REPORT

MEETING OF HEADS OF WHO COLLABORATING CENTRES IN MENTAL HEALTH

Tokyo, Japan
1-4 October 1984

Manila, Philippines
February 1985
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NOTE

The views expressed in this report are those of the participants in the Meeting of Heads of WHO Collaborating Centres in Mental Health and do not necessarily reflect the policies of the Organization.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for the Governments of Member States in the Region and for those who participated in the Meeting of Heads of WHO Collaborating Centres in Mental Health, held in Tokyo, Japan, from 1 to 4 October 1984.
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1. INTRODUCTION

The Meeting of Heads of WHO Collaborating Centres for Mental Health was held from 1 to 4 October 1984 at the Tokyo Medical and Dental University, Tokyo, Japan.

Dr Hiroshi Nakajima, Regional Director for the Regional Office for the Western Pacific of the World Health Organization, opened the meeting and welcomed the participants.

In his address, the Regional Director expressed his sincere appreciation to the Government of Japan for agreeing to hold this meeting in Japan. He also expressed his special thanks to Tokyo Medical and Dental University and its staff members for their excellent cooperation and the great efforts made by them in preparation for the meeting. The meeting was being held at a critical stage, when all Member States of WHO were already committed to achieving the goal of health for all by the year 2000. Mental health was an important aspect of health, which WHO defined in its constitution as a state of physical, mental and social well being. (The full text of the address of the Regional Director is attached as Annex 1).

The meeting was attended by twelve temporary advisers from Australia, China, Japan, Malaysia, the Philippines and the Republic of Korea.

Dr Takeo Doi, Japan, assisted in the preparation and the conduct of the meeting as a WHO consultant.

During the opening ceremony, Dr Ryo Nomura, Director, Mental Health Division of the Ministry of Health and Welfare, Japan, delivered a welcome address on behalf of Dr Hasumi Ohoike, Director General, Bureau of Health Services. Professor Makoto Nakao, Dean of the Tokyo Medical and Dental University, also welcomed the participants. Professor Ryo Takahashi, Japan, was elected Chairman; Professor Xia Zhenyi, China, Vice-Chairman; Professor Allen German, Australia, and Professor Paul Chen, Malaysia were appointed Rapporteurs.

The list of temporary advisers, consultants and members of the secretariat is attached as Annex 2.

2. WHO MEDIUM-TERM MENTAL HEALTH PROGRAMME

2.1 Summary of presentation

There are thirty-two countries or areas in the Western Pacific Region, characterized by great diversity insofar as population, level of development and culture are concerned. The main thrust of the WHO...
programme is Health for All by the Year 2000. It is therefore of greater concern that the general health programmes be upgraded than that highly specialized areas be developed. Programmes should be practical and the Regional Office should respond to requests from Member States. Prevention should be a priority objective.

The objectives of the mental health programmes of WHO are:

(a) to control and prevent psychiatric, neurological and psychosocial problems;

(b) to use mental health skills in developing general health services;

(c) to foster understanding of links between socioeconomic factors and mental wellbeing.

Collaborating centres are very important, particularly in view of the limited resources of WHO and the need to rely on resources of Member States. Use is also made of temporary advisers, advisory panels, resources centres and research seminars.

The WHO global programme, based on collaborating centres, has three sub-programmes:

(a) psychosocial aspects of health;

(b) alcohol and drug abuse;

(c) mental and neurological disorders.

Criteria for selecting collaborating centres were presented, including the national and international standing of the facility and its staff; its stability; its collaborative involvement with other institutions; its willingness to be active in country or global programmes.

Regional medium-term programme of the Regional Office for the Western Pacific (1984-1989)

The regional medium-term programme consists of the following areas:

10.1 Psychosocial factors in the promotion of health and human development;

10.2 Prevention and control of alcohol and drug abuse;

10.3 Prevention and treatment of mental and neurological disorders.

With regard to 10.1, the areas of activity decided on are:

(a) mental health in high risk groups;

(b) psychosocial aspects of health care;

(c) psychosocial consequences of rapid social change;

(d) promotion of mental health.
The various approaches necessary to pursue these areas were discussed, with emphasis on the strengthening of psychosocial research activities, which should be multidisciplinary and based on a network of collaborating centres exchanging information, experience and technical cooperation. It was agreed that comprehensive activities need to be developed through cooperation with agencies involved in environmental change. General health workers need training in psychosocial knowledge and techniques. Linkages with other programmes are important to promote knowledge in the field of mental health.

With regard to 10.2, attention was drawn to the increasingly severe and frequent alcohol abuse problems in countries of the Region. Various activities are planned in this connection:

- Collaboration with countries or areas, and other United Nations agencies, in the collation and analysis of information on alcohol and drug abuse related problems.

- Establishment of a regional information centre on the prevention and control of alcohol-related problems.

- Designation of a collaborating centre concerned with the prevention and control of alcohol-related problems.

- Organization of training at regional and national levels on the prevention and control of alcohol- and drug-related health problems.

- Epidemiological and behavioural research on alcohol and drug related problems.

With regard to 10.3, the slow development of the mental health services, based on community care, in most countries of the Region was noted, as well as the fact that some countries do not even have services. Facilities are required, not only for services, but also for training.

It is intended that training by 1989 will include training for general health workers in mental health; documentation and evaluation of the effect of preventive measures (e.g. immunization, etc.) on the prevalence of brain damaging conditions; and development of technological guidelines for the prevention and clinical management (in primary health care) of selected mental and neurological conditions in children, adults and the elderly.

2.2 Discussion

The reasons for the specific boundaries of WPRO and SEARO were discussed and it was noted that these were related to political circumstances during the 1945-1955 period.

Some concern was expressed at the relative lack of collaboration in the mental health area between WPRO and SEARO, and the considerable need for such cooperation in the ASEAN countries, especially with respect to classification.
An observation was made with regard to the medium-term time frame, it being pointed out that a good research study requires three years for planning, three years for data collection and three years for data analyses. In response to this, the flexibility of the time frames was emphasized; however, this has also to be seen against the WHO budgeting cycle which is based on a two-year period.

