

EXTERNAL EVALUATION OF

THE NATIONAL INSTITUTE OF PUBLIC HEALTH

The opening statement of this external evaluation of the National Institute of Public Health (NIPH) reads:

The evaluation panel was very impressed with the high quality of work carried out at NIPH and with the dedication and enthusiasm of the staff in aiming to inform health policy and improve population health in Denmark.

A major asset of NIPH is its competent staff, dynamic leadership and obvious and close access to the public health policy level.

NIPH should be acknowledged for its key role as a public health knowledge producer in Denmark and for being influential on public health matters in the other Nordic countries and potentially at a global level.

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**THE NATIONAL INSTITUTE
OF PUBLIC HEALTH**

EXTERNAL EVALUATION OF NATIONAL
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This report publishes the result of an external evaluation of the National Institute of Public Health (NIPH).

In 2000 an evaluation process was implemented at NIPH in the following stages:

- 1 Basic description of NIPH and its work
- 2 Overall internal evaluation of the Institute and evaluation of six selected research programmes. The evaluation was summarised in the so called SWOT-analysis: Strengths, Weaknesses, Opportunities, Threats in a report in English.
- 3 External evaluation performed by an international (Nordic) panel. The panel received the material mentioned in item 1 and 2, conducted site-visits interviewing the leaders and staff and carried out structured programme evaluations. This report constitutes the external evaluation.
- 4 Follow-up by responsible bodies: The NIPH Board of Directors and the leadership of the Institute

At a board meeting in November 2000 the NIPH Board discussed the external evaluation report. The Board took note of the contents of the report and emphasised the following points:

- This report reflects a positive evaluation of the work carried out at the Institute
- A higher degree of publication in peer-reviewed international journals is important
- In the future it is relevant for the Institute to take the initiative to issue a national »Public Health Report«
- Co-operation with universities should be developed including exchange of research staff
- It is desirable that the Institute's research be oriented more towards public health work of an analytic and experimental nature
- The current financial situation is a problem due to the fact that too much work is being financed by short-term funding
- NIPH ought to be concentrated at one address only, and the optimal solution would be to move to an environment of related institutions at the former Municipal Hospital of Copenhagen (Kommunehospitalet)

The external evaluation report has been made in English. A Danish translation is also available. A limited number of the internal evaluation report in English supplemented by the external evaluation report has been produced. These reports can be obtained at the Institute.

February 2001



JØRN OLSEN, Professor
Chairman of the Board



FINN KAMPER-JØRGENSEN
Director



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1 EXECUTIVE SUMMARY

The evaluation panel was very impressed with the high quality of work carried out at **NIPH** and with the dedication and enthusiasm of the staff in aiming to inform health policy and improve population health in Denmark. A major asset of **NIPH** is its competent staff, dynamic leadership and obvious and close access to the public health policy level. **NIPH** should be acknowledged for its key role as a public health knowledge producer in Denmark and for being influential on public health matters in the other Nordic countries and potentially at a global level.

The major recurrent issues identified by the panel when trying to assess the overall structure and performance of **NIPH**, and in its evaluation of the six specific programmes relate to:

- A Mechanisms for research priority setting
- B Funding and support structure of **NIPH**
- C Balance between an international profile and a national institute for health policy
- D Relationship to universities and other health policy and research agencies

The following main recommendations were made by the panel:

- 1 **NIPH** should maintain high ambitions as to the implementation of knowledge in health promotion and disease prevention, although it is acknowledged that this is more difficult to monitor and assess than in the clinical field. **NIPH** should take the lead in implementing and improving the marketing of the public health documents that they produce in an interactive dialogue with planners and decision-makers.
- 2 The long-term funding of **NIPH** must be secured through increased total funding and larger core support from the Ministry of Health. Only by allowing time and allocating resources for basic research in the institute can staff competence be kept, and quality and validity of research findings be maintained.

