Mental health in old age

A model for concerted action by WHO and university hospitals

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Very little of WHO's work is done by the Organization alone. Much of it takes the form of coordination and collaboration in which WHO acts in partnership with governments, institutions—both governmental and nongovernmental—and individual scientists and other workers in the field of health. As the following article shows, collaboration with a university hospital department enriches both partners and extends WHO's sphere of action beyond what the Organization, with its limited budget and staff, could accomplish on its own. Most important, this fruitful collaboration yields a harvest of practical knowledge that can be shared with all of WHO's Member States.

During the past decade, countries became fully aware of the enormous public health implications of the aging of their populations. Old people—often poorly served as regards health—were likely to double in number by the turn of the century, by which time most of them would be living in the developing world. WHO's governing bodies accordingly began to give some emphasis to a long-term programme for protecting the health of the elderly based on the principles agreed upon at the World Assembly on Aging (1).

To help it formulate and carry out this programme, WHO established collaboration with selected institutions with the requisite expertise and resources in various parts of the world. Among them are the University of Geneva Geriatric Institutions, Switzerland, which WHO recognized in 1981 as a national centre for protection of the health of the elderly.

The University of Geneva Geriatric Institutions, which have grown up over the last 20 years, now form a diversified network (2) pursuing treatment, education and research.

Treatment is provided mainly in a hospital setting. Inpatient facilities include a 320-bed geriatric hospital, a continuous care centre with 104 beds, and a psychogeriatric liaison advisory service for the doctors at the university general hospital. Geriatric care is also given on an outpatient basis by the medical-psychosocial centre, which is attended by elderly patients living in the community, and also sends out staff to visit patients living at home or in old people's homes. In addition, there are two services of the day hospital type, which form an intermediate stage between the hospital and outpatient facilities.

Teaching activities are conducted at the undergraduate, postgraduate and continuing education levels, and are designed for doctors, nursing staff, nursing auxiliaries and allied health workers. Since 1984, geriatrics has had recognized university status as part of medical training, and the teaching facilities offered by the University of Geneva Geriatric Institutions are being expanded accordingly.

Research covers morbid anatomy, clinical studies, and efforts to elucidate the aspects of geriatric disease and geriatric care associated with psychosocial factors or with health service facilities.

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The principles underlying the provision of services and the training of staff are: (a) an integrated approach to patients, i.e., an approach simultaneously taking account of somatic, psychological and social factors, and (b) continuity of care, an approach that aims in practice to share responsibility with patients' relatives and with community workers other than health personnel (j).

This dual approach, in which pride of place is given to mental health and to the psychosocial dimension of health and disease, has resulted in the development of special links with WHO's activities for the promotion of mental health in old age.

Hospitalizing the elderly: general hospital or geriatric hospital?

One such WHO activity is collaboration with Member States in developing a suitable infrastructure for the specific needs of elderly mental patients and for the psychosocial problems of old age. In this field the University of Geneva Geriatric Institutions have undertaken two collaborative studies, the first of which was aimed at comparing two models of hospital care for elderly patients.

Several European countries now offer their elderly patients care either in geriatric hospitals or units with specialized staff, or in general hospitals, in which an increasing proportion of the beds is occupied by elderly patients.

The advantages and disadvantages of each of these two types of care, their financial implications, and their suitability for the elderly are hotly debated. Some people emphasize that general hospitals, geared to the treatment of acute and curable diseases, are staffed by health workers who have negative attitudes towards patients requiring lengthy hospitalization and who are unaware of the psycho-organic and medicosocial factors often involved in the pathology of old people. Those who hold these views advocate specialized geriatric units.

Others consider that recent advances in geriatrics can and should now be incorporated into the practice of general hospitals. They stress the arbitrary nature of geriatrics as a medical discipline, based as it is on patients' retirement from work. Biological age is not strictly linked to "social" age; patients aged 65–75 often differ little, physically and in their pattern of disease, from those 10 years younger. They also stress that old people are already being pushed towards the fringe of society—it is inadvisable to segregate them further by hospitalizing them in separate establishments when they fall ill.