It was noted that three types of disciplines would be particularly useful in mental health research: behavioural sciences, disciplines involved in health systems research and epidemiology.

Another observation concerned the delay in issue of WHO research publications. In reply, it was pointed out that reports on a meeting like the present one could be produced in the Regional Office within a reasonable time frame.

The high rate of car accidents and related injuries in the Republic of Korea, as compared with Japan, was noted, and an appeal made for the development of a relevant research programme, throughout the Region. Although there is great concern in the Republic of Korea, no research work is apparently being done. The general importance of this issue throughout the Region was noted and there was agreement as to the need for a regional study in this area.

3. REPORTS BY HEADS OF CENTRES

The following reports were discussed:

3.1 WHO Collaborating Centre in Canberra (Dr P. Duncan-Jones)

The report described the following:

(a) studies of neuroses, the focus now being on statistical methods of identifying the role of personality and environment as contributing factors;

(b) Studies of dementia, including methods of detection, instrument development and the relationship of dementia to social support systems.

3.2 WHO Collaborating Centre in Beijing (Professor Shen Yucun)

The report noted the profound changes in the socioeconomic structure and in family structures in China. With the "one child one couple" policy, there has been a great increase in the proportion of the aged in the population; emphasis therefore needs to be put on child studies and on studies of aging, including related psychosocial factors.
Based on defined research areas, both rural and urban, data are now available on the prevalence of different psychoses in the elderly. Schizophrenia is the most common of these in patients over 60 (3.9 per 1,000); also common are organic cerebral vascular psychoses (3.2 per 1,000); senile dementia (Alzheimer's) (2.4 per 1,000). Rates are higher (3.7 per 1,000) in rural than in urban (1.6 per 1,000) areas.

Other activities include developing community mental health facilities; studies on diagnostic criteria for, and the classification of, major mental disorders; biological studies (transmitters, neuro-endocrine factors in schizophrenia, blood levels of drugs and electroencephalographic work); acupuncture for mental disorders; hyperkinetic syndrome in children.

Note was taken of a joint study involving Australia, Malaysia and Fiji, on the aged, which was likely to be extended to include China, Japan and Singapore.

Alcohol was also described as a newly emergent problem in Beijing. Liver enzymes are being studied there in high risk groups. It was stated that there was no alcoholism five years ago.

3.3 WHO Collaborating Centre in Chiba (Dr T.E. Doi)

The Institute is autonomous and has no working relationship with any other institute. It is small compared with the National Institute of Mental Health in U.S.A., albeit modelled on it. It advises the Ministry of Public Health regarding national policies on mental health and the promotion of research and training in mental health. The staff is small (15 psychiatrists, 3 clinical psychologists and 3 sociologists). The Institute has been quite influential and has introduced concepts of team management into Japanese psychiatry. Training is being provided for paramedical health professionals, especially social workers, clinical psychologists, psychiatric nurses and attendants.

The social and rehabilitative emphasis is prominent. Some biological work on autistic twins and normal twins is being done, together with studies on the psychobiological aspects of stress and on the detection of abnormal congenital metabolism leading to mental deficiency.

There are plans for work in family therapy; changes in psychopathology; and in epidemiology and social class.

3.4 Collaborating Centre in Kuala Lumpur (Professor P. Chen)

The report described the activities of the Departments of Social and Preventive Medicine and Psychological Medicine. Research studies include studies on traditional medicine, e.g. studies of culture-bound syndromes and on traditional healers in primary health care; and studies on health care of the elderly in conjunction with Australia, Fiji, the Philippines and the Republic of Korea. There is concern with the prevalence of dementia and depression, and the importance of social support systems was emphasized.
A number of studies on behavioural science in health were also mentioned, including various behavioural aspects of conditions such as leprosy and cholera. Other studies covered the prevalence of mental and physical disabilities and examined problems of rapid urbanization.

3.5 Collaborating Centre in the Philippines (Professor L.L. Ignacio)

The report stressed the education of undergraduate medical students in psychiatry as an integral part of medicine. There is a three-year graduate resident programme, based on the American system, but eclectic. There is a considerable need to increase the numbers of psychiatrists, who number only 150 currently, for a population of 50 million people. A shortage of teachers in psychiatry was noted.

Research has been a recent development and has included:

(a) a WHO collaborative study on strategies for extending mental health care in general health care;

(b) a WHO collaborative study on tubal ligation and psychosomatic sequelae;

(c) a WHO study on the assessment of day care centres.

The Present State Examination (PSE) has been used, with the Catego system. Four Filipino psychiatrists have been trained in the use of the PSE. Analysis of results is done locally. This study has shown that non-psychiatrists can be trained in the use of the modified shortened version of the PSE.

The Philippine National Disability Survey has been completed and is being used as a basis for planning services for the disabled.

The involvement of staff in the specific research project on mental health care has improved competence in training, and has also led to more relevant training of general psychiatrists.

3.6 WHO Collaborating Centre in Nagasaki (Professor Yoshiyumi Nakane)

The Nagasaki Department of Neuropsychiatry was founded in 1906. However, its predecessor had been established in 1872 as the Nagasaki Medical School, under the jurisdiction of the Ministry of Education. On 1 April 1923, the name was changed to the Nagasaki Medical College, at that time one of the six governmental medical colleges. The present Department has 46 beds and an outpatient clinic.

Research has focused mainly on functional psychoses - schizophrenia and depression - in collaboration with WHO international studies. Depression studies, using SADD, has extended to general practice; and to the study of low versus high dose tricycle type anti-depressant in the treatment of depression. The dexamethasone suppression test is also under study, as is the difference between oral and intravenous drug treatment of depression.
Considerable work is going on in the "Study of determinants of outcome of severe mental disorders (schizophrenia)," in which Nagasaki is one of nine participating centres worldwide.