- 3 The order of priorities between national and international publishing should be reconsidered. Peer-reviewed work should preferably also form the basis for national documents and recommendations.
- 4 Public health reporting would benefit from greater emphasis on the most important health risks and diseases, with less emphasis on frequent and general pictures of the public health situation; NIPH should consider the possibilities of publishing The Danish Public Health Report at regular intervals (although also not too often).
- 5 NIPH should carefully guard and maintain its academic environment; this implies allowing and prioritising scientific fora and staff development. High priority should therefore be given to theoretical and methodological work and to keeping and developing the environment accordingly.
- 6 NIPH need not be staffed by a fixed group of people; NIPH should increase collaboration with university institutions by affiliating senior as well as junior professionals, through joint projects and through participation in research training and supervision. NIPH staff could also be given academic affiliations as practised successfully in other Nordic countries.
- 7 NIPH has a major comparative advantage in its responsibility and access to several key health registers; the use of these could be increased further through the hosting of researchers and clinicians from other departments ad hoc while working with register data. It should also be considered whether NIPH should have more responsibility for other disease-specific registers.
- 8 The relationship between genetic, environmental and behavioural risks could be developed into a specific field, with studies undertaken in collaboration with other institutes. The rapid development of biotechnological research in cell biology needs to be broadened with a public health perspective. A country such as Denmark with a long-standing public health tradition could make an important international contribution to the application of these new technologies.

2 INTRODUCTION

The National Institute of Public Health (NIPH) contributes to the development of public health policy in Denmark as well as to the development of national and international public health theory and practice. The objectives of this external evaluation of the Institute were to assess the quality of the work conducted and to make recommendations regarding the future work plans of the Institute.

2.1 OBJECTIVES OF EVALUATION

The specific objectives were:

- to review and evaluate six selected programmes at the institute and comment on future strategic developments in these fields
- to review and evaluate NIPH as a »sector research institute« and comment on the future strategic developments for NIPH.

The six programmes selected for review were:

- Health interview survey programme
- Child health research
- Health services research and evaluation
- Arctic public health research
- Disease-specific and register-based epidemiology
- Reviews and participation in political-administrative processes

2.2 PARTICIPANTS AND EVALUATION PROCESS

The external evaluation panel consisted of:

- Former Minister of Health, Director Werner Christie, CEO Health and Social Services, Hedmark County Administration, Hamar, Norway
- Director, Professor Jussi Huttunen, National Institute of Public Health, Finland
- Professor, dr. med. Lars Iversen, Department of Social Medicine and Psychosocial Health, Institute of Public Health, University of Copenhagen, Denmark
- Professor Stig Wall, Epidemiology, Department of Public Health and Clinical Medicine, University of Umeå, Sweden (chair)

Claire Gudex provided academic secretarial support to the panel.

NIPH provided the evaluation panel with a background document, which included a review of the Institute's organisation and development, as well as SWOT analyses (Strengths, Weaknesses, Opportunities, Threats) of the Institute as a whole and of the six programmes under review. The evaluation panel found this material to be comprehensive and well-structured, giving a clear picture of a well-functioning institute producing systematic and high quality work. The SWOT analyses were considered to be helpful in illustrating the important issues facing the Institute.

The evaluation panel visited NIPH for 3 days in September 2000. During this time, 6 »site-visits« were held, in which NIPH research staff presented reviews of the strategy and working plans for each of the research programmes under review. Besides these discussions with the research staff, the panel discussed the current objectives and future plans for NIPH with the Institute's leadership and the Chairman of the Board, and also met with staff union representatives. The panel was also grateful for the opportunity to talk with Kjeld Kjeldsen from the Ministry of Health.

The panel has based its evaluation of NIPH programmes on the following criteria:

- scientific quality of the work carried out and published
- relevance of the individual programmes to clients at 4 levels
 - 1 policy level: at national level, mainly represented by Ministry of Health but also others, e.g. Ministry of Environment, Ministry of Finance; local level includes both counties and municipalities
 - 2 health care professionals: e.g. with respect to providing information on the distribution of health and disease, to recommending appropriate health care approaches
 - 3 patient groups: e.g. in providing background information to these groups and their associated professionals with respect to disease management
 - 4 the Danish citizens in general
- success of implementation and dissemination
- possible impact of research on health and health care (including health policy)
- internal structure of NIPH with respect to equipment, staff, location, etc.

