock and had not known his father. Lived the first six years with his mother and two elder brothers together with the mother's Danish partner. Then, the mother and the two brothers went to live in Denmark along with the mother's partner, but the patient preferred to stay in the town and live with an aunt and uncle. When he was 13 years old, they moved to another town; but our patient preferred to stay in the town and live with his maternal grandparents. He has always been dutiful and functioned well and managed his training without problems. Six months before being admitted, he was undergoing work experience in his native town and, although only having had intercourse with the girl in question on a single occasion, was here faced with a paternity case which had still not been decided when he was admitted to hospital. This case was the source of a great deal of worry to him, partly because of the financial implications and partly because he dare not tell his grandparents about the problem, as he was sure they would condemn him for it. During a week's stay in hospital he showed no psychotic symptoms, apparently talked things through and arranged with the ward for continued out-patient treatment. Shortly afterwards, however, he went back to his home town and a few months later, about a year after the start of the paternity case, he committed suicide by shooting himself in the face.

Already when the patient is admitted for the first time the situation is often very complicated:

A single man was committed for legal mental observation at the age of 18 on account of arson followed by several attempted suicides, overdoses of medicine and two attempts to strangle himself. He was not mentally ill, but suffered from an extremely immature personality. He was born in wedlock, but his father had died when the boy was ten years old, and the mother died seven years later. A sister committed suicide. The boy grew up under conditions of severe neglect and was often beaten by his older brothers. Most of those around him drank, and he himself developed alcohol problems at an early age. After mental observation he was put on probation with orders concerning place of residence, work and

training and stipulating that he should be treated for alcoholism. Those supervising him were unable to stabilize his circumstances on account of the serious lack of accommodation and the unemployment situation in his home town. Four months after being put on probation, he committed suicide by shooting himself in the chin in front of friends with whom he had just been playing cards.

What is most striking on examining these cases is that nine of the 12 men and three of the four women had grown up under such obviously inauspicious circumstances marked by deaths and other forms of disintegrated homes, alcoholism, neglect and violence, that all odds seem to be against a stable and harmonious psychological development.

Alive at the end of the study

110 of the men (79%) and 130 of the women (87%) were alive at the time of the follow-up. Their clinical condition at the time of the follow-up study is seen in Table 35. 1/3 of the men and 1/4 of the women were entirely symptom-free. However, just over half of them suffered relapses in the study period. 10% of the women and 15% of the men were severely impaired with signs of chronic illness.

At the time of the follow-up, eight patients were in psychiatric wards, six of them as long-stay patients. A further 17 were undergoing treatment in psychiatric outpatient departments, and 54 were having psychiatric treatment in their local district hospitals. Thus, it is the district hospitals that are faced with the responsibility for treating most of the patients, including the more chronic psychiatric patients.

Ten of the men and 13 of the women were in Denmark. Of these, two men were in a psychiatric hospital as long-stay patients, while three were in the secure prison in Herstedvester after sentencing. A further one man had remained in Denmark after several years in Herstedvester. After a difficult period serving Danish sentences for fresh crimes, he was now living in a shared house, and it looked as though he was finding a foothold in life. Four men had moved to Denmark independently of their stays in a psychiatric hospital. One of them, who was living alone and had several times been convicted in Denmark of offences against property, had only been once admitted to hospital in Greenland for two days, and twice in Denmark for altogether four days, all three admissions being diagnosed as misuse of medicine. He had no contact with Greenland, but was regularly in touch with the Greenlandic advisory office in Copenhagen. No information was available about the last three men living in Denmark.

Table 35. Clinical outcome of those alive at follow-up.

	Men	Women
No mental symptoms, no relapses	15	12
No mental symptoms, one or more relapses	20	18
Slight impairment, mild neuroses or personality disturbance	31	43
Moderate impairment, severe neuroses or personality disturbance, residual symptoms	23	39
Severe impairment, chronic psychotic, impaired intelligence and emotional function	16	13
No information	5	5
Total	110	130

One woman had since puberty been in a home for the mentally deficient in Denmark, and another was in family care on a farm after several years spent in hospital in Denmark. She was undergoing outpatient treatment in the local psychiatric ward and was doing well. She had moreover spent most of her childhood in Denmark, partly in children's homes, and partly in family care, and several members of her family were now living in Denmark. Finally, a severely physically handicapped woman had chosen to stay in Denmark on account of better possibilities of support for herself and her child. The other ten women have moved to Denmark in connection with training or together with a Danish partner. The information available, however, suggests that most of them have psychiatric problems, so that one woman was in hospital for a severe manic-depressive psychiatric disorder, one has had a severe reactive depression and several are suffering from neuroses. In the case of two of them, alcoholism determines their psychological condition, and in the case of three more, alcohol problems further complicate psychological disorders.

Three men and one woman were long-stay patients in DIH/A1. Two of the men had been committed for treatment in a psychiatric hospital, and all had been in hospital in Denmark on various occasions and for long periods. In Greenland there is one treatment centre for social education, Aaqa in Nuuk, which accepts chronic psychiatric patients for prolonged stays. All the long-stay patients had spent periods here, and at the time of the follow-up study one man and one woman were living there. One woman was temporarily in hospital, but otherwise lived in her home town together with a mentally handicapped young man in a small multi-family house with twenty-four-hour staff, run by the municipality. Two were long-stay geriatric patients in the care of the DIH medical ward, both suffering from severe dementia; one of them had been operated on for a cerebral tumour, the other was suffering from the after-effects of a drowning accident. Four elderly members of the cohort could be cared for in the local home for the elderly. One man was serving a sentence and had been committed to an institution in Greenland. An overview of the living condi-

Table 36. Living conditions for people alive at follow-up.

	Men	Women
Alone	33	29
With relatives	59	89
In institution, nursery, social training home, or correctional institution	7	9
Long-stay patient in a psychiatric hospital	5	1
Total	104	128
No information	6	2

tions is seen in table 36. Altogether the review of the places in which the patients were living suggests that for a small group with chronic mental disorders it has been very difficult to find suitable accommodation after their periods spent in hospital.

Involuntary commitments

In a report from 1984-1988, Marianne Engberg compared the incidence of involuntary commitments to hospital in Greenland, the Faroe Islands and Denmark. Allowing for age and for double registrations resulting from the fact that patients who were moved to a psychiatric hospital in Denmark within twenty-four hours of their admission to DIH/A1 were registered in both as involuntary commitments, the rate for involuntary commitment for men in Greenland was 1.75 times that in Denmark. For women the figure was 1.2 times higher. For young men aged between 15 and 24, the risk of being involuntarily committed was five times higher in Greenland, and for those aged between 25 and 34 twice as high as in Denmark. An inverse relationship could be shown in all three areas between the number of psychiatric beds and the use of involuntary commitment (Engberg 1991).

In the present study, which in contrast to Engberg's only encompasses the cohort of first admissions but on the other hand also includes their re-admissions during the study period, totalling altogether 683 admissions over seven years, the incidence of involuntary commitments is as follows:

The first admission was involuntary in the case of seven men and two women, corresponding to 5% of first admissions for men and 1% for women, while 13% of re-admissions for men and 10% for women were involuntary. Altogether 18 of the 139 men and 10 of the 150 women were involuntarily committed on one or more occasions. Thus 8% of all admissions, 10% for men and 7% for women, were involuntary. Of these, 2%, the same for men and for women, were admissions for treatment, while the rest were hospitalised in view of their being a danger to themselves or others.

As indicated above, the psychiatric department DIH does not possess a closed ward, but nevertheless it accepts involuntary commitments, either for treatment in cases where the need for involuntary arrangements is of short duration and can be accommodated with the help of permanent supervision and possibly the use of belts to restrain the patient, or as the first stage in a transfer to a psychiatric hospital in Denmark. An examination of the individual cases shows that in 18 cases registered as involuntary commitments a double registration occurred; it would thus have been more correct to talk of nine involuntary commitments, four for women and five for men, starting in Greenland and with transfers to Denmark. The transfer usually took place after some time in DIH/A1. Altogether 16% of registered involuntary commitments must thus be considered as double registrations if comparing with conditions in Denmark and the Faroe Islands, where the entire treatment is carried out in the same hospital. On the basis of this interpretation, it means that 18 men were involuntarily committed altogether 26 times and ten women altogether 20 times – that is 7% of all admissions.

The age of men on involuntary commitment ranges from 17 to 30, and for women from 20 to 39. In cases in which the first admission was voluntary, up to seven years might have elapsed before the patient was involuntarily committed.

Diagnoses: It was especially patients suffering from schizophrenia who were involuntarily committed. 14 of the 24 men and five of the 13 women who on at least one admission were diagnosed as suffering from schizophrenia were involuntarily committed on one or more occasions. Of the other five women, three were diagnosed as suffering from a manic-depressive illness and two from reactive depression on the basis of personality disorders. Of the other four men, one has a severe manic-depressive illness and three a reactive psychosis and personality disorders.

Marianne Engberg asks whether the high incidence of involuntary commitments is due to alcoholism. This is not reflected in the diagnoses in her material, and neither is it in the present study. Of the 18 men, three had alcoholism as a secondary diagnosis, and two of the ten women had periodically abused hash and alcohol, although it is not possible to demonstrate any connection between this and the involuntary commitments. Compared with the fact that among all men there are 15% with a primary diagnosis of alcoholism and 25% with alcoholism as a secondary diagnosis, and among the women 15% and 14% respectively, this does not suggest that alcohol plays a prominent role in involuntary commitments. In the section on alcohol it was demonstrated how many patients were in need of detoxification or withdrawal treatment. None of these were involuntarily committed. The study cannot disprove that alcohol might have played a part in the development of the condition forming the basis for the involuntary commitment,

but if this is the case, it is at least rarer than for those admitted voluntarily. Rather, the results can be interpreted as showing that patients admitted on account of severe alcohol problems have been more motivated for admission, or at least have more willingly accepted it than schizophrenia patients.