Now being undertaken is a collaborative comparative study with Shanghai; a protocol for this study was presented.

3.7 Collaborating Centre in Nanjing (Professor Tao Kuo-Tai)

This centre is concerned with child psychiatry. It undertakes epidemiological studies on psychiatric disorders, mental retardation and hyperkinetic syndromes. These studies also include family studies, chromosome studies, follow-up studies of child schizophrenia and screening tests of intelligence. The centre has carried out the National Care Study on Child Mental Health in China supported by WHO.

The centre is involved in postgraduate training in child psychiatry and more than 40 doctors have been trained so far in child psychiatry in the country.

3.8 Collaborating Centre in Perth (Professor Allen German)

This centre is a University Department of Psychiatry & Behavioural Sciences teaching undergraduates (12 weeks of psychiatry and final examination), postgraduates (35 residents), postgraduate child psychiatry (4 residents), and Ph.D. candidates.

Research is well developed in the following areas:

(a) neuro- and electrophysiology (cerebral cortex) of psychotic disorders;

(b) epidemiology, especially with aging populations from different ethnic groups;

(c) crosscultural (or comparative ecological) studies in relationship to Africa (to date) on epidemiology and mental health delivery technologies and methods;

(d) psychological research on cognitive structures and methods of cognitive change.

3.9 WHO Collaborating Centre in Sapporo (Professor Itaru Yamashita)

There has been more psychodynamic emphasis in recent years. Research now focuses on psychopathology, and on epidemiology and therapeutic issues in endogenous and organic psychoses and neuroses in general. Work is also under way on culture-bound syndromes in the Ainu (aboriginal people) of Hokkaido.
Biological work in progress focuses on neuropathology and neuropharmacology, with psychophysiological and neurochemical work in support. The Department has three laboratories - neurophysiology, neurochemistry and neuropathology. There is special interest in benzodiazepine abuse, dependence and withdrawal and on the possible differential response of Asian peoples to tricyclic drugs. A biological study of alcohol dependence in different ethnic groups is planned.

3.10 Collaborating Centre in Seoul (1) (Professor Chae Won Kim)

Biological research is emphasized, as also is training. Attention has focused on the following: "Systemic studies of potentiation between alcohol and psychoactive drugs"; "Immunopsychopharmacological studies centering around T-lymphocyte functions"; "Problems of benzodiazepine habituation and its management"; "Carbon monoxide intoxication, acute and chronic, including delayed sequelae"; "Cross-cultural epidemiological studies of depression"; and "Psychiatric studies in haemodialysis".

3.11 Collaborating Centre in Seoul (2) - (Seoul National University, Department of Neuropsychiatry) (Professor Chung-Kyoon Lee)

The organization of clinical facilities and of teaching/training activities was described. In the field of research; epidemiological studies have continued since 1950; these include studies on suicide, urban/rural differences, alcoholism and drug abuse, symptom patterns, and changes in these with cultural change.

Biological studies have been carried out since 1929. Currently, work is concerned with bioenzymes, transmitters, neuropeptides and drugs etc. in cerebrospinal fluid. Studies of tardive dyskinesia and mechanism of action of ECT are also under way.

Psychological studies of ancient modes of Korean thought, shamanism and literature, together with the impact of westernization, have also been developed.

3.12 WHO Collaborating Centre in Shanghai (Professor Xia Zhen-yi)

This centre was founded in 1981. Researches are carried out in biological and social psychiatry. Research has focused in particular on (a) diagnostic criteria and assessment; (b) biology (genetics) of schizophrenia (twin studies-family studies); evoked potential and CNV studies in schizophrenia; HLA antigens in schizophrenic, affective and schizo-effective disorders; studies of dexamethasone suppression test; and genetic toxicology studies of psychopharmacological drugs; (c) clinical psychology studies - therapeutic increase of intellectual functioning in aged; use of MMPI in pregnant women and neurotic patients; (d) international collaboration in a study on "Housing environment, family function and child mental health" with Singapore, with WHO support.
3.13 Collaborating Centre in Tokyo (Professor Ryo Takahashi)

The Department has worked closely with the Collaborating Centre in Nagasaki, with special reference to functional psychoses: e.g. standardized assessment of patients with depressive disorders in different cultures; biological markers of affective disorders; DST in endogenous depression; platelet imipramine binding; comparison of efficacy of carbamazepine and lithium in acute and prophylactic treatment of affective disorders. Extensive work is in progress on EEGs and the EEG in psychoses, drug-induced states, and the development of automated EEG systems.

4. BEHAVIOURAL SCIENCE AND MENTAL HEALTH

4.1 Summary of Presentation (Professor Paul C.Y. Chen)

This presentation focused on the following four questions:

(i) What is health behaviour research?

(ii) How does WHO view health behaviour research?

(iii) What priorities are there?

(i) What is health behaviour research

Although disease may be the same all over the world, culture dictates the view of diseases and the response to diseases, including health care organization. Culture also influences views of etiology, diagnosis, prognosis and management of ill-health.

Human behaviour and life-style also contribute to the manifestation of diseases such as drug abuse, obesity, motor-vehicular accidents, etc. Life-style may be thought of as a style based on personal choice, cultural patterns being more the dictates of the larger group or society, both of which, alone or together, may exert profound influences on disease prevalence.

Other factors which can lead to disease are stress related to work habits and occupational hazards. Mass migration and displacement of peoples into cities are a further important factor in the creation of adverse situations and the production and promotion of diseases. Adverse factors include crime, divorce, promiscuity, drug abuse, family break-up, etc. and produce circumstances antagonistic to health and the prevention of disease and ill-health, including mental ill-health.

These factors are important, but, in the past, society has been largely blind to their relationship to illness and health. Problems of this type have been repeatedly ignored and lessons have not been learnt.
(ii) How does WHO view this form of research?