2.3 STRUCTURE OF THE REPORT AND READERSHIP

This report is written in the first place for the Board of the NIPH, who has commissioned the evaluation. It is also hoped, however, that the report will be used more widely as a stimulus for discussion on the future direction of health services research in Denmark. Although much of the report focuses on individual programmes of work conducted within NIPH, the comments and recommendations may also impinge on other health research institutions in Denmark, as well as on national health research policy.

The evaluative part of the report is divided into 7 main sections. It starts with Section 3 (Setting the scene), which identifies some of the current challenges facing NIPH.

Then follows the panel's evaluation of

- the objectives of NIPH (Section 4)
- the approach taken to achieve this mission (Section 5)
- the funding of NIPH (Section 6)
- the working environment within NIPH (Section 7)
- the dissemination of information from NIPH (Section 8)
- the six research programmes under review (Section 9)

3 SETTING THE SCENE

Denmark is currently facing considerable challenges to its health and health care system. Data produced by NIPH have played a central role in defining the Danish public health agenda, with particular emphasis on social inequalities, relatively low life expectancy, risky health behaviour, and the prevention and care of large disease groups (e.g. diabetes, asthma, heart disease, cancer, cardiovascular disease, accidents and mental health). A further modern challenge is understanding the relationship between genetic and environmental risk factors in determining health and disease.

There is no tradition in Denmark of prevention of chronic disease. NIPH has a fundamental role to play here in relation to other health institutions and agencies, being in the unique position of having both research and implementation functions. It is therefore an important institute in the co-ordination of health promotion policies. Through publication of research findings, and also by playing a key

role in health promotion, **NIPH** can contribute to increased efficiency of the Danish health service and health promotion and disease prevention in other societal sectors, e.g. schools, workplaces and institutions of different kinds.

NIPH has the complex task of providing services to clients at four different levels, as outlined in the section above - national and local policy level, health care professionals, patient groups and the general population. It is clear that the needs of these client groups differ, not only with respect to the scope of information and level of detail required, but also to the mode of presentation. This puts pressure on **NIPH** to be able to respond to these different groups appropriately.

The role of **NIPH** is not limited to within Denmark, however. The challenges facing public health are international challenges and it is important that research findings and results of health policy changes in Denmark are made available to other countries in a timely manner. Denmark can improve its international health research profile by increasing international research co-operation, e.g. within the European Union, and by maintaining frequent publications in international journals.

4 MISSION STATEMENT OF NIPH

4.1 CURRENT SITUATION

The mission statement of **NIPH** is stated as »Research and reviews for change and better public health«. The Institute emphasises that it focuses on research and reviews rather than administration, practical programme development or policy making; that the target is broad public health; and that it wishes to participate in change processes to achieve better population health and health care.

4.2 PANEL'S EVALUATION OF MISSION STATEMENT

The panel endorsed this statement and felt that it was a well-formulated strategic plan for the Institute. It agreed that an epidemiological approach is the very basis for the Institute and that this should be further developed and supplemented by qualitative research. The panel considered, however, that while the current focus on mortality should be maintained, there should be greater focus on morbidity



and its prevention. It was noted that many of the major diseases in Denmark cannot be understood further through mortality studies, but rather need investigation of causality and risk factors.