Use of restraint during hospitalization

The means of restraint available in the treatment of dangerous mental patients are placement in a closed ward, the use of restraining belts and compulsory medication. If such a patient has demanded to be discharged or has refused treatment considered necessary for a cure, he is to be refused discharge and according to the law he can ask for the case to be reported to the Ministry of Justice, which can either accept or refuse the use of restraint.

Table 37 shows the number of such hospitalizations, categorized according to whether they took place wholly or partly in a closed ward and whether a restraining belt was used after admission. 586 of the 687 periods spent in hospital were exclusively in an open ward. Belts were employed in the course of 70 of these, i.e. 10% of all hospitalizations. Of these, 43 instances were during a stay in an open ward, in DIH/A1, restraint usually only being employed in a closed ward when one is available. Admissions to a closed ward lasting for a week at most, have not been associated with the use of restraining belts, which might indicate that the use of belts could be reduced if DIH/A1 had a closed ward at its disposal. However, the more a stay in a closed ward has exceeded a week, the more often has it been necessary to employ a belt during the stay.

Refusal of discharge

If a patient's wish to be discharged cannot be met, he must be told of the possibilities available to him to have the decision tested by reporting it to the Ministry of Justice. A formal detention order has been issued in 13 cases. Of these, eight took place during hospitalization in DIH, four in AHV and two in other psychiatric departments in Denmark. Two men were detained during two separate periods of hospitalization, the remainder only during one. Eight of the 13 hospitalizations leading to detention had been accepted voluntarily, but only one of the altogether 11 patients subject to a detention order defined in this way was not involuntarily committed at any time during the study period. The detentions are distributed throughout the entire study period: two in 1980, two in 1982, one in 1984, two in 1985, one in 1987, one in 1988, one in 1989, two in 1990 and one in 1991. An examination of the relevant patients' case histories shows that all the men belong to the schizophrenia cohort, while one woman is manic-depressive and one has a personality disorder with both self-destructive and psychosomatic symptoms. For most of them the reason for the detention was that they were a danger to themselves and to others, and that treatment was considered of crucial importance for the patient's health.

Table 37. Physical fixation (1 or more times) during stay in open or closed ward (all admissions).

	Physical fixation during stay in hospital		
	No	Yes	Percent with fixation
Solely open ward	543	43	8%
Closed ward 1-7 days	20	0	0%
Closed ward 8-30 days	18	2	11%
Closed ward 31-365 days	36	21	55%
Closed ward 366+ days	0	4	100%
All admissions	617	70	10%

Are there too many involuntary commitments in Greenland?

At any rate compared with Denmark and the Faroe Islands, there is an over-use of involuntary commitment. Can this be due to the small number of beds at the disposal of psychiatric patients, as suggested by Engberg (1991: 355)? An earlier analysis showed that the less intensive occupation of beds on the part of Greenlanders is due to the fact that fewer old people require psychiatric beds. And that age group was simply never committed involuntarily. For those aged between 15 and 24 there was a greater need for beds for Greenlandic patients than was the average in Denmark (see Fig. 18). The figures for Greenland stem from an unpublished report on psychiatric planning drawn up for the Ministry for Greenland in 1985.

The high number of involuntary commitments in Greenland, even with the corrected figure allowing for double registrations, must be partly understood in conjunction with the geography and conditions for travelling. Patients resident outside Nuuk usually need to be transported by air, whether they are to be admitted to DIH in Nuuk or to a Danish hospital. In order to carry out such a transfer in a secure manner there must be the legal endorsement of the use of such force as might be necessary in the case of disturbed and potentially dangerous behaviour. If the patient accepts the transfer, as is most often the case, but his condition is so affected by the psychosis that it is difficult to decide whether he is capable of deciding and maintaining his decision, there can also be a certain

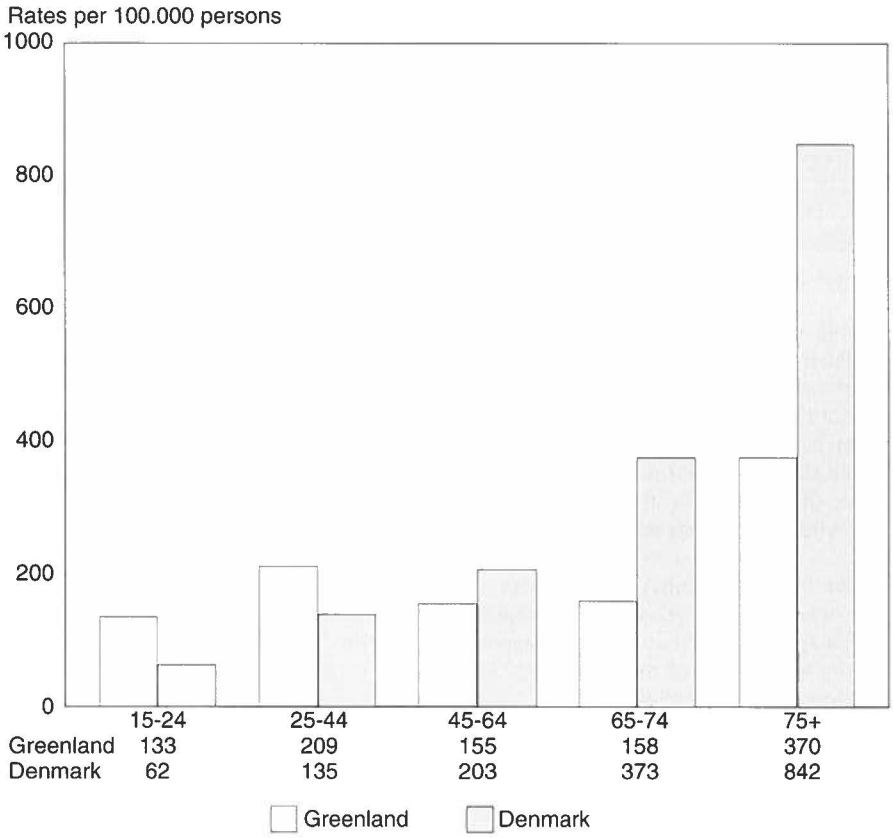


Fig. 18. Prevalence of psychiatric in-patients from Denmark and Greenland divided by age-groups.

Greenland: Average rates of in-patients on 1/3 1980, 1/3 1981 and 19/3 1984.
Denmark: Rates of in-patients in psychiatric institutions on 24/2 1982.

risk that he will regret it and, on arriving at Kastrup Airport, refuse hospitalization. It will be extremely difficult to start involuntary commitment proceedings with the help of an unknown duty doctor in Kastrup Airport, and the risk that the patient might escape without being in a condition to look after himself cannot be overlooked. If there is a reasonably well-founded suspicion that the patient might attempt to escape, a transfer will only be effected if the patient's condition suggests the need for involuntary commitment. The police should consequently be present during the transfer and be able to take action if problems arise. But this means that a patient who in Denmark, where journeys are of short duration, could be admitted voluntarily even if the conditions for involuntary commitment would be met if he resisted hospitalization, in Greenland would have to be involuntarily committed if his condition could entail danger during transfer, even if he is motivated to accept admission at the start of his journey. On the basis of the information available, it is not possible to determine how great a proportion of involuntary commitments are effected for this reason.

Mentally abnormal criminals – present-day rules and practice

According to the Greenland Criminal Code, § 84, such information concerning the personal circumstances of an accused person must be made available as might be considered significant in deciding what measures to apply to him. A mental examination is undertaken on the orders of the district court when this is thought to be of significance for the outcome of the case, and if the inconvenience or cost of the examination is not disproportionate to the significance of the case.

§ 113 of the Criminal Code provides the legal basis for committing mentally ill criminals to a psychiatric hospital, if necessary in Denmark. According to § 102, Subsection 3, in the case of particularly serious criminal acts, where there is no question of real mental illness, criminals can be committed to a medically supervised institution under the Prison Service in Denmark (the secure prison in Herstedvester). It is a condition of commitment to Herstedvester that the

culprit should be considered to represent an immediate danger to the lives, bodies or welfare of others, and that commitment to an institution in Greenland does not afford sufficient security, or that on account of psychological abnormity he is not considered suitable to place in an institution in Greenland. Imposing these very radical measures presupposes the availability of a report on the mental observation as well as a statement by the Danish Medico-Legal Council. Lynge & Køster (1985) have examined in greater detail the provisions contained in the Criminal Code for measures to be applied to mentally abnormal criminals in Greenland.

The explanation for mentally ill and psychologically seriously deviant criminals still being placed in institutions in Denmark is that Greenland does not possess such institutions. No closed psychiatric ward has yet been established in Greenland, for which reason a sentence of commitment to a psychiatric hospital cannot be effected in Greenland.

The Correctional System possesses three institutions, which in principle are half open, for receiving convicted criminals in Greenland. At the beginning of the 1980s, when the cohort constituting the present study was formed, these were institutions with eight places in Aasiaat and Qaqortoq respectively and 24 places in Nuuk, that is to say 40 places in all. Subsequently, the institution in Nuuk was expanded to 50 places, of which eight are intended for remand prisoners, including detention in cases where out-patient mental observations are being undertaken in the Queen Ingrid Hospital department of psychiatry.