In the Regional Office for the Western Pacific, a Sub-Committee on Behavioural Science and Mental Health was set up in 1982 by the Advisory Committee on Medical Research. The Sub-Committee recommended that:

(a) There should be a review of the current status of health behaviour research in each country of the WPRO.

(b) There should be an inventory of individuals and institutions engaged in health behaviour research in the Region.

(c) There should be at least one collaborative centre for health behaviour research in the Region by 1985 and

(d) Multicentre and multidisciplinary studies should be mounted between collaborating centres in the Region.

(iii) What are the priority areas for health behaviour research?

(a) Lifestyle threats
e.g. smoking, alcohol, automobile abuse, sexual promiscuity, etc.

(b) Specific health problems and diseases
 e.g. nutrition, cardiovascular, leprosy, schistosomiasis, etc.

(c) Intervention strategies
 e.g. design of health education programmes, community participation, "compliance" with control programmes, self-referral of the ill, active case-finding by health workers, etc.

(d) Mass migration and urbanization
 e.g. delinquency, divorce, illegitimacy, prostitution, sexually transmitted disease, etc.

4.2 Discussion

Some doubt was expressed as to the ability of social and behavioural scientists to effect change. Team work, involving public, government and influential groups, was seen as a necessary factor if success is to be achieved. Opposition groups, such as large commercial interests in alcohol and tobacco, need to be combated through political lobbying.

Health organizations and ministries are not always responsible for areas of pertinent social problems; thus intersectoral collaboration is important, as is the setting up of mental health coordinating groups, as recommended by WHO. However, problems remain in setting them up. In many countries the health sector, not to speak of the mental health sector, is very weak with respect to social concerns. In the face of this dilemma, it is important to identify problems which governments and peoples accept as important - such as drug abuse, alcoholism, etc. - and demonstrate that these are part of the mental health area. Inclusion of mental health in primary health care is also politically important, especially in developing countries.
It was stressed that situations differ between developing and more
developed societies and that collaborating links should be forged with this
in mind.

It was also emphasized that research may be easier than intervention
based on research, which, however is more likely to be accepted by policy
makers.

5. TRAINING IN MENTAL HEALTH

5.1 World Health Organization (Dr N. Shinfuku)

Dr Shinfuku presented the framework of training in WHO in mental
health principles:

(i) Health for all by year 2000

It is important to upgrade the basic mental health services
rather than develop specialized ones.

(ii) Training should be carried out through technical cooperation
among developing countries.

(iii) Mental health should be incorporated in primary health care.

(iv) Training should be relevant to the needs of Member States.

(v) The socioeconomic and cultural background should be considered.

This must be seen against the prevailing situation: with 1% of the
population mentally ill, and 70% of women and 40% of men expected to
experience emotional illness in their lifetime. Worldwide, 40 million are
seriously mentally ill, and 250 million have problems with neuroses and
drug abuse.

The psychiatrist/patient ratio varies from 1 psychiatrist to 80
"seriously mentally ill" in the most affluent country to 1 for 50 000
similarly ill in one of the least developed countries.

Constraints are:

(i) The low priority of mental health in national health programmes;

(ii) The uneven distribution of resources;

(iii) The brain-drain from the poorer to the more affluent areas.
It was noted that approaches need to be nationwide - e.g. multisectoral (National Mental Health Coordinating Committees) and that means of making appropriate drugs available at different levels are needed.

**Priorities:**

(i) Service development in primary health care of mental health
(ii) Promotion of community-based mental health care
(iii) National policies and programme development in mental health
(iv) Prevention and control of alcohol-related problems
(v) Prevention and control of drug abuse.

5.2 **Perth (Professor G. Allen German)**

Professor German stressed the importance of the principles of decentralization and delegation in mental health care and described a variety of field programmes aimed at training mental health workers at the community (primary health care) level. These programmes focus on practical techniques that can be used for management of mental illnesses. Much of this experience has been acquired in east and southern Africa, and the Seychelles. Flow charts have been used to assist in mental health management and have proved sufficiently flexible to be useful to a variety of health workers.

In the mental health field, it has proved possible to classify all mental health problems into eight presenting categories; a list of about 12 symptoms within each category is sufficient to allow for categorization. By way of flow charts, mental health management can be satisfactorily provided. However, the 40-50 management procedures need to be adapted to local conditions in accordance with the level of sophistication of the location, and of the health workers using the charts.

In an evaluation study carried out in Nigeria, it was possible to show that 95% of high school trainees had a positive correlation with the management procedures selected by psychiatrists, indicating the reliability of such a method of management by health care workers.

**Discussion**

It was noted that psychiatric nurses do not do as well as high school trainees in using flow charts, because they tend to take "short cuts" and make their own management decisions, indicating that it is essential to stick to the flow charts and not to take "short cuts". Consequently, supervision seems to be best done by "young residents" rather than experienced psychiatrists. Unfortunately, many experienced psychiatrists resist such kinds of "delegation" of psychiatric skills. One answer might be to include in the undergraduate and postgraduate training programme some substantial time with such health workers.

As regards collaborative efforts, it might well be of cost benefit to exchange trainers and teachers between centres, rather than students.
Flow chart technologies seem to be best used by non-psychiatric trained staff – unless they are introduced early into training. Charts should be developed to various levels of sophistication to suit different cadres of staff, including medical students.

There is, in some places, difficulty in persuading professional medical bodies and ministries of health to permit delegation of psychiatric and medical skills to other workers.

5.3 **Manila (Dr L. Ignacio)**

Dr Ignacio emphasized that it is feasible to develop task-oriented methods of training which are capable of enabling primary health workers to undertake substantial areas of mental health care.

The project includes identifying the profile of health needs at grassroots level; identifying health workers and the range of their skills; identifying the attitudes of these health workers to mental health; and the additional knowledge and skills they require to be effective in mental health areas. Teachers require to be intimately familiar with conditions as they apply in, for example, village health centres.