In economic terms, the specialized approach is said to avoid the proliferation of useless clinical procedures, improve prevention, and reduce the cost of hospital care through proper use of the full resources of the community. However, it is also claimed that the setting up of geriatric hospitals in industrial countries narrows the scope of the general practitioner unnecessarily and drains off into this tertiary care sector health problems that could be treated at the primary, community level.1

A region such as the Canton of Geneva, in which general medical services and fully developed geriatric services coexist, affords an excellent opportunity to explore different models of hospital care available to the same elderly population. Consequently, a comparative study was begun in 1980 as a collaborative venture between the Swiss National Fund for Scientific Research, the World Health Organization, the University of Geneva Geriatric Institutions and the internal medicine department of the University of Geneva. Its aim was to obtain verified and comparable descriptive information on two hospital models: a specialist model, represented by the geriatric hospital, whose multidisciplinary treatment teams offer integrated medical, psychiatric and social care; and a general model, represented by the internal medicine department of the general university hospital, whose doctors may consult psychogeriatric specialists, or call upon the services of social workers, as required.

The assessment covered the following points:

(1) The effect of the hospital environment and of treatment on the physical health, mental health and social functioning of patients over 65. These dimensions were measured on admission and monitored during the patients' stay in hospital.

(2) The investigative and therapeutic procedures carried out on these elderly patients during their hospital stay.

The outcome of hospitalization proved difficult to compare because the study revealed (6) that the two hospitals were in fact serving populations with different initial psychosocial profiles; this was true even for patients in the same age group admitted for comparable medical conditions. The patients

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1 A similar debate rages over the mental health problems connected with the diseases of old age and the specific psychosocial needs of elderly hospitalized patients. Should psychiatric know-how and the psychosocial dimension be incorporated into general medical practice, or should patients continue to be treated along the lines of conventional internal medicine with recourse to mental health services as and when required? The advocates of integration make much of the need to treat the whole man. Its critics are apprehensive lest this approach lead to eclectic amateurism.
treated in the geriatric hospital generally had more serious mental conditions, especially dementia, than the comparison group admitted to the general hospital. They were also more socially vulnerable. This selection had nothing to do with any known factors in the hospitals’ admission policies but resulted from the differing ways in which the two hospitals were perceived and used by doctors and others responsible for referral. For this reason, although the specific illness requiring hospitalization tended to be more serious in the case of patients admitted to the general hospital, patients at the geriatric hospital were more heavily dependent. These differences resulted, *inter alia*, in different uses of investigative and treatment methods in the two hospitals.

**Training increases job satisfaction**

One of the more striking findings of the study was that job satisfaction among nurses caring for elderly patients was higher in the geriatric hospital than in the general hospital (7). This finding runs counter to the generally accepted notion that staff treating old people exclusively are more likely to become demoralized. An analysis of the problems encountered by staff in caring for elderly patients showed that dissatisfaction had less to do with the thankless nature of the tasks than with the lack of resources or know-how to carry them out. For example, it was observed in both hospitals that areas of care in which the tasks have been well defined are viewed with some satisfaction even when the tasks themselves are thankless. In contrast, those areas in which duties are poorly defined, such as care of the terminal patient or the disturbed patient, create dissatisfaction. In general, the nursing staff of the geriatric hospital had far more knowledge and technical resources at their disposal for coping with these problems and as a result had greater job satisfaction. Proper training would thus appear to be an effective means of enhancing the job satisfaction of nursing staff and, presumably, of improving the quality of care they provide for the elderly.

**Intervention methods for psychosocial problems**

There are now many studies showing that psychosocial problems such as bereavement and relocation can significantly impair the physical and mental health of the elderly. Nevertheless, this knowledge is rarely translated into practical measures for reducing the adverse health effects of such problems and the resulting burden on the health services and on society. In November 1984, with the financial support of the Federal Bureau of Public Health in Berne, WHO therefore organized a meeting of experts from various parts of the world, hosted by the University of Geneva Geriatric Institutions, which served as the starting point for a project on the subject.

A critical review was first carried out of the main controlled studies on the psychosocial problems of old people, their health and their use of health services. Completed in 1985 (8), it shows that the psychosocial problems having the most clear-cut deleterious effect on health are widowhood and widowerhood, relocation, the lack of social support, and withdrawal from society.

Treatment centres for the elderly with adequate research facilities were then identified in various countries in preparation for the second phase of the project: an international study to develop and evaluate the effectiveness of community-based preventive measures in different sociocultural settings. Thanks to support from the National Institute on Aging in the USA, investigators from centres in Paris (France), Mannheim (Federal Republic of Germany), Jerusalem (Israel), Göteborg (Sweden), Geneva (Switzerland), Minneapolis (USA) and Belgrade (Yugoslavia) met in December 1985 to draw up a research agenda.