It is assumed that the convicted criminals will work outside the institution during the day. Only during an initial admission period and in the case of disciplinary offences are they obliged to remain in the institution throughout the twenty-four hours. If no work can be obtained in the town, however, the consequence is that they are obliged to stay in the institution. But there are no workshops or possibilities for occupation worth speaking of.

Before taking the decision to commit someone for mental observation, the Correctional System carries out an examination of the person concerned, and the local district doctor undertakes a medical assessment of the accused person's present mental state supplemented with any information available on previous psychiatric treatment or signs of psychological deviation. One of the psychiatric doctors at the Queen Ingrid Hospital then makes an estimate of whether mental observation is thought necessary and, if so, whether it can be undertaken on an out-patient basis or through admission to the Queen Ingrid Hospital, or whether, mainly for security reasons, it ought to be undertaken in a closed psychiatric ward, either in the department of forensic psychiatry or in the maximum security unit in Nykøbing Sjælland. In cases where the accused person is obviously psychotic, hospitalization can be undertaken immediately in accordance with legislation on mental illness, and the decision on mental observation is taken later.

The forensic psychiatric patients in the study

35 of the 289 patients constituting the total study were admitted at least once in connection with the commission of a serious crime. In addition, one man, who was committed as a long-stay patient to a psychiatric hospital in Denmark for schizophrenia committed rape while on leave from the hospital, for which reason he was sectioned under § 113. There are thus 36 forensic patients altogether, 27 men and nine women. Patients who might have committed less serious crimes entailing neither mental observation nor other forensic psychiatrical measures in the study period are not included in this analysis. It thus shows the rise in new forensic psychiatric patients in the period 1980-83.

Table 38 shows the age distribution on first admission of the forensic component of the cohort compared with the remaining patients. These are quite young patients, 2/3 of both men and women are under 25 years of age on first admission. Conversely it means that 25% of all the men admitted for the first time in the age range 15-24 have committed a serious crime, while the figure for women is 13%.

Table 39 shows the crimes leading to mental observation (index criminality). In cases where several crimes have been committed, only the most serious is listed. In the case of the men various serious crimes

Table 38. Age at first admission, gender and legal status.

Age at 1st admission	Men				Women			
	Forensic psychiatric		Not forensic psychiatric		Forensic psychiatric		Not forensic psychiatric	
	n		n		n		n	
15-24 years	18	25%	54	75%	6	13%	39	87%
25-34 years	7	21%	27	79%	3	6%	49	94%
35-54 years	2	9%	21	91%	0		35	100%
55+ years	0		10	100%	0		18	100%
Total	27	19%	112	81%	9	6%	141	94%

Table 39. Criminal act causing legal provision.

	Men	Women
Murder or attempted murder	12	7
Rape (child victims)	4	
Rape (adult victims)	5	
Arson	3	
Violence	2	
Threats, dealing with dangerous things		2
Escalating criminal behaviour during serving of sentence ('unmanageable')	1	
Total	27	9

Table 40. Place of admission for legally required observation.

	Men	Women
Queen Ingrid's Hospital, Psychiatric Department, Nuuk, Greenland.	18	8
County Hospital, Nykøbing, Zealand, Forensic Psychiatric Department.	4	1
County Hospital, Nykøbing, Zealand, Maximum Security Ward.	4	0

Table 41. Main diagnoses at follow-up for the forensic psychiatric patients.

	Men	Women
Schizophrenia	4	
Other psychosis	3	3
Personality disorders	16	3
Alcoholism	2	1
Oligophrenia, (mild form)	1	
Nervous conditions		1
Transitional situation disturbances		1
No certain mental abnormality	1	1
	27	9

12 men and 2 women had a secondary diagnosis of alcoholism, thus in total 17 had alcohol problems.

have often been committed, while in the case of the women it is generally speaking only a case of a single instance.

In addition to murder and assault, sexual crimes and arson have led to legally enforced mental observation. Almost all the men have been guilty of several serious breaches of the law during their careers, often from as early an age as 16-17 years, and often within different spheres such as (attempted) murder, rape, sexual relations with children and arson; in other words, this is a group associated with very serious and repeated crimes.

Eight of the 27 men have committed murder and eight have attempted murder, some of them several times. Only in the case of six men was murder or attempted murder the sole serious crime. There have been murders with backgrounds in the family (of children, partners, fathers or mothers) and the murder of friends, while several are credited with more random, apparently unmotivated crimes in which they have not had any previous connection with their victim.

In the case of the women, the picture is simpler. Of the nine women, two have committed murder and five have attempted murder. One has been guilty of violent crime and one of threats of a particularly serious nature. None of the women had a previous record of serious crime. In all cases except one, the criminal act was related to family, and in all cases it was a reaction to long-standing conflicts and emotional pressure.

31 of the 36 patients, 23 men and eight women, were first hospitalized in connection with the crime leading to mental observation, while four men and one woman had previously been in hospital.

The place in which mental observation was undertaken can be seen from Table 40. The above-mentioned patient who committed rape while hospitalized was not formally subject to mental observation, but was sentenced to continue the psychiatric treatment while in hospital on the basis of a statement from the department undertaking the treatment.

The diagnoses can be seen from Table 41. These are the revised diagnoses which it was possible to make at the time of the follow-up study. The diagnostic problems can be illustrated by the following example:

At the age of 18, a man was examined during commitment to DIH/A1 after having attempted to rape a child. On the basis of this examination, he was assessed as having an immature personality but showing no sign of psychosis. He was sentenced to a youth detention centre. Soon after being released he went on a shooting spree in a crowded town and was again sentenced to a youth detention centre. Here, he was now seen to be clearly psychotic, was involuntarily committed and again discharged several times. In an obviously psychotic condition he now commited rape and assault, and after a new examination, which established that this was a case of schizophrenia, he was sentenced to be detained in a psychiatric hospital in Denmark. This patient is a good example of the insidious development of schizophrenia, the diagnosing of which was undoubtedly delayed by the fact that the first examination took place before the pathological picture was fully developed, although in retrospect his severely deviant behaviour must be considered to have been connected with his psychological disorder.

The study cohort's usage of the psychiatric hospital measured by numbers of admissions and duration of stay can be seen from Table 42. Forensic patients account for 12% of all patients, 15% of admissions and 22% of bed days. No distinction is made between whether the individual admission is a judicial measure, voluntary or involuntary in accordance with legislation on mental illness. Men account for 28% of all bed days as against 13% for women. Men admitted for legally enforced mental observation spend most of their time in hospitals in Denmark. Here 38% of bed days are taken up by forensic patients.

Table 42. The study cohort's usage of the psychiatric hospital.

A. Number of admissions	All	Forensic psychiatric	Percent forensic psychiatric
Men	n=139	n=27	19%
In Greenland	236	31	13%
In Denmark	84	25	30%
Total admissions	320	56	18%
Women	n=150	n=9	6%
In Greenland	309	29	9%
In Denmark	55	18	33%
Total admissions	364	47	13%
Men and Women	n=289	n=36	12%
Total admissions	684	103	15%
B. Duration of stays, measured by bed days			
Men	n=139	n=27	19%
In Greenland	9607	1441	15%
In Denmark	12757	4848	38%
Total bed days	22364	6289	28%
Women	n=150	n=9	6%
In Greenland	11040	1104	10%
In Denmark	3681	773	21%
Total bed days	14721	1877	13%
Men and Women	n=289	n=36	12%
Total bed days	37085	8166	22%

As described in the section on conditions of life in childhood, the conditions under which they have grown up as children have placed a strain on many of those making up the cohort, but in the case of men the burden has in all respects been greater in the forensic psychiatric group than in others of the same age. Thus only one in six in this group has spent his entire childhood at home living with both parents without any problems being noted. In those under 35 years of age in the non-forensic group this only applies to one in three. However, the figures are too small to reach 5% significance. Both men and women in the forensic group have more frequently grown up in homes characterized by the extensive use of alcohol than is the case with non-forensic patients; for both sexes combined the difference is significant, (Odds Ratio= 0.41, 95% c.l. 0.17-0.98), and similarly more have grown up in homes marked by violence. (OR=0.40, 95% c.l. 0.15-1.02).

The measures imposed and applied after mental observation can be seen from Table 43. Seven men, but none of the women, were committed for treatment in Denmark. On account of recidivism, a further four men were later committed for treatment in Denmark, three being sent to Herstedvester and one admitted to a psychiatric hospital. That is to say that altogether 11 of the 27 men examined have been committed to an institution in Denmark, six in Herstedvester, one in the maximum security psychiatric hospital and four to an ordinary psychiatric hospital.

12 men and two women have committed serious crimes after the index criminality. From the last column in Table 43, it emerges that most cases of recidivism occurred after periods spent in a Greenlandic institution. Two committed serious crimes while on leave or after escaping from the institution, the others after release. There has also been a relatively high incidence of recidivism from detainees in youth detention centres. Those concerned in these cases were young people suffering from severe psychological abnormalities with whom the understaffed youth detention centres were not equipped to deal.

However, it is also important to emphasize that a number who have committed even very serious and repeated crimes had at the time of the follow-up study been completely re-absorbed into society and accepted by those around them. An example of this is a man who was sent to a youth detention centre at the age of 17 for attempted murder. Subsequently, he was guilty of a large number of cases of theft, vandalism and arson and was sentenced to an institution in Greenland. On release he committed a murder without any clear motive. In the course of mental observation he was found to have a highly explosive nature. He was born out of wedlock and had never known his father. He grew up with his grandmother until she died when he was eight years old. He then went to live with his mother, who was married and

Table 43. Provision after legally required observation, and number with subsequent relapse in criminality.