The panel made the following specific recommendations:

- NIPH should focus more on health services research, with greater disease-specific orientation and more evaluation of both process and outcome of health promotion and other health interventions
- NIPH should go further than documenting and describing health differences within the population and health changes over time; it should also conduct more analytical studies of the mechanisms behind these differences and changes, and propose interventions that might reduce health inequalities or limit deteriorating health status.
- The use of current data may be improved by more focus on the issues most affecting the health of the Danish population; currently available survey data could be used to identify areas needing further research, e.g. social inequalities in health, risky health behaviour, vulnerable groups and the chronically diseased (e.g. more work along the lines of that currently conducted into smoking behaviour).
- Health surveys are important and should be regularly undertaken but also not too frequently. The surveys could go into more depth by focusing on specific diseases causing high disability or on subgroups of the population at higher risk, including study of health careers.
- The panel did not see the need for a specialised unit of Environmental health; instead it was suggested that the relationship between genetic, environmental and behavioural risks could be developed into a specific field, with studies undertaken in collaboration with other institutes
- If a new Alcohol research programme was to be established, it must be substantially and separately funded within a designated multi-disciplinary unit (e.g. at least 5-8 scientific staff)

5 APPROACH OF NIPH

In terms of the approach that NIPH uses in conducting research, the evaluation panel noted the very good relations that NIPH appears to have with the National Board of Health and the Ministry of Health, as well as strong international relations with other health researchers.

The evaluation panel made the following recommendations:

- **NIPH** should continue to develop strategic research alliances with other institutions within Denmark, especially the universities; explore the possibilities of having joint senior as well as junior posts and involvement in university teaching and PhD supervision
- Maintain and further develop the current emphasis on international collaboration
- There is a need for both basic and applied research to be conducted at **NIPH**
- Devote more time to the development of theoretical and methodological skills
- Increase the opportunities for external colleagues to work at **NIPH** on a short-term basis; develop more flexibility of staff with respect to skills, and use them as and when needed (in addition to permanent core staffing)
- Place more focus on international publications as well as on popular pieces for the Danish public, rather than project reports and data description

6 FUNDING OF NIPH

The panel was surprised at the relatively low level of funding for **NIPH**. It was noted that most European countries are currently investing much more heavily in public health and that Denmark appeared to be the exception here. The panel considered that Denmark could gain enormously from a greater investment into public health research - both through encouraging a more efficient health care system and through improving health promotion and hence population health status.

The panel's specific recommendations were as follows:

- The level of funding for **NIPH** should be increased
- Funding should be provided over a longer time period to allow better strategic and more long-term planning of research
- The structure of the funding should be altered: more money is needed for methodological research which will then maintain the high quality of the work and allow better exploitation of the existing data sets
- Statistics Denmark data should be less expensive to obtain and more easily available; such data collection costs should not be burdening public health research.

7 WORKING ENVIRONMENT

The panel's impression was of a well-functioning institute, with extremely hard-working and committed staff and dynamic leadership. Two main issues were noted, however. Firstly, that high demands are made on NIPH staff: these arise from the increasing pressure and competition from the outside research community to produce high quality scientific research, combined with the need to respond to more immediate requests for health status information and policy recommendations from the Ministry of Health. Secondly, NIPH is currently based on three different sites, limiting the opportunities for scientific and social exchanges, and is relatively isolated from other health research institutions. The importance of strong leadership and easy access of the staff to the leadership was emphasised.

The evaluation panel made the following recommendations:

- The government should consider the physical proximity of NIPH and Statens Serum Institute (SSI); it might be beneficial to merge NIPH with the epidemiological section of SSI, thus strengthening the basis for epidemiologically oriented health services research
- NIPH should be relocated to be closer to other relevant institutions, at the same time combining the current three sites into one site
- Provide greater opportunities for external engagements for research staff, e.g. 1 year in every 7 years; these could include research visits to international colleagues
- Encourage more in-house scientific exchange of common methodological issues, e.g. through regular multidisciplinary seminars
- Review current salary levels, especially with respect to differences in salary levels between different professional groups
- NIPH should have a non-smoking policy!

8 DISSEMINATION OF INFORMATION

The panel was impressed with the level and quality of publications produced by NIPH. It was concerned, however, that these publications do not have the impact they deserve through not being sufficiently disseminated or not being sufficiently targeted at particular groups. The rationale for producing project reports and health information for local use was recognised, but the panel emphasised the need to disseminate Danish research findings and health policy results more widely in the international community.

