scientific
research

within the
netherlands
institute of
general
practitioners

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The Netherlands Institute for General Practitioners (NHI)* is a foundation largely subsidized by the Ministry of Public Health and Environmental Hygiene. The NHI also receives external funding on a project basis.

The NHI is concerned with the development and support of general medical practice, both in relation to primary care and also to other sectors of medical health care. Over the past few years there has been an observable tendency towards the development of an institute concerned with primary care as a whole.

The activities of the NHI embrace - in addition to scientific research - : in-service training, professional education, advisory and support services and documentary and information services. The director general is S.van der Kooij, M.D.

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Introduction

In addition to a resource centre which is primarily for the benifit of general practitioners (GP's) and other members of the primary medical health care team, the NHI also has a scientific research department which is, in the first instance, concerned with the development of official policy guidelines. The activities of the research department lie in the spheres of interest of the Government, the Health Insurance Funds and other policy-making bodies (including the GP's professional associations), a fact which in turn makes these bodies the foremost recipents of the department's research.

The choice for research into the development of official policy is reflected in the topics that are covered by the department. There is no research, or scarcely any, into intrinsically medical problems. Virtually all of the projects are concerned with the structure and organization of the Health Care system - with the GP in a pivotal position - and the influence on the functioning of the Health Care team. This choice is also reflected in the academic disciplines from which the researchers working on the various projects are drawn. They are, for the most part university research workers with a social science background (sociologists and psychologists). This prospectus is intended to give a synopsis of the research program at the NHI as it is at the present time (1980). The programs described come under the headings of the organizational units within which they are carried out.

Recording in general practice

Since 1970 the NHI has kept an ongoing record of the morbidity rate called "sentinel stations". These stations are to be found in 60 general practices distributed nationwide throughout the Netherlands and choosen in such a way that they represent approximately 1% of the Dutch population. They keep an on-going record of a number of complaints, diseases or events frequently encountered in general practice. Some cases occur regularly in the records for years (abortion, influenza), others (accidents occuring while participating in sports, alcoholism) only appear on the weekly recordsheet every year or two. The project is thus able to give continuous feedback on the changing requirements for information on the occurence of particular cases in general practice. In this the "sentinel stations" project certainly meets a need. The project has received praise both nationally and internationally and the data it produces are often used in the formulation of official policy. The limitation of the "sentinel stations" project arises from the fact that only a small number of illnesses can be recorded simultaneously. There is also in most cases no record of the care provided by the physician; as to wether he provides treatment himself, refers the patient on, prescribes medication, gives advice, etc. It is however extremely important to have records of all the requests for care that the GP receives and it is equally important to know what care is provided in general practice. The GP is still the pivotal figure and point of entry into the Health Care system. Knowledge of requests for care and care provided in general practice is therefore an indispensable part of good planning in the Health Care system. It is a need that increases in importance as the resources of the Health Service become more scarce. Developments in the fields of automatisation and other scientific developments enhance the practicability of this sort of large scale recordkeeping. Nevertheless a great deal of preparatory work remains to be done. With this in view, the NHI has, on the instruction of the Ministry of Public Health and Environmental Hygiene, designed a number of projects.

Automatisation in general practice

This project is concerned with an investigation into the automatisation of patient-records. The components of the project are: (a) a study of the practicability of the use of microcomputers in General Practice and (b) the development of computer programs (software) needed for general practice. There will also be a comparative investigation of the microcomputers (hardware) suitable for use in general practice.

Classification of requests for care

A separate project is devoted to the question of how a recording system that relates to policy, care and research needs can be developed with the assistence of the existing systems of classification. Only when these projects have been completed, will it be of any value to take a decision as to the realisation of a project recording 'demand and supply' of primary medical care on a national basis.

Manpower and facilities in primary medical care

Knowledge of the demand for primary care is important for successful planning in the Health Service. However, information on the number of potentially available health care workers (including expected variation in numbers) is an essential prerequisite for planned policy in Medical Health Care. Realizing this, the NHI set up a system of registration for all practising GP's, by means of which it is possible to give an accurate description of the active GP-population of the Netherlands at any given moment. In order to predict fluctuations (important in conncetion with manpower-planning), a record of aspiring GP's has recently been added to the system. This list contains the names of physicians who have completed medical school and are embarking on the one year professional training program for GP's. Other professional groups are beginning to show an interest in the NHI registration system. At present discussions are being held with the physiotherapists to investigate the possibilities of a similar system for them as members of the primary care team. The research plans and on-going activities under the general heading of Manpower and Facilities are specified under the following heading: joining the profession, leaving the profession, composition of the profession, regional distribution of practices. In scholarly terms, these activities are the province of occupational sociology. Their relevance to the formulation of policy derives from the Bill on Medical Care Facilities that is currently in preparation.