	Men	Relapse	Women	Relapse
In Denmark				
Maximum security ward	1			
Involuntary placement in psychiatric hospital	2			
Treatment in psychiatric hospital	1			
Secure prison	3	1		
In Greenland				
Correctional institution, night prison ("Anstalt")	14	8	1	
Correctional institution for young offenders	4	2	3	1
Psychiatric out-patient treatment			2	
Supervision by probation and correctional service included treatment for alcohol abuse	2	1	3	1
Total	27	12	9	2

living in Denmark, but missed his grandmother. In spite of stable home circumstances, there were increasing problems. The family returned to Greenland when he was 12. He began drinking at an early age, was expelled from continuation school etc. After mental observation he was committed to Herstedvester for an indefinite period. After three years in Herstedvester he was transferred to an institution in Greenland, and after a further three years released on probation. At the time of the follow-up study he was completely independent of the institution; he has permanent work as a driver, lives alone in a self-contained flat, but in close proximity to his mother and his two half-brothers, with whom he has a good, close relationship. The signs are that he is completely stabilized.

But not all outcomes are so successful: One man was born in wedlock and grew up in a home marked by the father's alcoholism. He was compulsorily removed from the home at the age of ten on account of behavioural problems and because, according to the social services, his father was leading him into crime. At first he was placed with foster parents, by whom he felt he was badly treated, and later in a children's home far away from his town, but after three years he was transferred to a children's home in the town from which he came. From the age of 15 he again lived at home and by the time he was 16 there were repeated reports of theft to the child welfare committee, though apparently no attempt was made to interfere. At 17 he was sentenced to supervision by the Correctional System for rape, but five months later, on account of fresh evidence, the sentence was changed to one of a youth detention centre and treatment for alcoholism. At the age of 20 he was for the first time sentenced to an institution in Greenland for assault, theft etc., and while he was out on conditional release he was again sentenced to a Greenlandic institution for rape. After several very serious cases of rape and again being sentenced to an institution, he was subjected to mental observation and diagnosed as suffering from personality disorders and alcoholism. From the report, it emerges that his behaviour while under the influence of alcohol was highly abnormal. And all his crimes were committed while he was intoxicated. In the hospital he seemed quite unremarkable under the circumstances; he fitted in with hospital regulations and was happy to talk to the Greenlandic staff. He was committed to Herstedvester for an indefinite period. After five years he was transferred to a Greenlandic institution. After a further year here he was released on licence subject to supervision and on condition that he accepted treatment for his alcoholism in Greenland. Six months later he again committed rape and attempted rape and was again committed to Herstedvester. He could not understand the sentence and felt he had been unfairly sentenced. The report on the mental observation makes the point that he scarcely understands or accepts the concept of women's liberty to control their sexual relations.

During the follow-up period, five of the forensic psychiatric patients died, all men and all by suicide. Two of them committed suicide in Denmark, one in the high security unit and one in AHV. One committed suicide after being re-settled in his own home in Greenland after having been placed in Denmark and after long periods spent in hospital for reconstructive plastic surgery. This was the man referred to earlier who, while suffering from depression, had killed his two children and shot himself in the face with the intention of committing suicide. A further two patients, both sentenced for arson and both in a hopeless social situation, committed suicide, one while on conditional release from an institution in Greenland and the other while on probation and subject to treatment for alcoholism.

So altogether 11 of the 139 men included in the main study have been committed to institutions in Denmark during the study period, corresponding to three or four patients a year being sentenced to serious measures of this kind. How have they fared? Three have died by suicide. Three are either still or again in the institution in Herstedvester, two in the County Hospital in Vordingborg. Three are now released in Greenland, two of them living with partners, while the third, who lives alone, is in close contact with his mother and brothers. All three of them appear to be managing well.

Summary of the forensic psychiatric situation

Conditions have changed greatly in Greenland since the introduction of the criminal code in 1953, when, according to the Committee for Social Research, it was "- one of the most fundamental assumptions that because of close contact with the citizens, the legal authorities would, without the participation of psychiatrists, psychologists and social advisers, continue to have a thorough first-hand knowledge of the personalities and surroundings of criminals as well as the factors that might explain why the individual crimes had been committed" (Kriminalloven og de vestgrønlandske samfund – The Criminal Code and the West Greenland Communities – 1962: 44). Comments on the bill show that already at that time it was assumed that there would be regular studies to monitor how the law was working in practice. The Committee for Social Research in Greenland report on the Criminal Code and the West Greenland Communities from 1962 was the first major follow-up, and here it can already be seen that the opening up in 1951 of a Greenland that had hitherto been closed led on the one hand

to greater contact between the many small communities in Greenland and on the other between the Greenlandic community as a whole and the rest of Danish society. As a result, the reaction pattern characteristic of a small, isolated community has changed character and moved in the direction of the reaction systems characteristic of industrial societies – and "at a speed and to an extent which were not foreseen in the practical implementation of the criminal code" (Kriminalloven og de vestgrønlandske samfund 1962: 117).

The revision of the code in 1963 met these changed presuppositions, partly by introducing a provision that for the use of the court dealing with the case, information should be obtained on the offender's personal and social circumstances when there was any question of sentencing him to measures implying treatment or radical procedures. As said in the introduction to this section, a provision allowing for committal to preventive detention in Denmark was now introduced.

However, society continues to develop. The incidence of crime has risen steeply and at the same time some of the crimes are more difficult to understand on the basis of traditional forms of behaviour; motives might be obscure, as might the behaviour of the accused, while the crime itself might be inexplicable and give cause for concern. And the result of this is that psychiatry has been given an at once difficult and important function, both in the analysis and interpretation of deviant behaviour and the experiences leading to it, and also in administering measures intended to ensure the treatment and safety of the mentally ill. Sentences committing criminals to institutions in Denmark have been increasingly handed down, always on the basis of thorough investigations. But the many commitments to Denmark have also created a major problem centred on the return home of those who have been so committed. There is an enormous difference between a high security prison like Herstedvester and an institution in Greenland, and between a period spent in a psychiatric hospital with a closed ward and the open ward in DIH. The gradual reintegration of offenders when their condition is considered satisfactory has hereby become a major problem demanding considerable resources. There is a need for a framework of measures in Greenland with provision for the necessary security relating to qualified treatment of offenders and training for their reentry into society.

Conclusion

Having worked as a psychiatrist in Greenland, I have often been faced with specific questions: Do the same psychiatric disorders exist in Greenland as in Denmark? And: What problems do you most often encounter? I have sought to expand these questions on the basis of inspiration from Ransom J.Arthur (1971).

1. Are the categories of mental disorders, as described in WHO's diagnosis system and applied in both Greenland and Denmark, also useful in Greenland?

   To this, the answer must be a clear affirmative. The study leaves no doubt that the classical psychoses, schizophrenia, manic-depressive illness, organically determined psychoses are encountered in Greenland with pathological pictures similar to those found in Denmark. Reactive mental illnesses, set in train by specific experiences, also have forms and expressions we recognize. But reality is not always such that it can be fitted into categories, either in Greenland or in Denmark, and several cases of serious psychoses are "atypical" in relation to the classical descriptions of the illnesses. Generally, however, it is my impression that the more advanced the pathology, the less specific the cultural characteristic, and the greater the common features to be found in schizophrenia patients from Greenland and Denmark.

   But this is not the same as saying that culture is of no significance for treatment and care. On the contrary: the disorder does not only reside in the painful experiences and thoughts accompanying the illness; these might be an attempt to give life some content and to compensate for the rift in human relations. And the path to treatment and relief goes through the re-establishment of those relations on the patient's own terms. Here there is a need for both specialist knowledge and cultural insight.

   A striking number of schizophrenia patients are preoccupied with and feel themselves linked to cosmic, possibly divine forces. If we start from the description of the four dimensions of loneliness – lack of intimacy, of a sense of belonging to a group or culture, and finally the relationship with nature, the cosmos, or the religious dimension – it is natural to see this cosmic preoccupation as a (culturally determined?) compensation for the relationship absent in the other areas, the inability to be on close terms or to act as one of a group.
2. Is the occurrence of mental disorder, measured on the basis of incidence and prevalence, of the same order in the two countries? This question cannot be answered without further clarification. Although we are more or less able to distinguish the categories of illness from each other, there is no sharp borderline between being ill and not being ill. It is a question of a continuum, and socio-cultural circumstances play a part when a condition is considered pathological by the patient and/or those around him, and then whether and when this leads to hospitalization. Nor is it always the illness in it-

self that leads to admission, but rather the extent to which the patient is vulnerable to the problems of life entailed by it. Nevertheless, it looks as though on the whole there is no great difference between Greenland and Denmark in the lifelong risk of developing forms of schizophrenia requiring hospitalization. However, the first admission to hospital occurs earlier in Greenland, while there is also a considerable risk of chronicity under present conditions, a subject to which I will return. In the case of manic-depressive illness the study has found surprisingly few cases, especially among older men. But the diagnosis might be difficult to establish, as, especially in young people, it often has an atypical beginning. How many cases exist without being hospitalized is naturally something on which the study can offer no information.