The panel made the following recommendations:

- There needs to be discussion with the Ministry of Health as to how the various NIPH reports and publications are used by policy makers, and how they can be more widely disseminated and their contents discussed
- Publication of a National Public Health Report on a regular basis by NIPH (as currently done in Sweden, Finland and Norway); this would include both selected population health data and recommendations for health policy; it could perhaps be combined with the health reports produced by the counties every 4 years.
- Greater emphasis on international publications, to the extent that they are prioritised ahead of reports in Danish
- Employment of a journalist or similar professional to popularise and communicate research findings within Denmark

9 EVALUATION OF SPECIFIC PROGRAMMES FOR REVIEW

9.1 HEALTH INTERVIEW SURVEY PROGRAMME

The data collected through this programme were considered to be highly valuable and relevant to the Danish public health programme and with an excellent scientific basis. Good external collaboration was noted, both more locally through the linking of various health registers and also internationally in the Øresund region, between the Nordic countries, within the European Union and with other agencies such as WHO. Output from the programme has also been considerable, including both Danish and international publications.

The panel agrees with the research group, however, that the programme faces a number of difficulties.

- 1 There appears to be an imbalance where much more effort is put into data collection than into longer-term detailed data analysis, with the result that the data set is being under-utilised. It was recognised that this is largely due to the short-term nature of funding from the Ministry of Health (typically 1 year), so that there are only resources for main analysis of immediate relevance to the Danish authorities and health care system. Fewer opportunities are available to develop longer-term strategic analysis..

- 2 The Health interview survey programme covers a wide range of studies and research interests, but it is unlikely that all these can be achieved in view of the relatively small number of researchers in the group and the limited budget. Upon discussion with the research group, the main priorities of the programme appear to be four main areas: reporting of SUSY 2000 (National health and morbidity survey), evaluation of the Public Health Programme, longitudinal data analysis of social differences in lifestyles, and data quality assessment. This prioritisation reflects the major role of the research programme in providing health data and analysis at a national level for use by the Ministry of Health and the health care sector.

The panel was of the overall opinion that the Health interview survey programme is very important for the institute, and should be maintained and further developed.

The following specific recommendations were made:

- The field of research should be narrowed down to key areas of high priority. This would mean a change of focus to better exploit the data that are available now rather than experimenting with new topics or new approaches to data collection.
- The Ministry of Health should guarantee programme funding for at least 3 years in advance. This would allow more considered and longer-term strategic planning of data analysis, as well as greater security for the staff and the research programme.
- Efforts should be intensified to develop collaboration with other health research agencies, in particular the University of Copenhagen. One suggested option was the establishment of formal relations (e.g. professorships and senior lecturer posts) jointly funded by NIPH and the University (a system used successfully in Sweden and Finland).
- The programme may benefit from better communication with the Ministry of Health, regarding the type of data that are available for use and the possibilities that exist for further analysis.
- In view of the high resource cost of interview-based studies, it might be worth considering greater use of a postal questionnaire approach. This would also allow more frequent data collection. (The panel also noted, however, the importance of maintaining a high response rate of at least 70-75% and that some topics need a combined approach, such as mental health and musculoskeletal disorders.)

- There needs to be clarification of the division of labour with respect to the analysis of national statistics. Currently, this role is divided between NIPH, the National Board of Health and Statistics Denmark, with no clear identification of respective roles and thus a less effective structure.

9.2 CHILD HEALTH RESEARCH

This appears to be an active multidisciplinary research group doing a lot of good collaborative work both within Denmark and internationally. Of particular interest to the panel was the possibility of identifying control groups thanks to the routine blood samples stored in the State Serum Institute. The research group is also funded from a variety of sources, including the Medical Research Council (a 5-year grant), the Health Insurance Fund, the Nordic Council, the European Union and other project funds, as well as from core NIPH funding.