Joining the profession

The most important area of research under this heading is the investigation entitled search behavior and the esthablishment of a general medical practice. This is a longitudinal investigation in which a year's class of aspiring GP's (a cohort) are observed as they attempt to acquire a practice. These GP's are interviewed each year until they actually establish a practice or give up their plans to enter general practice.

Leaving the profession

Our investigation: premature departure from general practice was cincluded in 1978. One of the most important conclusions was that those physicians who had left general practice had performed secondary tasks for which they had received remuneration more frequently than those colleaques who continue to practice . This means that a further investigation into factors relating to the assumption of secondary occupation will have to play an important role in further research in the area.
A second approach is the analysis, by cohort, of the 'drop-outs' among different consecutive years' classes of GP's, to determine the influence of economic factors (amount of investment and goodwill costs) on their progress.

The composition of the profession

An annual survey of the composition of the profession in respect of a number of factors is made possible by the GP registration system. These factors are: age, sex, partnership, date established in practice, nature of practice, and the presence or otherwise of

a dispensary. In addition to surveys in which changes over a period of years are analysed, it is our intention to undertake further research into particular groups of GP's (such as: female GP's or GP's who remain in practice after the age of 65, etc).

Regional distribution of GP's

There is according to the GP registration system an uneven distribution of GP's in the Netherlands and the ratio of GP's to patients also varies considerably from one part of the country to another. Further research into the reasons for this variation and its consequences for the medical health care is being carried in a study entitled: background to the variations in GP-density. Data on referrals, admissions to and length of stay in the hospital are related on the one hand to the availability of specialist and primary care and on the other hand to the factors which determine the demand for care (distribution of the population in terms of age, sex, income, degree of social deprivation).

So far, research under the heading "Manpower and Facilities" had been primarily concerned with the general practitioner. Similar research projects could increasingly be undertaken for other professional groups in primary care depending on the development of the NHI, interest on the part of the other professional groups and the availability of funding.

Cooperation in primary health care

In recent years there has been a growing realization in the Netherlands that Primary Health Care can only function well if cooperation exists between the various Health Care workers. The aim of Primary Health Care is to provide general (non-specialized) and integrated care. Cooperation is regarded as a means of achieving this goal. It is therefore important to know where and between whom cooperation exists in the Netherlands and, furthermore, wat the results of this cooperation are. In other words: how does the Health Care worker and the patient/client benefit from shared premises and/or proximity of location?
Research into cooperation also has a relevance to policy making. If, for example, "regional planning" is being considered seriously it is important to know what is the relationship between the different Primary Health Care facilities (the individual Health Care worker being regarded as a facility), where gaps occur and where overlap exists. Again, a system of registration constitutes the central core of work in this area. All Health Care Centres and Group General Practices in the Netherlands are periodically assessed. Also being planned are some research projects arising directly or indirectly from this system of registration.

Registration of health care centres and group general practices

The registration system used in Health Care Centres and Group General Practices provides, by means of

twice yearly assessments, continuous information concerning the various Group Practices and Health Care Centres in the Netherlands. Each centre provides information on the tasks and numbers of its Health Care workers, the nature of their contracts with the centre, composition and size of the patient-population etc. In addition to this, a special project is carried out annually. Thus, a report on the various forms of consultation within Primary Health Care teams was published in 1979. For 1980 a report is planned on relations between the various centres and Specialist Health Care as well as Mental Health Care.

Research into other forms of cooperation

The registration system operated by Health Care Centres and Group General Practices only covers team-care in shared premises. This is an important form of cooperation but neither the only one, nor, indeed, the one most frequently found. There is also a growing interest in other forms of team care, both mono-disciplinary (such as deputizing services) and multi-disciplinary (home-teams, etc.)
Apart from the provision of an inventory of these Primary Health Care teams, a comparative study of these forms of cooperation and of those in shared premises would certainly be of great value.

The relationship between primary and specialist medical care

A specific peculiarity of the Dutch health care system is that the patient in the Netherlands (in contrast to Belgium or the U.S. for example) can only consult a specialist on referral from his GP. The patient is only allowed to contact the specialist directly in very few cases (ophthalmologist and in the course of emergency first aid treatment).
This situation makes the relationship between the GP as a primary care worker and the medical specialist at the next level an interesting subject to study. In any case the GP determines which patients (and how many) are referred to the higher echelons. The specialists or more generally the hospitals are motivated economically to bring a certain amount of pressure to bear on the primary care echelon. This introduces an interesting research topic: both from the viewpoint of the control of costs - care at the specialist level being more expensive than primary care -, from a regional planning viewpoint - where questions arise such as: what care is given, by whom, and who makes use of it? - and from the viewpoint of the researcher concerned with defining the roles of the GP and specialist. The flow of patients between primary and specialist care echelons is pivotal in this research. We are therefore becoming increasingly more interested in the question of who exercises the consumer's choice in medicine: the patient, the GP, or the specialist, and what factors influence the choice: the patient consulting-rate norms, the division of tasks among members of the health care

team, the system of remuneration and so forth. Research in this area is conducted on the borderline between sociology and economics.