3. Are there special psychiatric syndromes unique to Greenland – or once unique to Inuit? Like all mental disorders, the syndromes described in the introductory section arose in an interplay between the individual, its culture and its surroundings. I do not believe that the defence mechanisms against being overcome by anxiety which the Inuit had at their disposal were in principal of a different order from those we exercise today, but the often employed defences of withdrawal and dissociation fit in well with their conditions of life, the close community in small societies.

   Kayak anxiety and kayak dizziness, as it is also called, is a phobic condition reminiscent of the fear of heights (indeed, the Greenlandic term, *nangiarneq* means fear both at abysses and in a kayak). It has also affected Danes in kayaks off Greenland. Similarly, mountain wandering, *qivinneq*, is an immediately understandable reaction to anger and shame in cases of humiliation. But both the natural conditions, which of course mean certain death for anyone living alone, and the social structure which made it absolutely necessary for the tribe to avoid being split up, led to a strong sense of disapproval of turning your back on society, with the result that if this nevertheless happened, it became difficult if not impossible to return home.

   But what about *pibloktoq*, also known as Arctic hysteria? Here, too, we have a way of reacting seen in various cultures, but probably particularly well developed among the Inuit: the ability temporarily to dissociate oneself, which time after time has served as a defence mechanism to prevent feelings destroying reason and at the same time has been an appeal to the surroundings, a signal that something was wrong.

4. What are the forces in the Greenland of today that seem to influence the emergence of mental disorders? Two characteristics immediately strike one:

   Many psychiatric patients, especially men, cross the threshold to admission at a very early age, and a great many in particular of the younger ones have been exposed to neglect, alcoholism and changing childhood environments. The group that has experienced the worst childhood conditions is without comparison the one with the most widespread personality disorders.

   The significance of conditions of life in childhood for the development of personality and for the ability to create stable affectional bonds is today well known as the result of many years' research, beginning with Bowlby's pioneering work for WHO after the Second World War (Bowlby 1951). In his review of the extensive literature on the subject, Michael Rutter (1991) establishes that "antisocial personality" is connected with a break down in the childhood home, but not caused by the separation this implied, stemming rather from the disagreements and disharmony that had led to the breach.

   Although this study can only provide a broad indication of problems in the childhood home, and likewise cannot indicate whether the problems have been present throughout the whole of childhood or only part of it, it leaves no room for doubt that ¾ of patients in the age range 20-24 have grown up in conditions so tainted that with our general knowledge of the significance of childhood for the development of personality, this alone is an alarming discovery. When it comes to young people, modern Greenlandic psychiatry will accordingly have to be seriously concerned with the psycho-social effects of neglect and other forms of detrimental conditions of life in childhood. Although the incidence of schizophrenia cannot be explained on the basis of conditions of life in childhood, its early onset and the large proportion of chronic patients could be seen in relation on the one hand to the increased emotional stress level produced by the conditions of growing up, and the demands for constant adaptation and accommodation to new conditions in modern society, and on the other hand to a system of treatment that is hardly coherent and which has great difficulty in providing a coordinated contribution in keeping with the needs of the individual.

5. What can the study teach us about the future organization of psychiatric treatment? The poor prognosis for schizophrenia in conjunction with the average of 20% of the study period spent in hospital, the high number of re-admissions and the relatively frequent use of restraint suggests that the treatments available to this group of patients are not satisfactory. In many cases there has been a significant improvement and perhaps the disappearance of symptoms while in hospital. But this is not the same as being cured. The risk of a relapse is very real, and there is a great work ahead in both improving the treatments available during stays in

hospital so that there is sufficient time for the condition to be stabilized before discharge, and then in subsequently providing qualified out-patient treatment. In the (few) cases where it has been possible to combine qualified supportive psychotherapy with psycho-pharmacological treatment in the place of residence, the beneficial effect has been quite pronounced, both on the pathological picture and the patient's potential for functioning in society, his relations with the family and so on.

Since the completion of this study, an institution for social educational treatment has been established which is to receive very young people with mental disorders, in collaboration with and possibly after a brief stay in a psychiatric ward. Some of the early cases of schizophrenia will presumably be able to derive significant benefit from such a treatment centre in Greenland, but those who are most ill need treatment that is interdisciplinary and demands such resources that it ought to be part of some psychiatric institution.

There is a great need throughout the population for education on the subject of mental disorders and for support and guidance for those affected. Fear of the odd, the incomprehensible and the unpredictable in the behaviour of the patient creates distance and strengthens his feeling of being outside the community.

An improvement in the possibilities of professional treatment for the most seriously ill and deviant cannot be effected unless it goes hand in hand with an increased acceptance in the population so that an end is put to the processes of exclusion and a humane view of the patient is maintained in all phases of his illness.

6. What suggestions for future research can be drawn from this study? Charting the group of patients crossing the threshold to hospitalization in a psychiatric institution does not in itself provide information on the incidence of mental disorders in the community. Are there (elderly) women with schizophrenia who are never ever admitted? If so, what enabled them to stay out of hospital? Do they need care that is not available? Similarly for the manic-depressive, here it is in particular the low number of admissions for men that strikes one, but for both sexes it must be expected that a depression without conspicuous symptoms is unlikely to lead to measures on the part of those close to the patient. The culturally determined respect for the autonomy of the individual militates against this, just as for those close to the patient it might perhaps be difficult to distinguish between a relatively simple withdrawal into yourself because of mental stress, and a true state of depression. And conversely, a slightly manic hilarity fits in well with the culturally determined requirement to put on a show of high spirits.

With Goldberg's model for pathways to psychiatric treatment in mind (Fig. 5), a deeper understanding of the state of mental health in Greenlandic society will require knowledge both of the incidence of mental disorders in the community at large and in patients consulting a doctor in the primary health service. A study of the Greenlandic health profile yet to be published contains data on mental health in the community. But a study of mental health among patients in the primary health service could add a significant piece to the pattern.

Acknowledgements

In the preparatory phase of the project I received consultative support from the statistician Mette Madsen of the Danish Medical Research Council. Thanks to his encouragement and support from the beginning to the final full stop Poul Munk-Jørgensen of the Institute for Basic Psychiatric Research, Department of Psychiatric Demography, Århus Psychiatric Hospital, Risskov, had a decisive influence on the accomplisment of the whole project. The department of Psychiatry in Queen Ingrid's Hospital, Nuuk, Greenland, provided accomodation and practical help with the patient files. The then chief psychiatrist in that department, Jonna Jacobsen, participated in the collection of information on the follow-up condition and undertook part of the Present State Examinations. Else Rosing assisted in the PSE-interviews as interpreter. The Department of Psychiatric Demography at Århus Psychiatric Hospital allowed me to work there as guest researcher. The data schedules were transformed into SPSS files by Søren Skadhede, who also did part of the statistical treatment of data. Merete Mortensen organized secretarial assistance. Other friends and colleques have influenced the final product, first and foremost professor Bent Harvald, who patiently and sharply has commented on many versions, and professor Jean Briggs, whose studies of Canadian Inuit culture have opened my eyes to many comparisons and whose comments and criticisms have been seminal. Professor Emeritus W. Glyn Jones of the University of East Anglia at Norwich, England, translated the Danish version into English "Velux fonden of 1981" contributed with a grant. The cohort study was supported financially by The Commission for Scientific Research in Greenland, whose chairman Jens Peder Hart Hansen has also contributed personally with essential advisory support.

References

Andreassen, K. 1935. Nogle af mine Oplevelser. – *Det grønlandske selskabs Aarsskrift* 1935, pp. 103-111.

Arthur, R.J. 1971. *An introduction to social psychiatry.* – Penguin Books, Harmondsworth, Middlesex.

Bentzon, A.W. 1968. Familiens organisation i de grønlandske samfund. – *Nyt fra Samfundsvidenskaberne* 10: 115 pp. – Copenhagen.

Bentzon, A.W., Goldschmidt, V. & Lindegaard, P. 1950. Betænkning afgivet 6. september 1950 af den juridiske ekspedition til Grønland 1948-49. – Copenhagen. Mimeo.

Bertelsen, A. 1937. Grønlands Medicinsk Statistik og Nosografi, II. Sundhedsvilkårene i Grønland. – *Meddr Grønland* 117(2): 1-248.

– 1940. Grønlands Medicinsk Statistik og Nosografi, III. Det sædvanlige grønlandske Sygdomsbillede. – *Meddr Grønland* 117(3): 1-234.

Bertelsen, A., Sartorius, N., Fischer, M. Nielsen, J.A. & Munk-Jørgensen, P. 1989. Presentation of methods and results from the WHO international studies of follow-up of severe psychoses. – In: Guyotat, J. (ed). *Colloque sur les aspects actuels du suivi des psychoses au long cours. Des hypothèses à la thèrapeutique*, Lyon, 22 et 23 Avril 1988: 1-47. – Editions Mèdicales Specia, Paris.

Bjerregaard, P. 1991. Disease pattern in Greenland. (Dissertation). – *Arctic Medical Research* 50 (suppl. 4): 1-62.

Bjerregaard, P. & Bjerregaard, B. 1985. Disease pattern in Upernavik in relation to housing conditions and social group. – *Meddr Grønland, Man & Soc.* 8: 1-18.

Bowlby, J. 1951. *Maternal Care and Mental Health.* – WHO, Geneva. (Danish edition 1953. *Børn uden hjem.* – Munksgaard, Copenhagen: 220 pp.).

Briggs, J.L. 1970. *Never in Anger. Portrait of an Eskimo Family.* – Harvard University Press, Cambridge, Massachusetts: 379 pp.