Training needs to be simple; in the language of the people; task-oriented; and concerned also with, not only diagnostic and management skills, but also educational skills concerning mental health and disease. Priority conditions have been selected in the Philippines, rather than equipping primary workers with skills in all areas. Training materials have been developed, including questionnaires for use by primary health workers to assist them in asking meaningful questions which help discriminate between different syndromes, and which can be used as screening tools. Flow charts prepared for different diagnostic groups have proved useful as auxiliary tools in diagnosis and management. It is important, also, not to neglect the changes required in the attitudes and skills of psychiatrists and others involved in teaching, training and supervision and the need for them to change their roles.

The discussion then focused on the need to extend training to involve professionals such as physicians; on various levels of training of the health personnel involved; and on psychotropic drugs used at the primary health care level the range of which is very restricted. It was pointed out that primary health care approaches in mental health are also appropriate in developed countries, particularly those which still retain a highly centralized and institutionalized system of mental health care.

The importance of changing the attitudes of health workers was emphasized, especially the need to sensitize them to psychosocial matters.
6. COLLABORATIVE RESEARCH

6.1 General discussion

6.1.1 Canberra (Dr Paul Duncan-Jones)

Dr Duncan-Jones presented a proposed epidemiological study of neurotic disorders, the preparatory work on which is not yet completed. The study could be the basis for a collaborative study, but, if so, it will be essential to reach a consensus on the theoretical background and the study design. There are four reasons why one should study neurosis: it is very common; it causes much suffering; it causes much economic loss; and the majority do not receive medical help.

The study aims to define prevalence, incidence and etiology. No data are available on inception rates for neurosis or duration of neurotic episodes. The latter is difficult to measure but possible, using a probability model. Data are also sought on etiology, looking not at a patient series (in treatment facilities), but at a community cohort. A community survey is required.

The etiology is probably multifactorial, constitutional, genetic, with acute factors determining the onset of episodes. Childhood experiences may also be important.

Twin studies are also required, together with physiological measures, personality scales, adult reports and family histories. Current illness (e.g. depression) may contaminate and distort reports but methodologies can be developed to get around this. Stress-impact could possibly be measured using selected psychophysiological measures in the field.

The proposed study will be longitudinal, with assessments of some people carried out several times over several (three) years.

With regard to the assessment of psychopathology, two alternatives are possible:

(1) standardized psychiatric interview (e.g. Present State Examination) of all subjects, using lay interviewers, or

(2) questionnaire screening, standardized interview of sub-sample, then adjustment of the screening test according to sub-sample results.

Various statistical models of etiological possibilities were presented. Long-term vulnerability factors account for 70% and short-term factors for 30% of the variance (known from pilot studies).

Of long-term vulnerability, trait neuroticism accounts for 44% and other vulnerabilities for 25% (total 70%).
Preparatory steps include:

(1) computer simulation of statistical models

(2) sub-studies which would be worthwhile done as collaborative studies.

Discussion

It was observed that at least two dichronic assessments would be needed, but it would be better to do at least four assessments; thus a sample of about 1 000 is needed of the general population. With an aged population, contamination from other disorders may make it very hard indeed to isolate out key neurotic phenomena. Thus the upper age limit would probably be 65 years.

6.1.2 Chiba (Dr Takeo Doi)

Dr Doi proposed a collaborative study on mental health delivery in the Western Pacific Region. He considered this to be important because the length of hospitalization in Japan is much longer than in other developed societies, and is increasing. This was said to be due to the profit-seeking motives of private hospitals. However, Dr Doi did not agree with the statement that psychiatry in Japan is backward and was skeptical of the moralistic criticisms put forward. Only a proper study, on a collaborative basis, could clarify such matters. It was felt that socio-cultural factors may explain this aspect of Japanese psychiatry. It was noted that in Hawaii, Japanese-American people are admitted less frequently to mental hospitals but, on the other hand, remain longer in hospital than other groups. It is believed that early diagnosis is reluctantly undertaken in Japanese people and that once admitted, family support is withdrawn and discharge is difficult.

Hospital care in Japan costs much less than in the United States (US$22.5 as compared with US$200-300), which may permit a longer stay in Japan. More neutral investigations of this phenomenon, and for comparisons with more comparable developed countries are necessary.

Discussion

It was noted that the Health Commission of Victoria is collecting profile data on mental health delivery systems in the Region in ten countries. Dr Doi's study would need a comparable country, in terms of development, insurance system, etc., but preferably with a different socio-cultural setting for a collaborative study: possibly Western Australia would meet this requirement.

6.1.3 Tokyo (Professor Kyo Takahashi)

Professor Takahashi proposed a biological study of mental disorders using an automatic EEG analyser. He said that it is often maintained that there is a central nervous system dysfunction in behaviour-problem children, hyperkinetic children and "minimal brain damaged" children.
There is much controversy over this - partly due to the variability of reports of visually interpreted EEGs, partly due to differences in diagnostic criteria for these clinical groups. A population-based study, rather than a clinic-patient study, would be needed. Such a study would require formal definition of clinical groups; construction of a questionnaire for parents and teachers and a defined catchment area; questionnaire-respondents would need to visit an institute for EEGs etc. EEG technology, and methods of assessment, require to be standardized across different investigators. A description was given of the automated EEG technology.

6.1.4 Sapporo, (Professor I. Yamashita)

Professor Yamashita made a proposal on psychopharmacology - specifically on a biological study of the alcohol-dependence syndrome with particular reference to ethnic differences. Oriental people are reported to flush after the ingestion of quantities of alcohol that have no effect in occidental people. It has been suggested that low rates of alcohol-abuse among orientals are due to such physiological differences.