It was decided to begin with a psychosocial problem that could be tackled by all centres: bereavement. The death of the marriage partner lends itself to comparative standardized study since it is a universal and well-defined psychosocial problem with quantifiable and potentially modifiable effects on health. The period following the death of husband or wife is marked by an increase in health problems and in the use of health services by the surviving partner. This adverse effect seems to be most marked in men, but it is also clearly seen in women who do not feel that they are receiving proper support from their social network. A pilot intervention study is now being carried out in Paris and in Geneva, where it is being supported by WHO and the Swiss National Fund for Scientific Research. The project aims at softening the adverse impact of bereavement in these high-risk individuals through a series of simple and inexpensive psychosocial support measures based on the principles of the behavioural sciences. These measures, which come into play in the period immediately following bereavement, include access to practical assistance and advice from widowers and widows who have successfully adjusted to their condition, and participation in mutual aid groups that can offer interpersonal relationships to help the mourning period pass as smoothly as possible.
INFORMATION AND TRAINING TOOLS

- **Assessment instruments.** A wide variety of instruments for assessing physical, mental and social functioning in the aged were collected from different countries, critically examined, and classified in a source book (17) published in English, French and Italian. A Serbo-Croatian version is in preparation. Specific instruments for assessing the capacity for autonomy of the elderly have also been assessed (26).

- **Manual on mental disorders.** A practical guide on mental disorders in the elderly is now being written for the non-specialist health worker. It will review the best practices for prevention and management of the commonest disorders, incorporating the views of experts from the developing and developed world.

- **Didactic videotapes.** The initial project, which has produced a set of videotapes for teaching non-psychiatrist physicians how to manage depression in the elderly, is described in this article. Based on this project, teaching tapes devoted to a variety of mental health topics will be produced. One set will cover the management of the demented patient, and will be aimed at relatives as well as the family doctor. Another set will deal with attitudes of health personnel towards elderly patients.

- **Information on old-age dementias.** An effort is being made to define the information most needed in this field by the international scientific community. Five information areas are being assessed: (i) classification and diagnosis, (ii) epidemiology, (iii) neurobiology, (iv) drug treatment, and (v) support network and services. Once the information needed is defined, a strategy will be drawn up for its systematic collection and dissemination by WHO.

- **Information in other areas.** WHO regularly convenes or cosponsors scientific meetings to review the situation in various fields of old-age mental health so as to gather and disseminate the material countries need for the formulation of national health policies. Among the recent topics reviewed are the psychosocial aspects of accidents in the elderly (14), research on mental health of the elderly (15), the uses of epidemiology in studying the elderly (16), the aging of populations in the Americas (27), and quality control of the care available in long-stay homes and institutions for the elderly. Soon to be reviewed are community strategies for alleviating social isolation, and legislation having a bearing on the mental health of the elderly.

### DIAGNOSTIC CRITERIA AND METHODS

- **Rating scales for assessing depression.** A recent publication (18) reviews the assessment of depression in various geographical and language areas and in specific age groups. One chapter critically examines the scales used in assessing depression in old age and provides guidelines for their practical application.

- **Rating scales for assessing dementia.** During a workshop held in 1985, participants examined the range of needs for assessment (diagnosis, observation of change, treatment response, epidemiological research) and discussed rating scales in common use. The time needed to administer these scales, the problems encountered in their use, and the professional training required are outlined in the workshop report, currently in preparation.

- **Standardization of diagnostic criteria for the dementias.** The tenth revision of the International Classification of Diseases (ICD-10) is now being developed. A group of experts, set up to deal with mental conditions in the elderly (9), is preparing the ICD-10 revision in coordination with the revision of other authoritative classification systems. As a first step towards the bridging of these classifications, scientists working in each system are to meet in 1987.

- **Clinical differential diagnosis of dementing conditions.** As described in this article, a research project is now under way to refine the clinical criteria for the differential diagnosis of such conditions through the use of new brain-imaging techniques, such as positron emission tomography (11, 12). The aim is to produce by
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1987 a validated battery of clinical tests that can distinguish between different conditions characterized by dementia.

- **Immunological and biological markers of dementia.** A scientific meeting was convened in 1985 to define areas of research in the field of immunology and immune-related neurobiology in aging where progress of practical benefit to the elderly may be expected in the next decade. Neurobiological and immunological markers for the diagnosis of dementia were among the areas examined, and the logistical support needed for progress in this field was defined to guide the work of WHO (10).

**MANAGEMENT OF MENTAL ILLNESS AND PSYCHOSOCIAL PROBLEMS: SERVICES AND TECHNIQUES**

- **Institutional care for elderly patients with mental health problems.** The mental health needs of the ill and the mentally ill elderly patient, and the organizational aspects of developing services to meet these needs, were the subject of a number of recent studies, meetings and publications (4-7, 28). The present article reports on a study that assessed the relative merits of specialized geriatric hospitals and general hospitals.