– 1990. Playwork as a tool in the socialization of an Inuit child. – *Arctic Medical Research* 49: 34-38.

– 1992. Mazes of Meaning. How a Child and a Culture Create each Other. – In: Corsaro, W.A. & Miller, P.J. (eds). *Interpretative Approaches to Children's Socialization. New Directions for Child Development*, No. 58, Winter 1992: 25-49. – Jossey-Bass., San Francisco.

– 1994. "Why Don't You Kill Your Baby Brother?" The Dynamics of Peace in Canadian Inuit Camps. – In: Sponsel, L.E. & Gregor, T. (eds). *The Anthropology of Peace and Nonviolence*, pp. 155-181. – Lynne Rienner, Boulder, Colorado.

Brill, A. 1913. Pibloktoq or Hysteria among Peary's Eskimos. – *Journal of Nervous and Mental Disease* 40: 514-520.

Brochmann, H. 1992. *Bygden i Diskobugten.* – Gyldendal, Copenhagen: 248 pp.

Böök, J.A., Wetterberg, L. & Modrzewska, K. 1978. Schizophrenia in a North Swedish geographical isolate, 1900-1977. Epidemiology, genetics and biochemistry. – *Clinical Genetics* 14: 373-394.

Caldwell, C.B. & Gottesmann, I.I. 1990. Schizophrenics kill themselves too: a review of risk factors for suicide. – *Schizophrenia Bulletin* 16: 571-589.

Condon, R. 1992. Changing patterns of conflict management and aggression among Inuit youth in the Canadian Arctic: Longitudinal Ethnographic Observations. – *Native Studies Review* 8 (2): 35-49.

Curtis, T. 1993. Mens vi venter på sundheden. (Thesis). – Institut for Kultursociologi, University of Copenhagen. Mimeo.

Danmarks Statistik. 1990. Social sikring og retsvæsen. Kriminalretlige afgørelser i Grønland 1979-1988. – *Statistiske efterretninger*, 8. Årgang, Vol. 9. Copenhagen: 20 pp.

Dingman, C.W. & McGlashan, T.H. 1988. Characteristics of patients with serious suicidal intentions who ultimately commit suicide. – *Hospital and Community Psychiatry* 39: 295-299.

Durkheim, E. 1968. *Självmordet.* – Argos, Uppsala: 268 pp. (Org. 1897. *Le Suicide*).

Eaton, J.W. & Weil, R.J. 1955. *Culture and Mental Disorders, a Comparative Study of the Hutterites and Other Populations.* – The Free Press, Illinois: 254 pp.

Eckert, P. & Newmark, R. 1980. Central Eskimo Song Duels: a contextual analysis of ritual ambiguity. – *Ethnology* 19(2): 191-211.

Egede, P. 1988. Efterretninger om Grønland, uddragne af en journal holden fra 1721 til 1788. – Lidegaard, M. (ed). *Det grønlandske selskabs Skrifter* 29: 1-204.

Ehrström, M.C. 1951. Medical Investigations in North Greenland 1948-49. – *Acta Medica Scandinavica* 140(4): 254-264.

Engberg, M. 1991. Involuntary commitments in Greenland, the Faroe Islands and Denmark. – *Acta Psychiatrica Scandinavica* 84: 353-356.

Folkvar, P. & Hvilsom, F. 1994. *Af den indre styrke. Beretninger om liv og død trehundrede kilometer nord for polarcirklen.* – Atuakkiorfik, Nuuk: 155 pp.

Foulks, E.F. 1972. The Arctic Hysterias of the North Alaskan Eskimo. – In: Maybury-Lewis, D.H. (ed). *Anthropological Studies* 10, 162 pp. – American Anthropological Association, Washington DC.

Fremming, K.H. 1947. *Sygdomsrisikoen for sindslidelser.* – Munksgaard, Copenhagen.

Freuchen, P. 1962. *Peter Freuchens bog om eskimoerne.* – Gyldendal, Copenhagen: 294 pp. (Org. 1961, *Peter Freuchen's Book of the Eskimos.* – The World Publishing Company, Ohio).

Gad, F. 1974. *Fire detailkomplekser i Grønlands historie 1782-1808.* – Nyt Nordisk Forlag, Arnold Busck, Copenhagen: 283 pp.

Giddens, A. 1994. *Intimitetens forandring.* – Hans Reitzels Forlag, Copenhagen: 207 pp. (Org. 1992, *The Transformation of Intimacy.* – Polity Press, Cambridge).

Giesecke, K.L. 1878. *Bericht einer mineralogischen Reise in Grönland in Form seines Tagebuchs von 1806-1813.* – Johnstrup, F. (ed). Copenhagen.

Glahn, H.C. 1921. Missionær i Grønland Henric Christopher Glahns Dagbøger for Aarene 1763-64, 1766-67 og 1767-68. – Ostermann, H. (ed). *Det grønlandske selskabs Skrifter* 4: 1-247.

Goldberg, D. & Huxley, P. 1992. *Common mental Disorders. A Bio-Social Model.* – Tavistock, Routledge, London & New York: 193 pp.

Goldschmidt, V. 1980. Fra uskreven til skreven kriminalret i Grønland. – *Retfærd* 16: 116-129.

Grove, O. & Lynge, I. 1979. Suicide and attempted suicide in Greenland. A controlled study in Nuuk (Godthaab). – *Acta Psychiatrica Scandinavica* 60: 375-391.

Grønland 1990. *Årbog* 1991. – Grønlands statistiske afdeling, Nuuk.

Graah, W.A. 1932. *Undersøgelsesrejse til Østkysten af Grønland, efter kongelig Befaling udført i Aarene 1828-31.* – Birket-Smith, K. (ed). Gyldendal, Copenhagen: 171 pp.

Gulløv, H.C. 1978. *Kampen om sjælene.* – Nationalmuseet, Copenhagen: 68 pp.

Gussow, Z. 1960. Pibloktoq (hysteria) among the Polar Eskimo. – In: Muensterberger, W. & Axelrad, S. (eds). *The Psychoanalytical Study of Society*, pp. 218-236. – New York.

– 1963. Kayak-anxiety. – *International Journal of Social Psychiatry* 9(1): 18-26.

Hamprecht, M., Maurer, K. & Häfner, H. 1992. Evidence for a gender bias in epidemiological studies of schizophrenia. – *Schizophrenia Research* 8: 223-231.

Hamprecht, M., Riecher-Rössler, A., Fätkenheuer, B., Louzá, M.R. & Häfner, H. 1994. Higher morbidity risk for schizophrenia in males: fact or fiction? – *Comprehensive Psychiatry* 35: 39-49.

Hansen, J.P.H. 1974. Børnemishandling – også i Grønland. – *Ugeskrift for Læger* 136: 1213-1215.

Hansen, J.P.H., Meldgaard, J. & Nordqvist, J. 1985. *Qilakitsoq. De grønlandske mumier fra 1400-tallet.* – Grønlands Landsmuseum & Chr. Ejlers' Forlag, Copenhagen: 216 pp.

Hansen, J.P.H. & Gulløv, H.C. (eds). 1989. The mummies from Qilakitsoq – Eskimos in the 15th century. – *Meddr Grønland, Man & Soc.* 12: 1-199.

Hansen, K.G. 1995. Kajaksvimmelhed – et eksempel på mere end 100 års grønlandsmedicinsk forskning. – In: Bjerregaard, P. & Kern, P. (eds). *NUNAMED 94 – en grønlandsmedicinsk konference*, Nuuk: 35-38.

Harmsen, G. 1979. *Grønlands demografi.* – Grønlands Seminarium, Godthåb.

Harvald, B. 1989. Genetic Epidemiology of Greenland. – *Arctic Medical Research* 48: 171-174.

Helgason, I. 1964. Epidemiology of mental disorders in Iceland. – *Acta Psychiatrica Scandinavica*, suppl. 173.

Helms, S. 1988. The East Greenlanders' own traditions to social care for widows and children. – *Arctic Medical Research* 47(3): 136-143.

Helms, S. & Helms, P. 1979. Indtryk fra gensyn med Ammassalik. – In: *Sundhedstilstanden i Grønland.* Landslægens årsberetning, Nuuk.

Holm, G. 1972. *Konebådsekspeditionen.* – Rhodos, Copenhagen: 248 pp.

Hovesen, J. & Jørgensen, B. 1983. Vold i Narsaq. – *Ugeskrift for Læger* 145: 2460-2462.

Institut for psykiatrisk grundforskning. 1987. *Årsberetning* 1987. – Afdeling for psykiatrisk demografi, Århus.

Jablensky, A. 1987. Multicultural studies and the nature of schizophrenia, a review. – *Journal of the Royal Society of Medicine* 80: 162-167.

Jablensky, A., Sartorius, N., Ernberg, O. et al. 1992. Schizophrenia: manifestations, incidence and course in different cultures. A World Health Organization Ten-Country study. – *Psychological Medicine, Monograph Supplement* 20.

Jensen, B. 1965. *Eskimoisk Festlighed. Et essay om menneskelig overlevelsesteknik.* – G.E.C. Gad, Copenhagen: 115 pp.

Jones, G. 1964. *The Norse Atlantic Saga.* – Oxford University Press, London, New York & Toronto: 246 pp.

Jørgensen, B., Johansen, L.G., Roed, S., Falkenberg, J., Nielsen, F. & Nielsen, F.K. 1984. Voldsulykker i Grønland. – *Ugeskrift for Læger* 146: 3398-3401.