If this problem can be elucidated physiologically, it may become possible to detect individuals and races at risk. It is not suggested that these biological factors can replace the broader concept of alcohol-abuse as a socio-psycho-biological disorder. Enzyme ALDH-1 has been shown to be deficient in 40% of orientals but always present in occidentals. As a result, these 40% accumulate acetaldehyde during alcohol metabolism, which leads to a flushing response and unpleasant fall of blood pressure. Very few habitual drinkers are deficient in ALDH-1, so that the absence of this substance seems to protect against alcoholism. Disulphiram has some indirect inhibitory effect on ALDH-1, but the development of drugs which directly inhibit ALDH-1 seems highly desirable.

6.1.5 Shanghai, (Professor Xia Zhen-yi)

Professor Zhen-yi presented a proposal for a study on the psychosocial aspects of health, which is an area of major concern to WHO. The concept is a broad one, so it is necessary to select certain aspects and give these priority for study inasmuch as they are within the capacity of centres to study.

For this reason, the following were proposed:

(1) Research on methodology and instruments. There are many such instruments, but few are likely to be suitable in the Western Pacific Region for cultural reasons. This problem requires to be studied, and instruments need to be standardized for regional research.

(2) Diagnostic factors need to be clarified, e.g. those that support the diagnosis of neurasthenia, which, in China and Japan, is thought to have a relationship to psychosocial factors.
(3) Research on psychosomatic diseases and psychosocial factors is important. Not all diseases can be studied. Psychosomatic disorders are more likely than other conditions to show useful results in terms of psychosocial factors.

(4) Research on psychological counselling and psychotherapy in different psychosocial circumstances, and on the applicability of these approaches to different social and cultural groups.

6.1.6 Nanjing, (Professor Tao Kuo-Tai)

Professor Kuo-Tai proposed a collaborative examination of family structure, family size and child mental health. He noted the declining family size, especially in China, and queried the effect of this on the mental health of children. Proposals were made for the standardizing of instruments to assess family conditions, parental attitudes to child rearing, child development and rearing patterns, and child mental health status.

Discussion

It was observed that possibilities of crosscountry studies in this area seem to be very relevant and important, as family structures are changing throughout the region.

6.2 Summaries of research proposals

6.2.1 CHIBA

(1) Title of research

Comparative Study of the Mental Health Delivery System

(2) Background of research

It is often argued whether a country's mental health services are advanced or backward. They may be the product of social and cultural factors, which need to be investigated in order to get an accurate picture of how the system works.

(3) Objectives of research

Realistic appraisal of the adequacy of the mental health delivery systems in any given country.

(4) Description of research (methodology and research design)

Collection and analysis of statistical data relating to mental health, and demographic and cultural data of the participating countries.
(5) **Expected outcome**

Besides the above-mentioned objective, the study will shed light on the relationship between mental health and socio-cultural factors.

(6) **Duration of research**

One year.

(7) **Estimate of funds needed, (specify main items for expenditure)**

The travelling expenses of the investigators to one another's country for consultation and conference.

(8) **Participating centres**

Perth, Shanghai, Kuala Lumpur and Manila.

(9) **Responsible centre**

Japan's National Institute of Mental Health in Chiba.

6.2.2 **MANILA**

(1) **Title of research**

Utilization of Management Outlines (Flow Charts) as tools in training primary health workers in mental health.

(2) **Background of proposal**

Studies have shown the feasibility of training primary health workers to undertake mental health care. Among the training tools, flow charts have been shown in one country in the Western Pacific to be useful. It may be worthwhile to find out how useful it is in other area/areas in the Region.

(3) **Objectives**

The general hypotheses to be tested are: (1) it is possible to develop flow charts for selected psychiatric conditions in the area; (2) the health workers will respond positively if these flow charts are the main tools in their training.

(4) **Methods**

Training design will use the flow charts as the main tools. Assessment will be undertaken of health workers before and after training. Instruments to be used in this assessment will utilize those now available in Manila.
(5) **Results (expected outcome)**

Flow charts for psychiatric conditions designed will be specific for participating centres. Active participation by health workers in responding to their patients' psychosocial problems will be observed.

(6) **Duration of project:**

18 to 24 months.

(7) **Estimate of needed funds**

This will need time to assess and depend on the number of participating centres.

(8) **Participating centres**

Manila, Kuala Lumpur, Sapporo and/or Nagasaki and another area (among the South Pacific islands) where the dearth of mental health services makes it imperative to develop mental health care in primary health care.

(9) **Responsible centre**

Manila, Philippines.

6.2.3 **NAGASAKI**

(1) **Title of research**

Clarification of criteria for psychiatric diagnosis in the countries of the Western Pacific Region.

(2) **Background**

There are many differences in the prevalence rates of mental disorders among some countries or areas in the Western Pacific Region. This may be due to the use of different diagnostic criteria.

(3) **Objectives**

This phenomenon needs further investigation to see whether these differences are real or are caused by diagnostic habits.

(4) **Description of method and research design**

There will be a discussion of cases, including live interviews, put forward by each centre, using common diagnostic instruments like PSE, ICD-9, DSM-III, etc.

(5) **Expected outcome**

It should be shown whether or not there exist major or minor differences between countries of the Western Pacific Region, leading to interventions which will contribute to solving these problems.
6.2.4 PERTH

(1) Title of research

Studies of mental disorder in aging populations.

(2) Background of research

There has been much concern over the increasing numbers of the aged population in various countries. Required are the development of screening instruments for depression and dementia especially; and an epidemiological study, using these, to establish prevalence rates for various populations.

(3) Objectives of research

To develop tools for the early detection of depression/dementia; to field test these in terms of reliability and validity; and to use these to establish prevalence rates. There should be a psychosocial component to this type of research.

(4) Description of research (methodology and research design)

To be developed, using work already undertaken in Canberra as a model.

(5) Expected outcome

Completed multi-country prevalence study with instruments developed for assessment of these problems, suitable for use in the primary health care sector.

(6) Duration of research

Five years.