- **Lay help for the management of dementia.** Positive experiences have been reported with lay groups who help families to cope with dementia. These experiences need to be evaluated and possibly replicated in different countries. A meeting has been held as a first step in promoting a lay-based support system for the care-givers and families of patients with Alzheimer's disease and related disorders.

- **Community-based interventions to mitigate psychosocial problems and their health impact.** A multicentre research programme is in progress to evaluate the effectiveness of simple intervention methods in mitigating the adverse health effects of bereavement, relocation, and lack of social support (8). The details are described in this article.

- **Recording of psychosocial problems in primary health care.** A multiaxial recording system has been developed for use in primary care (29). It includes checklists of psychological and social problems that should sensitize the health worker to the behavioural aspects of help-seeking and sickness. This recording system is now being adapted to the specific problems of the elderly.

- **Collaborative research on senile dementia.** A WHO Scientific Group (13) made proposals for a long-term international programme aimed at defining effective measures for reducing suffering from senile dementia. The goal is for interdisciplinary research and action to be undertaken by a number of centres simultaneously in the following linked areas: (i) clinical diagnosis and classification, (ii) epidemiology, (iii) etiology (with particular reference to neurobiology), (iv) treatment and prevention, and (v) health service delivery. A task force is being established to implement this collaborative effort, including the search for funding.

**DRUG TREATMENT OF MENTAL DISORDERS**

- **Monitoring psychoactive substances.** It is WHO's responsibility to recommend narcotic drugs and psychoactive substances for international control, where indicated. The Organization is now reviewing a number of uncontrolled barbiturates, collecting information on availability, restrictions, illicit traffic, involvement in accidents, adverse effects, and dependence and abuse potential. Special emphasis is being given to information on barbiturate use among the elderly.

- **Guidelines for drug evaluation in dementia.** Guidelines are being prepared on the assessment of drugs used in dementia, particularly the agents acting on cognitive function which are proposed for prevention or reversal of mental deterioration.
Effectiveness will be assessed by comparing the health indicators of a group of widows and widowers benefiting from these measures with those of a control group.

Apart from the problem of bereavement, the University of Geneva Geriatric Institutions will also study ways of reducing the adverse effects of relocation on the health of the elderly. It has been observed that older people have increased morbidity for some months before and after a change of residence, especially when the move is not of their own choosing. The stress of anticipation and then adaptation, which seems to be responsible for the deterioration in health, could be reduced by simple psychosocial measures. The measures whose effectiveness will be tested in old people due to be admitted to an old-age home include: familiarizing them with the future environment, enabling them to discuss their anticipated problems and possible ways of coping with them (these discussions will include sessions with old people already living in the institution), strengthening family bonds and other social contacts (especially to ensure that these links continue after the move to the old-age home), and trial placement in the home.

Although the problem of institutional placement is relatively specific to industrialized countries and affects only a small proportion of the elderly, the results of this project will have wider implications. It should be possible to adapt the knowledge gained and the support measures developed to different settings, for example, the shifting of elderly populations from rural to urban environments.

**Brain-imaging techniques to clarify the diagnosis of dementia**

Part of WHO’s programme consists in developing methods for the assessment and diagnosis of mental disorders in the elderly (see box). In this area, the University of Geneva Geriatric Institutions are collaborating with WHO on the use of new brain-imaging techniques to validate clinical criteria for the diagnosis of dementia. In its various forms, dementia—an overall deterioration of higher cortical function—rises in incidence with advancing old age, and the aging of populations means that these disorders, with their disastrous effects on the individuals affected and their families, not to mention the economic burden on society, can be expected to grow rather than recede.

There are two main forms of primary senile dementia: senile dementia of the Alzheimer type, or degenerative dementia, characterized morphologically by neurofibrillar degeneration and senile plaques leading to cerebral atrophy; and vascular or multi-infarct dementia, in which there is thrombotic, embolic or haemorrhagic damage to the cerebral vasculature. There are also mixed forms.

Alongside these primary forms, there are a number of pathological states that can present clinically as dementia. The main causes of secondary dementia are normal-pressure hydrocephalus, depression (or depressive pseudodementia), space-occupying lesions of the brain, certain drugs, hypothyroidism, alcoholism, vitamin B12 deficiency, hepatolenticular degeneration, and neurosyphilis.

Estimates of the prevalence of each of the types of primary and secondary dementia vary from study to study. It is generally conceded that dementia of the Alzheimer type accounts for roughly half the cases, multi-infarct dementia for 15–20%, mixed forms of primary dementia for roughly 15%, and secondary dementia for 15%.