The main issues discussed were:

- 1 Dissemination and use of research findings: the recently published report on Child Health in Denmark has been very much sought after within the country. As yet, however, no international publications have been produced. Both the previous report and this current report have been extensively used by public health nurses and school doctors, and by planners and health professionals for planning purposes at municipal level.
- 2 The combination of a traditional epidemiological approach and clinical biology has great potential in this field, for example in assessing risk factors. While an epidemiological approach such as that found at NIPH can help in explaining that an association exists, research at the clinical and cell level provides the necessary theoretical and methodological approach to establish the causative relationships.
- 3 Funding: 75% of the child research conducted at NIPH is funded by external grants, although it seems clear that basic epidemiological research is required in this area by the Ministry of Health. At present, the European Union is funding 70% of the budget and only for 1-1½ yrs. The research group would prefer to see funding that covers 3-5 years.
- 4 Difficulty of finding a balance between meeting the obligation to the Ministry of Health in monitoring the health of Danish children in order to inform priority setting, and carrying out more specific re-

search into areas where there is great need for intervention. It was noted that the research group has taken over responsibility for the monitoring of health topics that used to be monitored by the National Board of Health.

The panel made the following recommendations:

- It would be beneficial for the research group to join forces with researchers in the other Nordic countries to assess and compare child health and its development.
- The panel was of the opinion that while the Child Health report is undoubtedly of use to health professionals in Denmark, the main risk factors and the social impact of disorders are now known. If this review was repeated in 5 years, there would be little variation in the health status findings. The way forward may instead be to focus only on specific issues, e.g. obesity, infections, allergy, children's smoking, drinking and drug habits, and on particularly vulnerable groups such as children with cerebral palsy and the socially underprivileged.
- A third Child Health report would be most useful in another 10 years' time, when it may be possible to identify more general changes.
- The combination of the epidemiological and clinical biological approaches should be encouraged, especially as this will increase the collaboration between NIPH and hospitals and universities. It could also perhaps be developed in co-operation with the other Nordic countries.

9.3 Health services research and evaluation of health promotion & disease prevention activities

The panel was in agreement that there is a great need for this type of research in Denmark. It was considered that the government would benefit considerably by providing more resources for this area – results would be seen in terms of better quality of care and higher patient satisfaction, while the data would also help in the prioritisation of health care services. Evidence suggests that a greater focus on the management of disease entities can increase the efficiency of care, while clinical outcomes can also be improved.

A number of issues were discussed:

- 1 It was noted that NIPH has a long tradition of evaluating screening programmes and has the advantage of being considered neutral (i.e. not for or against particular screening programmes). It has established a good expertise in epidemiology, statistics and sociology, and

therefore is a good source of advice and support in collaborative projects.

- 2 Collaboration within Denmark: the panel was impressed with the strong domestic cooperation within this field, with a close network established between different institutes and bodies. This makes the more formal organisational networks less important. The strong collaboration with clinicians was also noted.
- 3 This is a research field that also shows the power of collaboration with other international centres. Promoting NIPH as a national centre of excellence would give a strong profile to the Danish government, which they could take pride in and it would put their policies into an international setting. It would also give the Danish researchers the international role that they deserve.
- 4 The research has produced a large number and a good range of publications. The approach taken was noted with interest – international articles produced first, followed by Danish translations.
- 5 Development of evidence-based clinical guidelines is becoming increasingly important and can help in efficiency improvement, therefore evaluation of these guidelines is also important. This fits into an approach directed more along disease entities and into NIPH's strong tradition of maintaining registers. The panel noted that NIPH should not themselves produce guidelines (this being the role of the professionals), but that NIPH can provide data for benchmarking and for comparisons, and for the retrospective evaluation and adjustment of established guidelines.
- 6 The research field of »disease career« (from the patient's perspective) has great potential in Denmark in view of the availability of patient registers and, for example, can improve the efficiency of interfacing between the hospital sector and primary care. Waiting lists are an important part of the prioritisation process so research as to what is happening to them is necessary.
- 7 The shelf life of knowledge is short and information is not useful unless it is linked with a very active implementation and development policy.
- 8 It was noted that in some of the other Nordic countries, responsibility for health promotion lies with non-governmental organisations (e.g. Heart Association, Cancer Society, Diabetes Association etc., either alone or in collaboration) as these are more orientated towards prevention. These will in the future also be increasingly important "Client" groups for health services research.