(7) Estimate of funds needed (specify main items for expenditure)

Not yet worked out.
(8) Participating centres
Beijing, Canberra, Perth, Kuala Lumpur, Nanjing.

(9) Responsible centre
Canberra (Professor Scott Henderson)
Collaborating investigator in Perth would be Professor Peter Burvill.

6.2.5 SAPPORO

(1) Title of research
Biological studies of the alcohol dependence syndrome with particular reference to ethnic differences.

(2) Background of research
About 40% of Japanese, but no Caucasians, show acetaldehyde dehydrogenase (ALDH)-1 deficiency, which produces flushing more easily after alcohol ingestion, and thus tends to prevent the development of the drinking habit and hence the alcohol-dependence syndrome.

(3) Objectives of research
To determine the exact distributions of ALDH-1 deficient individuals among Asian populations by estimating ALDH activity from human hair roots.

(4) Description of research (methodology and research design)
To collect 30 to 40 hair roots from normal volunteers or schizophrenic subjects in each locality and send them to the Sapporo Centre, where ALDH activities of the collected sample will be estimated using isoelectric focusing techniques.

(5) Expected outcome
Determination of the susceptibility of a given population to alcoholism will permit the planning of countermeasures to deal with alcohol-related problems more effectively, including future development of appropriate drugs to inhibit ALDH-1 selectively.

(6) Duration of research
Six months for participating centres and two to three years for those areas undertaking studies for special purposes.
(7) **Estimate of funds needed (specify main items for expenditures)**

(a) Travel to various districts for population investigation and sample collection  
   US$15,000

(b) Shipment of samples  
   2,000

(c) Estimation of samples  
   2,000

(d) Fees for volunteers  
   1,000

**Total**  
US$20,000

(8) **Participating centres**

Perth, Seoul.

(9) **Responsible centre**

Sapporo.

6.2.6 **TOKYO**

(1) **Title of research**

Biopsychosocial studies on children with emotional-behavioural problems.

(2) **Background of research**

Emotional and behavioural problems of children are important mental disorders, requiring study. They have emerged rapidly following the disintegration of the family system in countries in the Western Pacific Region. Recent studies have shown that these disorders are probably caused by both biological and psychosocial factors.

(3) **Objectives of research**

To carry out a study of the prevalence of emotional/behavioural problems in children, and to compare these with normal children from the viewpoint of neurophysiology and psychosocial background.

(4) **Description of research**

Collect school children aged 6 to 15 and study the following aspects:

(a) psychological background of parents and child, using various psychological tests;

(b) social background, e.g. structure, composition of family, occupation of family, economic status, education, residence, ethnic background;

(c) visual EEG examination; automatic quantitative EEG analysis.
(5) **Expected outcome**

Correlation between, and identification of psycho-social-biological status of children with emotional and behavioural problems, and prevention and early treatment of such problems.

(6) **Duration**

Three years

1985 - screening subjects, history-taking, training for standardized EEG examination.

1985-1987 main field work.

(7) **Estimate of funds needed**

EEG paper and cassette magnetic tape:
(five minutes per case)

200 cases (100 subjects and 100 controls) per centre

200 cases x 8 centres = 1,600 cases

Cost per 100 cases = US$4256

Total cost - 16 x US$256 = US$4,096

4 magnetic recorders for 4 centres = 8,000

Aid for technical assistance for 1,600 cases

EEG examination US$840 x 8 centres = 6,720

Total funds needed = US$18,816

(8) **Participating centres**

Perth, Nanjing, Seoul (Dr Kim)

(9) **Responsible centre**

Tokyo.

7. **FIELD VISIT**

A field visit to the National Musashi Research Institute for Mental and Nervous Diseases, Kodaira, Tokyo, was organized on the afternoon of 3 October; almost all participants (13 persons) in the meeting joined in this visit. The Director of the Institute, Dr Y. Shimazono, and the senior staff welcomed the participants and gave general information about the structure and function of the Institute.
The Institute is one of the largest national hospitals for mental and nervous diseases in Japan, with 860 beds (660 beds for psychiatry) and 422 medical staff members. Participants visited the Day Care Section, and the EEG Laboratory. At the Day Care Section, it was explained that 30 registered patients and 6 trial patients were taking part in group activities of a therapeutic nature five days a week. At the EEG laboratory, staff demonstrated clinical examinations using simultaneous recording, telemetry and evoked response recording.

The participants then visited the Research Centre, where the Director, Dr. E. Satoyoshi, described briefly the functions of this centre. Researches directly related to mental disorders were described by Dr. H. Narusa, who discussed the recent finding of in vivo metabolic changes in patients with depression and infantile autism, using stable isotopic techniques. Dr. M. Toru reported on the results of studies of the biochemical structure of neurotransmitters and neuropeptides in postmortem brain samples of chronic schizophrenic. A short session for questions and answers followed.

8. MANAGEMENT OF WHO COLLABORATING CENTRES

8.1 International health work undertaken through WHO Collaborating Centres (Attached as Annex 5).

An Information Booklet on WHO Supported Research was presented by the Regional Adviser in Mental Health. The introduction of this information booklet stresses the responsibility of WHO for promoting and supporting health research. Once centralized in Geneva, this activity has now been largely decentralized to the regions and should be carried out in existing institutions. It was noted that WHO is now implementing the 1984-1989 Seventh General Programme of Work and that the Organization can consequently only support research which is in accordance with that programme.

Health research, to be effective, must find solutions to the health-related problems of Member States. In the developing world in particular WHO cannot afford to support research just for its own sake. Research must be pragmatic and realistic.

Mechanisms for promoting research

(i) Research training grants

It was observed that priority is given to nationals of developing countries.
(ii) WHO Regional Office for the Western Pacific Research Grants

Such grants may be applied for directly to the Regional Office, or through the national governments. Receipt will be acknowledged. Application is then screened at the Regional Office, particular emphasis being placed on the relevance of the proposal to regional programmes. If acceptable, the application is then submitted to assessors for external review in terms of scientific quality, technical feasibility etc. A further internal and ethical review is then undertaken. Following signing of a Technical Services Agreement, the grant is awarded, subject to regular reports and monitoring.