Kamper-Jørgensen, F., Enevoldsen, B., Michelsen, N. & Friis-Hasché, E. 1980. Sociale klassifikationer. – *Ugeskrift for Læger* 142: 472-477.

Kelstrup, U. 1943. Beskrivelse af de vigtigste Sygdomme. Til Brug ved Jordemoderundervisningen. – Godhavn. Mimeo.

Kleinfeldt, J. & Bloom, J. 1973. *A long way from home. Effects of public high schools on village children away from home.* – Center for Northern Educational Research and Institute of Social, Economic and Government Research, University of Alaska, Fairbanks: 119 pp. (+ 9 appendices).

Kraus, R. 1973. Eskimo suicide. – Paper presented to a meeting of the American Psychiatric Association, Honolulu, Hawai, May 1973.

Kriminallov for Grønland. 1979. Justitsministeriets j.nr. L.Å. 1978-20002-1. – Justitsministeriets bekendtgørelse nr. 49 af 13. februar 1979.

Kriminalloven og de vestgrønlandske samfund. 1962. – In: Samfundsvidenskabelige undersøgelser. – *Udvalget for Samfundsforskning i Grønland* 5. – Copenhagen.

Krogh, K.J. 1967. *Erik den Rødes Grønland.* – Nationalmuseet, Copenhagen: 182 pp.

Køster, A. & Lynge, I. 1985. En undersøgelse af alle mentalobservationer foretaget i henhold til den grønlandske kriminallov i femårsperioden 1978-82. – *Nordisk Tidsskrift for Kriminalvidenskab* 72(4): 249-262.

Køster, A., Lund, H., Rosendal, A., Lynge, I. & Wæhrens, J. 1986. Overførsel af psykiatriske patienter fra Grønland til Danmark 1978-82. – *Ugeskrift for Læger* 148(19): 1166-1171.

Kaalund, B. 1979. *Grønlands Kunst.* – Politikens Forlag, Copenhagen: 223 pp.

Lange, C. 1864. Bemærkninger om Grønlands Sygdomsforhold. – *Bibliotek for Læger* 1864.

Langgaard, P. 1986. Modernization and traditional interpersonal relations in a small Greenlandic community. A case study from Southern Greenland. – *Arctic Anthropology* 23(1-2): 299-314.

Lidegaard, M. 1991. Glahns anmærkninger. 1700-tallets grønlændere. Et nærbillede. – *Det grønlandske selskabs Skrifter* 30: 1-205.

Lov om rettens pleje i Grønland. 1980. – Ministeriet for Grønland, j.nr. 0860-10-07. Ministeriet for Grønlands lovbekendtgørelse nr. 376 af 19. august 1980.

Lov om sindssyge personers hospitalsophold. Sat i kraft for Grønland ved lov nr. 259 af 27. maj 1981.

Lynge, H. 1955. Inegpait eller fornemme mennesker, som Melville Bugtens eskimoer kalder sig selv. Upernavik Norddistrikts ældre Historie. – *Meddr Grønland* 90(2): 1-187.

Lynge, I. 1971. Alkoholmisbrug i lægelig belysning. – Bilag II til Ædruelighedskommissionens delbetænkning 2, 1971. – Copenhagen. Mimeo.

– 1976. Alcoholproblems in Western Greenland. – In: Shephard, R.J. & Itoh, S. (eds). *Circumpolar Health. Proceedings of the Third International Symposium*, Yellowknife, NWT: 543-547. – University of Toronto Press for Health and Welfare Canada, Medical Services Branch, Northwest Territories Region, Toronto & Buffalo.

– 1985. Suicide in Greenland. – *Arctic Medical Research Report* 40: 53-60.

– 1991. Mental health problems and services in Greenland. – In: Postl, B.D., Gilbert, P. & Goodwill, J. (eds). *Circumpolar Health 90. Proceedings of the 8th International Congress on Circumpolar Health*, Whitehorse, Yukon, May 20-25, 1990: 246-248. – University of Manitoba Press for the Canadian Society for Circumpolar Health, Winnipeg, Manitoba.
– 1994. Suicide in Greenland. – In: Petursdottir, G., Sigurdsson, G., Karlsson, M.M. & Axelsson, J. (eds). Circumpolar Health 93. Proceedings of the 9th International Congress on Circumpolar Health, Reykjavik, June 20-25, 1993. – *Arctic Medical Research* 53(suppl.2): 551-554.
– 1995a. A keynote on family health. – In: Lynge, I. & Bjerregaard, P. (eds). Proceedings from the Symposium on Family Health in Circumpolar Regions, Ilulissat, Greenland, April 18-22, 1994. – *Arctic Medical Research* 54 (suppl.1): 7-10.
– 1995b. Mental disorders and conditions of life in Greenlanders. – In: Lynge, I. & Bjerregaard, P. (eds). Proceedings from the Symposium on Family Health in Circumpolar Regions, Ilulissat, Greenland, April 18-22, 1994. – *Arctic Medical Research* 54 (suppl. 1): 60-67.
Lynge, I. & Køster, A. 1985. Den grønlandske kriminallovs bestemmelser vedrørende foranstaltninger over for psykisk abnorme lovovertrædere. – *Nordisk Tidsskrift for Kriminalvidenskab* 72(4): 245-248.
Lynge, I. & Jacobsen, J. 1995. Schizophrenia in Greenland. – *Acta Psychiatrica Scandinavica* 91: 414-423.
Munk-Jørgensen, P. 1986. Schizophrenia in Denmark. Incidence and utilization of psychiatric institutions. – *Acta Psychiatrica Scandinavica* 73: 172-180.
Munk-Jørgensen, P. & Mortensen, P.B. 1989. Schizophrenia, a 13-years follow-up. Diagnostic and psychopathological aspects. – *Acta Psychiatrica Scandinavica* 79: 391-399.
Munk-Jørgensen, P., Mortensen, P.B. & Machón, R.A. 1991. Hospitalization patterns in schizophrenia. A 13-years follow-up. – *Schizophrenia Research* 4: 1-9.
Munk-Jørgensen, P., Kastrup, M. & Mortensen, P.B. 1993. The Danish psychiatric register as a tool in epidemiology. – *Acta Psychiatrica Scandinavica* (Suppl.) 370: 27-32.
Murphy, H.B.M. 1968. Cultural factors in the genesis of schizophrenia. – In: Rosenthal, D. & Kety, S.S. (eds). *The Transmission of Schizophrenia*, pp. 137-153. – Pergamon Press, Oxford, London, New York, Toronto, Sydney, Paris, Braunschweig.
Nansen, F. 1891. *Eskimoliv*. – Aschehougs Forlag, Kristiania: 293 pp.
Nordentoft, M. & Rubin, P.J. 1992. Selvmord blandt psykiatriske patienter. – *Ugeskrift for Læger* 154: 1481-1486.
Nyland, N. 1994. Patienter og læger i Grønland for 70 år siden og i dag. – *Dansk Medicinsk Historisk Årbog*, Copenhagen: 89-114.
Ottosson, J.O. 1983. *Psykiatri*. – Almquist & Wiksell, Stockholm: 578 pp.
Petersen, R. 1993. Samfund uden overhoveder – og dem med. – In: Andreasen, C., Jacobsen, B. & Schwedler, M. (eds). *Grønlandsk kultur- og samfundsforskning* 93: 121-138. – Ilisimatusarfik/Atuakkiorfik, Nuuk.
Pokorny, A.D. 1964. Suicide rates in various psychiatric disorders. – *Journal of Nervous and Mental Disease* 139: 499-507.
Pontoppidan, K. 1901. Om den grønlandske Kajaksvimmelhed. – *Bibliotek for Læger* 1901.
Rasmussen, K. 1925. *Fra Grønland til Stillehavet*, I. – Gyldendalske Boghandel, Nordisk Forlag, Copenhagen: 464 pp.
– 1926. *Fra Grønland til Stillehavet*, II. – Gyldendalske Boghandel, Nordisk Forlag, Copenhagen: 416 pp.
– 1929. Intellectual Culture of the Iglulik Eskimos. – *Report of the Fifth Thule Expedition* 7(1): 1-308. – Gyldendalske Boghandel, Nordisk Forlag, Copenhagen.
– 1935. Nye Mennesker. – In: Freuchen, P., Mathiassen, T. & Birket-Smith, K. (eds). *Mindeudgave*, Vol. 3. – Gyldendalske Boghandel, Nordisk Forlag, Copenhagen: 392 pp.
Rodgers, D.D. 1982. Suicide in the Canadian North-West territories 1970-80. – In: Harvald, B. & Hansen, J.P.H. (eds). Circumpolar Health 1981. Proceedings of the Fifth International Symposium on Circumpolar Health, Copenhagen, August 9-13, 1981. – *Nordic Council, Arctic Medical Research Report* 33: 492-495.
– 1991. Community crisis intervention in suicide epidemics. – In: Postl, B.D., Gilbert, P. & Goodwill, J. (eds). *Circumpolar Health 90. Proceedings of the 8th International Congress on Circumpolar Health*, Whitehorse, Yukon, May 20-25, 1990: 276-280. – University of Manitoba Press for the Canadian Society for Circumpolar Health, Winnipeg, Manitoba.
Rosenthal, D. 1970. *Genetic theory and abnormal behavior*. – McGraw-Hill Inc., New York, Düsseldorf, London, Mexico, Sydney, Toronto: 318 pp.
Rosing, J. 1960. Ísímardik, den store drabsmand. – *Det grønlandske selskabs Skrifter* 20: 1-89.
Rutter, M. 1991. *Maternal Deprivation Reassessed* (2nd edition). – Penguin Books, Harmondsworth, Middlesex: 285 pp.
Sadler, W.A. & Johnson, T.B. 1980. From Loneliness to Anomia. – In: Hartog, J., Audt, J.R. & Cohen, Y.A. (eds). *The Anatomy of Loneliness*, pp. 34-65. – Universities Press, New York.
Schulsinger, F. 1980. Karakterafvigelser. – In: Welner et al. (eds). *Psykiatri, en tekstbog*, pp. 457-472. – FADL, Copenhagen.
Seitamo, L. 1984. Psychological and cultural perspectives on arctic hysteria among the Skolt Lapps. – In: Fortuine, R. (ed). *Circumpolar Health 84. Proceedings of the Sixth International Symposium on Circumpolar Health*, May 13-18, 1984: 316-319. – University of Washington Press, Seattle and London.
Sonne, B. 1987. Oversætterens forord. – In: Sandgreen, O. *Øje for øje og tand for tand*. – Otto Sandgreens Forlag, Nuuk.
Statistiske efterretninger for Danmark. 1987. – Statistisk Institut, Copenhagen.
Strauss, J.S. & Carpenter Jr., W.T. 1972. The prediction of outcome in schizophrenia. – *Archives of General Psychiatry* 27: 739- 746.
Sundhedstilstanden i Grønland. Landslægens årsberetninger 1960-1980. – Landslægeembedet, Nuuk (Godthåb).
Sølling, L. 1971. Undersøgelse af sammenhæng mellem alkoholforbrug og social belastning. – Bilag I til Ædruelighedskommissionens delbetænkning 2. – Copenhagen. Mimeo.
– 1974. Alkoholforbruget i Grønland. (Thesis). – Institut for Kultursociologi, University of Copenhagen. Mimeo.
Thuesen, S. 1988. *Fremad, opad. Kampen for en moderne grønlandsk identitet*. – Rhodos, Copenhagen.