The diagnostic assessment centre Oudenrijn

An important issue under the heading of the relationship between primary and specialst care is the question as to whether giving the GP access to hospital diagnostic facilities has any influence on the development of patient-flow. In the field, there are restrictions in respect of the difficulty of measuring true effect; nevertheless, the development of a number of the parameters of medical consumption (referrals, out-patient treatment, admissions to hospitals, length of stay) will be followed. Furthermore by means of a highly detailed analysis of the medical consumer-behaviour of a number of chronic patients ("tracer cases"), we shall attempt te essess the extent to which there is an improvement in coördination between primary care specialist care. This investigation will be carried out in cooperation with the National Hospital Institute (NZI)*.

Referral at the micro-level

Over the past few years, researchers, in a number of places in the Netherlands, have been occupied with development of econometric models for the health care system in which referrals are a central concern. All of these models suffer from the same defect: they have no operational mechanism. For example, in order to understand how referrals are made, it is an indispensible requirement that one knows whether the initiative was taken by the patient, the GP or the specialist. Such analyses are not possible with the existing statistical data. As a consequence this particular research project on referral will be pursued with our own collection of data in order to move towards a better macro-mathematical model.

The Lelystad project

In the middle of 1982, a hospital will be opened in Lelystad. Until that time, the town is dependent on relatively remote specialist facilities. This unique situation makes it possible to gain insight into the relative contribution of the patient, GP and specialist to the patient-flow volume, when changes occur in availability of care.

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Psycho-social care

The research-topics described so far are all of a structural nature; a choice that arises from the NHI's own decision to engage in policy development research. There is an inherent danger in structural research and that is that the research will be 'empty' because too little attention has been paid to how the system works: to function. For that reason, we have one research sub-department which concerns itselfs principally with the functioning of members of the primary care team (i.e. the GP) and only addresses itself to structural questions indirectly. The common factor in the various research peojects is in this case the patient with psycho-social complaints. Two areas of interest are differentiated: how do GP's behave towards patients with psycho-social complaints and, what are the possibilities for fruitful cooperation between physicians and other members of the primary care team leading to better treatment of psycho-social complaints. In answering this question particular attention has to be paid to the 'doctor factor' (This refers to the phenomenon that physicians differ considerably one from another in the manner in which they observe, diagnose and treat what are objectively the same complaints). Tracing this doctor-factor and the role that cooperation with others plays in it occupies a central position in research projects organized or planned in the topic of psycho-social care.

The Breda-project

In Breda, there is at present intensive cooperation between a team of eight GP's and a psychotherapeutic team, made up of a psychologist, a social worker and a psychiatric nurse. The NHI is conducting research on this project. The principal research topic is the manner in which GP's behave towards patients and their psycho-social complaints. Both subjective and objective ways in which they observe these patients is what we call the labelling proces. In our research, we investigate the influence of the labelling process on the patients' later behaviour as a medical consumer (his GP-consultation rate, medication, referrals to the psycho therapeutic team, medical specialists and others). At the same time we investigate the influence of the psycho therapeutic team on his behaviour.

Talking to patients

The NHI has assembled a large collection of video-tapes of GP's consultations. We have tapes of 1500 consultations with some 30 different GP's at our disposal. As the video material forms part of three experiments in the area of psycho-social care, and as recordings were made both before and after the experiment, it is possible to compare the three experiments one with another in respect of a number of point. We were concerned here with an experiment in discussion techniques, a mental health consultation, and an experiment bringing in a primary care psychologist. The GP's behaviour in discussions is always analysed before and after the experiment. An important concept in this project is that of "giving the patient room" this derives from a number of theories on psycho social care.

Remaining projects

GP in-service training project

The object of the huan project is to develop an in-service training program for GP's designed to provide optimal care for cardio-vascular disease. This program follows the Millerscheme. According to this plan, the major problems in the area of cardio vascular disease are determined first. Later, norms are established which treatment should optimally achieve. Then, the actual care is investigated to judge the extent to which it meets the established norms. If there are discrepancies between actual care and optimal care, the reason for this must be discovered. The reason can arise with the GP, the patients or the structure of the practice, but it is also possible that the norms have been set too high.

A number of these problems is insoluble, others can be removed by in-service training or other educational techniques. On the basis of these findings the experts will set up and carry out a remedial program. On the conclusion of this program a further investigation of the extent to which actual care accords with optimal care will be carried out, and on this basis a definitive program can be established to provide optimal care in fighting cardio vascular disease.

The research is being carried out in cooperation with the University of Nijmegen, Institute of General Practice.

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