The panel made the following recommendations:

- Rather than continue to undertake this research on an ad hoc basis, it should be developed as its own department or sub-unit within **NIPH**.
- Higher level of funding from the Ministry of Health is needed
- The panel would prefer to see centralisation of disease-specific and procedure-related registers in **NIPH** to ensure cost-effectiveness in use and quality.
- A useful structure would be to maintain knowledge and expertise at **NIPH** and rely heavily on collaboration, e.g. with clinicians, within different disease-specific issues.
- Strengthen the focus on disease management and patient management; identify specific areas for focus, e.g. concentrate on specific disadvantaged groups, especially if this can be combined with the approaches used in assessing patient experiences, e.g. screening of particular groups. It is very important to establish what genetic risk factors mean and their relationship with environmental risk factors – the possibilities of collaboration with SSI will explode in the future. Prioritisation should be not so much of who should be treated but how and when they should be treated.
- Seek more contact with patient groups (e.g. as with the cerebral palsy group) and develop alliances with them.
- Employ one person full-time to produce popular publications for the Danish market, including press releases to disseminate findings as quickly as possible.
- Waiting list research should be part of a broader theme, not on its own; it could, for example, be linked to disease career or patient management themes.

9.4 ARCTIC PUBLIC HEALTH RESEARCH

The panel considered that the work of this unit is well-planned, includes high quality epidemiological research and is producing good publications. The research group is small but appears to be dynamic and has established a wide contact network in Greenland at different levels (central level, within the health care services and privately), with both research and teaching functions. Research findings are widely distributed through the media and via public meetings and the researchers consider that the general population and the politicians are both interested in and aware of the research results. The panel was also interested to hear of a number of qualitative studies being conducted.

A number of specific issues were discussed:

- 1 Funding of the unit: until now, most of the funding has come from a private foundation (Karen Elise Jensens fund) and the Danish Medical Research Council. Very little »core« support thus comes from NIPH, although the Arctic health unit pays overheads to NIPH. A decision is expected shortly as to whether the professorship will continue to be funded by Greenland. The soft nature of the funding makes it difficult to attract and keep long-term staff.
- 2 A feeling of isolation from the rest of NIPH, with little exchange of methodological approaches and scientific methods, and little integration. The group feels the lack, for example, of secretarial services. Most of the collaborative work is done with international partners. Directions of loyalty are also different from the rest of NIPH, being mainly to the Greenland government.
- 3 The oddity of dealing almost exclusively with Greenlandic health issues and yet being physically based in Denmark, although frequent trips are made to Greenland. It would be easier to work in an environment where everyone understood the particular issues faced by the Greenland as a mixture of a developed and non-developed country.

The panel was in agreement that this work should be maintained and offered the following recommendations for strengthening the unit:

- The Nordic countries have an obligation to foster research also on global health matters. For the Arctic Research department, the natural geographic area in which to develop collaboration is the circumpolar region, including Russia. The panel noted the extensive collaboration already established with Canada and Detroit, but also suggest further co-operation with other Arctic research departments in the Nordic counties, such as in Oulu, Tromsø and Sweden.
- It was considered essential for both quality of work and staff development to develop regular internal seminars where research staff could exchange views on methodological issues.
- In general, research findings are first written up as reports in Danish, and then articles are prepared for international journals. The panel disagreed with this prioritising and recommended that the research results be first published in international journals and then written as a more general document for the Greenland government. This would also assist in attracting funding.

9.5 DISEASE-SPECIFIC AND REGISTER-BASED EPIDEMIOLOGY

The evaluation panel recognised the considerable expertise that NIPH has developed in the maintenance and use of disease registers. It was considered important that registers which hold key data for governmental use or that are clearly linked to ongoing research at NIPH should be held at NIPH. It was clear that the register data are frequently used, either to respond to external requests for specific analysis, e.g. mortality among doctors, the Thule episode, or in collaborative projects with other Nordic or European data sets. NIPH is also an international partner in the development of public health models such as the Prevent and Heart models.