Thomsen, H. 1992. Om europæernes syn på børn samt børns opvækst i det grønlandske samfund i tiden omkring koloniseringen. – In: *Grønlandsk kultur- og samfundsforskning* 92: 227-258. – Ilisimatusarfik/Atuakkiorfik, Nuuk.
Thorslund, J. 1991. *Ungdomsselvmord og moderniseringsproblemer blandt Inuit i Grønland.* (Dissertation). – SocPol, Holte: 408 pp.
Weeke, A. 1979. Causes of death in manic-depressives. – In: Schou, M. & Strömgren, E. (eds). *Origin, prevention and treatment of affective disorders*, pp. 289-299. – Academic Press, London.
West, S. 1948. Sundhedsvæsenet i Ammassalik. – *Det grønlandske selskabs Aarsskrift* 1948, pp. 39-53.
WHO 1992. *SCAN Scedules for Clinical Assessment in Neuropsychiatry.* – World health Organization, Geneva.
WHO ICD-10 1994. *Psykiske lidelser og adfærdsmæssige forstyrrelser. Klassifikation og diagnostiske kriterier.* – Munksgaard, Copenhagen: 259 pp.
Ædrueligheds kommissionens delbetænkning II til Grønlands Landsråd. September 1971.

Appendix 1.
Item Group Checklist (PSE-10)

IG1	Nervous tension
IG2	Muscular tension
IG3	Autonomic anxiety and panic
IG4	Agoraphobia
IG5	Social phobia
IG6	Specific (simple) phobia
IG7	Obsessions and compulsions
IG8	Depersonalisation and derealisation
IG9	Lowered subjective functioning
IG10	Lowered bodily functioning
IG11	Special features of depressed mood
IG12	Depressed mood
IG13	Depressive delusions and hallucinations
IG14	Delusions about the body
IG15	Heightened subjective functioning
IG16	Rapid subjective tempo
IG17	Expansive mood
IG18	Expansive delusions and hallucinations
IG19	Overactivity
IG20	Altered perception
IG21	Nonspecific auditory hallucinations
IG22	Nonspecific visual hallucinations
IG23	Nonspecific psychotic
IG24	Non-affective auditory hallucinations
IG25	Experience of disordered form of thought
IG26	Delusions of control
IG27	Bizarre delusions and interpretations
IG28	Miscellaneous delusions
IG29	Delusions of reference
IG30	Delusions of persecution
IG31	Emotional turmoil, etc
IG32	Incoherent speech
IG33	Other speech abnormality
IG34	Socially embarrassing behaviour
IG35	Flat and incongruous affect
IG36	Poverty of speech
IG37	Nonverbal communication
IG38	Self neglect
IG39	Motor retardation
IG40	Catatonic behaviour
IG41	Monosymptomic delusion(s)

Instructions to authors

Two copies of the manuscript, each complete with illustrations, tables, captions, etc. should be sent to the Secretary, Kommissionen for videnskabelige Undersøgelser i Grønland. Manuscripts will be forwarded to referees for evaluation. Authors will be notified as quickly as possible about acceptance, rejection, or desired alterations. The final decision on these matters rests with the editor.

Manuscripts corresponding to less than 16 printed pages (of 6100 type units) including illustrations are not accepted, unless they are part of a special theme issue. Manuscripts that are long in relation to their content will not be accepted without abridgement.

Manuscript

Language. – Manuscripts should be in English (preferred language), French, or German. Authors who are not writing in their native language must have the language of their manuscript corrected before submission.

Place names. – All Greenland place names used in the text and in illustrations must be names authorised by The Greenlandic Language Committee. Authors are advised to submit sketch-maps with all required names to the Secretary for checking before the manuscript is submitted. Names of Greenland localities outside the area with which the paper is concerned should be accompanied by coordinates (longitude and latitude).

Title. – Titles should be as short as possible, with emphasis on words useful for indexing and information retrieval.

Abstract. – An abstract in English must accompany all papers. It should be short (no longer than 250 words), factual, and stress new information and conclusions.

Typescript. – Typescripts must be clean and free of handwritten corrections. Use double spacing throughout, and leave a 4 cm wide margin on the left hand side. Avoid as far as possible dividing words at the right-hand end of a line. Consult a recent issue for general lay-out.

Page I should contain 1) title, 2) name(s) of author(s), 3) abstract, 4) key words (max. 10), 5) author's full postal address(es). Manuscripts should be accompanied by a table of contents, typed on separate sheet(s).

Underlining should only be used in generic and species names. The use of italics in other connections can be indicated by wavy line in pencil under the appropriate words.

Use at most three grades of headings, but do not underline. The grade of heading can be indicated in soft pencil in the left hand margin of one copy of the typescript. Avoid long headings.

Floppy disc. – It may be helpful in the printing procedure if, in addition to the hard copies, the manuscript is also submitted on a DOS-formatted floppy disc. However, editing will be made on the hard copy, and the text file on the disc must be identical to the final version of the manuscript.

References. – References to figures and tables in the text should have the form: Fig. 1, Figs 2-4, Table 3. Bibliographic references in the text are given thus: Shergold (1975: 16) ... (Jago & Daily 1974b).

In the list of references the following style is used:

Boucot, A. J. 1975. Evolution and extinction rate controls. – Elsevier, Amsterdam: 427 pp.

Sweet, W. C. & Bergström, S. M. 1976. Conodont biostratigraphy of the Middle and Upper Ordovician of the United States midcontinent. – In: Bassett, M. G. (ed). The Ordovician System: Proceedings of a Palaeontological Association symposium, Birmingham, September 1974: 121-151. University of Wales Press.

Tarling, D. H. 1967. The palaeomagnetic properties of some Tertiary lavas from East Greenland. – Earth and Planetary Science Letters 3: 81-88.

Meddelelser om Grønland, Man & Society (Geoscience, Bioscience) should be abbreviated thus: *Meddr Grønland, Man & Soc. (Geosci., Biosci.)*

Illustrations

General. – Submit two copies of all diagrams, maps, photographs, etc., all marked with number and author's name. Normally all illustrations will be placed in the text.

All figures (including line drawings) must be submitted as glossy photographic prints suitable for direct reproduction, and preferably have the dimensions of the final figure. Do not submit original artwork. Where appropriate the scale should be indicated on the illustration or in the caption.

The size of the smallest letters in illustrations should not be less than 1.3 mm. Intricate tables are often more easily reproduced as text figures than by type-setting; when lettering such tables use »Letraset« or a typewriter with carbon ribbon.

Colour plates may be included at the author's expense, but the editor must be consulted before such illustrations are submitted.

Size. – The width of figures must be that of a column (76.5 mm), 1 1/2 columns (117 mm), or a page (157 mm). The maximum height of a figure (including caption) is 217 mm. Horizontal figures are preferred. If at all possible, fold-out figures and tables should be avoided.

Caption. – Captions to figures must be typed on a separate sheet and submitted, like everything else, in duplicate.

Proofs

Authors receive two page proofs. Prompt return to the editor is requested. Only typographic errors should be corrected in proof; the cost of making alterations to the text and figures at this stage will be charged to the author(s).

Twenty-five copies of the publication are supplied free, fifty if there are two or more authors. Additional copies can be supplied at 55% of the retail price. Manuscripts (including illustrations) are not returned to the author after printing unless specifically requested.

Copyright

Meddelelser om Grønland

Bioscience
Geoscience
Man & Society

Published by
The Commission
for Scientific
Research
in Greenland

Printed in Denmark by Special-Trykkeriet Viborg a-s