Apart from cases of secondary dementia where the causes are known and curable, the therapy of dementia is currently limited to symptomatic treatment of the accompanying disorders of mood or behaviour and to general palliative measures—protection, monitoring and assistance with everyday activities. However, recent research, especially in the field of neurobiology, does open up prospects for the treatment of both vascular and degenerative causes.

To ensure that future therapeutic trials have the greatest possible chance of success, it is more important than ever for the researcher to be able to make a differential diagnosis with some confidence at the very onset of dementia—the stage at which therapeutic measures are most likely to be effective. The problem is that, at present, definitive diagnosis is often made only post-mortem, on the basis of histopathological examination of the brain. Yet a great deal of clinical information has accumulated on the signs and symptoms characterizing the clinical course of the different forms of dementia, or the mental disorders that accompany them. At the same time, new techniques are being developed for imaging the brain; in particular, positron emission tomography (PET) can be used to visualize cerebral function and metabolism.

Research (I1) has thus begun in the form of a collaborative study between the University of Geneva Geriatric Institutions, the department of nuclear medicine at the Cantonal Hospital in Geneva, and WHO, with financial support in 1984 from the Swiss National Fund for Scientific Research. The aim of the study is to refine the clinical criteria for the differential diagnosis of the dementias through the use of new brain-imaging techniques (I2). As a first step, the various signs and symptoms reputed to be of use in differential diagnosis were
indexed, clearly defined, and recorded in an examination protocol for reliable comparative measurement. Next, data on the structure and metabolism of the brain were obtained by computed axial tomography and the study of cerebral blood flow as well as by PET in a number of dementia patients in whom these differential clinical signs had been assessed. We have now begun to examine the correlation between the clinical signs and the brain images. This will, it is hoped, lead to a better understanding of the characteristic clinical presentation of each form of dementia and to the development of a simple, tested clinical method usable by researchers and practitioners for the differential diagnosis of the dementias. In other words, data obtained from brain-imaging methods such as PET will be converted into practical knowledge for use by clinicians without the need for these highly specialized, costly techniques.

Training material for non-psychiatrist doctors

As part of its programme on the mental health of the elderly, WHO is developing a role as an international centre for the collection and exchange of information (see box). In this field, the internal medicine and psychiatry departments of the University of Geneva together with the Geriatric Institutions are collaborating with WHO on the development of a mental health training programme to meet the specific needs of doctors who are not psychiatrists. It is just such doctors who are often the first contact point (19, 20) and who tend to treat the majority of patients with psychiatric problems (21, 22). In Switzerland, for instance, an extensive survey revealed that more than 90% of all sufferers from depression were treated by the family doctor (23). As they help to provide mental health care, such doctors become aware that they lack the training to carry out this task properly. For example, a recent survey of a national sample of general practitioners in the USA showed that at least one-third of them felt the need of additional training in psychiatry (24).

Following a review of the mental health problems most commonly encountered in general practice and of the teaching methods that have proved most effective in this field (25), it was decided to opt for audiovisual training. The first learning package developed comprises two video cassettes and a manual on how to detect, assess and manage depressive disorders. The first assessment of the package’s educational impact on doctors in non-psychiatric practice shows an improvement in the detection of depression, even when not severe, and in its differential diagnosis from other psychopa-

thology. This method of instruction will be extended to other priority themes, such as attitudes to the terminally ill patient, mental confusion in the elderly, poor compliance of the older patient with treatment regimens, and the problems of families looking after a relative with dementia.

The importance of a concerted effort

It has been a feature of our century that the elderly have increased in number from a few venerable individuals to large groups often amounting to a sixth of the population. In its extent and rapidity, this demographic change has outstripped the slow adjustments made to public health systems and community services. Solutions to these problems are daily sought at all levels, as much by the elderly themselves, their families, communities, health professionals and nongovernmental organizations as by governments. The University of Geneva Geriatric Institutions undoubtedly constitute a collecting-point for opinions and contributions from the first of these levels, to which WHO—as an intergovernmental body—does not have direct access. It is, on the other hand, WHO’s role to link up the various centres in the world that are producing useful models based on the local health problems of the elderly. In so doing, WHO is stimulating and improving national efforts at the same time that it is helping to promote health and social dignity in old age on a regional and global scale. Collaboration such as that illustrated in this article aims to increase the likelihood that, by the end of this century, people may be able to live to a ripe old age without suffering an inevitable decline in their mental health and wellbeing.

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