The main issues discussed included:

- 1 Financing: only the Cause of Death Register has core funding, the others are run from private funds or financed by patient associations. Other sources of finance include research grants, the European Union and the Communicable Disease Center in the United States. Most research is done on the registers held at NIPH as the data from Statistics Denmark are expensive to use. Lack of funding contributes to the fact that validation of the registry data is not common.
- 2 Co-ordination of data: if only one data set is being used, the project is run in-house. If there are several data sources, e.g. from the National Board of Health and from Statistics Denmark, then the work is usually co-ordinated by Statistics Denmark. Data security is a key issue, especially when merging potentially sensitive data.
- 3 There is an increasing number of institutes in Denmark working on register-based research, including competition from clinical databases and registers being established in individual hospitals. This makes it hard to get good researchers. The staff felt that they had limited time available for generating publications.

The recommendations from the panel were:

- Disseminate more information about the registers available and encourage further co-operation with external researchers who could use the registers in their own projects
- Develop competence in training clinicians in the use of the registers; it appears that having access to NIPH expertise has proved to be very valuable for others when using register data
- Explore the possibilities of greater collaboration with organisations such as the National Cancer Register and the Cancer Association

- Provision of special funds for register-based epidemiological studies would put less burden on project funds and benefit use and quality of registers
- The geographical location of the various disease registers should be carefully evaluated; it would appear that some of them would benefit from a transfer from the county to NIPH.

9.6 REVIEWS AND PARTICIPATION IN POLITICAL-ADMINISTRATIVE PROCESSES

For many years NIPH has provided information, monitoring and advisory services to health planning, both at a general political level and on specific issues, such as life expectancy and tobacco. The panel was very impressed by the way in which NIPH has participated in political processes during the 1990s, not only in response to external requests but also taking the initiative in health areas of great relevance and value. The Health interview survey databases have been widely used at various levels, e.g. for local and international research (often in collaboration), both in-house and external reviews, for educational purposes, reference material (in & out of house) and as data extracts made available to others.

A number of issues were discussed:

- 1 NIPH has a key role in contributing to ministerial committees, with a special expertise and knowledge regarding preventive strategies and an evaluative approach with respect to individual diseases and health problems. This also helps to provide continuity and stability in health policy, e.g. the Health Promotion Programme.
- 2 NIPH also has the freedom to identify needed research, e.g. prevention of lower back pain. It is important that NIPH can contribute and ensure that some implementation plan emerges, e.g. multidisciplinary groups to discuss how to move forward with the research findings.
- 3 Although the review work is considered an important part of NIPH's remit, it does not always fit easily into the work plan. Urgent requests for information can interrupt longer-term research and prevent other work from being followed through in more depth. On the other hand, it is stimulating to be part of policy making and to see how one's work is directly relevant.
4. NIPH is shortly to take responsibility for a new Documentation Center which will build up a database on the implementation of health promotion strategies. NIPH can play a unique role in organising

a broad multidisciplinary consensus and following up with monitoring and testing.

The panel made the following recommendations:

- A major role of NIPH should be to provoke political thought processes and raise awareness of new or unrecognised health problems.
- The general surveys should be conducted less often (e.g. every 10 years) and used to identify specific health problems and to stimulate projects where effective interventions are likely to give a good pay-back with respect to life expectancy and/or morbidity. The most relevant themes and population subgroups should be identified and focused on, for example, the socially disadvantaged, suicidal youth, genetic risk factors and their relation to environment, health behaviour, prevention and treatment.
- Emphasis should be placed not only on writing the reviews, but also on following up the resulting policy changes to monitor their effects.
- It was considered important to maintain and strengthen the relations with the county administrations and clinicians, since these are often the levels at which findings can be implemented.
- NIPH could widen its base of clients to include other interest groups such as schools, social groups, patient groups and their families.