Examples of relevant research studies were demonstrated based on the Information Booklet. Application forms for research grants were also demonstrated and distributed.

If a research grant is sought for a collaborative study, only one of the chief investigators should apply for research funds. The grant will be made to that centre which, it is agreed should manage the research. It was emphasized that multicentre studies can best be promoted and coordinated if one person or one institution assumes at least administrative responsibility for the project. The manager may be a chief investigator or an external consultant. In some cases, this may require special arrangements since research circumstances vary, as does the "mix" of researchers and collaborating centres - and also the type of questions under consideration.

9. MECHANISMS FOR RESEARCH COLLABORATION AMONG CENTRES

It was observed that WHO should assume a coordinating role and should collect and disseminate information within and outside the Region. Communication is often inefficient between centres; a central facility is mandatory. Examples were given.

Centres doing collaborative work should be involved from the beginning for example in the conceptualization of each project. Technical as well as financial support needs to be assured. Roles and functions must be clearly defined from the start, and easy communication between investigators should be facilitated.

A series of further papers (Professor T. Doi, Professor Y. Nakane, Professor Chung-Kyoon Lee, Dr Tao Kuo-Tai, Professor Allen German and Professor Yamashita) emphasized the need for communication mechanisms, and the central role of the Regional Office for the Western Pacific in this respect. All papers emphasized the need for regular meetings and workshops.
Also emphasized was the need for:

(i) exchange of visits of principal members
(ii) exchange of young trainees
(iii) exchange of test samples and details of researches.

Work must be realistic and efficiency-oriented.

This general consensus, with emphasis on improved communication methods, was further underscored by Professor Xia Zhen-yi and Professor Ryo Takahashi. There is clearly, therefore, a deeply felt and real need for a system of information exchange to be organized through the Regional Office and for an increase in opportunities for face-to-face contacts in meetings, workshops and study visits. The mechanisms for collaboration in specific studies will vary. The issue was raised as to whether collaborative-research would always reflect regional priorities; often centres are linked on the basis of common interests which may not necessarily reflect regional needs. It was agreed that the Regional Office for the Western Pacific is in the best position to assess regional needs and resources, and should perhaps accept some responsibility for "contracting out" problems to certain collaborating centres, and even take responsibility for providing some degree of direction to centres.

10. RECOMMENDATIONS

Preamble

In the Western Pacific Region, there is an urgent need to promote contacts and communications between regional collaborating centres in the field of mental health and the neurosciences, as well as with other centres, groups and individuals actively involved in aspects of the WHO mental health programme.

The Group found this meeting to be of outstanding value in promoting knowledge of needs, resources and WHO objectives throughout the Region. Particularly useful were the contacts with colleagues from diverse backgrounds.

Recommendation 1

The Group recommends that, in pursuit of the goal of health for all by the year 2000, the resources of all collaborating centres should be mobilized to promote the training of all health care workers (including general practitioners) in mental health, so as to facilitate the delivery of mental health care at the primary health care level (i.e. in the community) in all Member States.
Recommendation 2

The group recommends that WHO should further support and promote health behaviour and mental health research. The following topics, at the present time, are considered to have priority, and to be feasible within the Region:

(i) Mental health delivery systems
(ii) Epidemiological studies of psychiatric disorders
(iii) Studies of children with emotional and behavioural problems
(iv) The training of primary health workers in mental health
(v) Clarification of criteria for psychiatric diagnosis (with respect to diagnostic concepts used in the Region)
(vi) Studies of mental disorders in aging populations
(vii) Studies of the psychosocial and biological aspects of alcohol dependence and alcohol-related problems in different ethnic groups and cultures.

Recommendation 3

It is recommended that similar meetings be held; in particular, a second meeting of the Group should be held in the near future to review progress made and to further clarify collaborative activities in research and training.

Recommendation 4

The Group recommends that, as soon as possible, WHO should conclude official arrangements to permit the designation of collaborating centres in Nanjing (Nanjing Child Mental Research Centre), Perth (University of Western Australia Department of Psychiatry and Behavioural Science) and Tokyo (Department of Neuropsychiatry, Tokyo Medical and Dental University).

Recommendation 5

The Group affirms the relevance of the medium-term mental health programme of WHO, and recommends that all necessary measures should be undertaken to achieve the goals and targets of this programme within the Western Pacific Region.

In respect of the following recommendation (recommendation 6), it should be noted

(i) that the WHO definition of health is a state of physical, mental and social well being; however, in many Member States, the mental aspect of health is seriously neglected; and
(ii) that research has shown that neglect of human behavioural and mental health issues has contributed, and continues to contribute to problems which adversely affect the prevention and management of disease, alcohol and drug abuse, break up of the family and other social evils.

Recommendation 6

The Group recommends that Member States should give higher priority to mental health issues, particularly in relation to the integration of mental health care into primary health care. Attention is also directed to the relevance of human behaviour in the causation, maintenance and treatment of physical diseases; and to the fact that many destructive mental health problems and behaviours can be readily prevented or changed.
OPENING SPEECH OF THE REGIONAL DIRECTOR
AT THE MEETING OF HEADS OF WHO COLLABORATING CENTRES
FOR MENTAL HEALTH
TOKYO, 1-4 OCTOBER 1984

Distinguished Participants, Ladies and Gentlemen,

I have great pleasure in welcoming you all to this opening session and in thanking you, on behalf of the World Health Organization, for your cordial cooperation and participation in this important meeting of Heads of WHO Collaborating Centres for Mental Health in the Western Pacific Region.

First, allow me to express my sincere thanks to the Government of Japan for agreeing to hold this meeting in Japan. I am particularly grateful to Tokyo Medical and Dental School and its staff members for their excellent cooperation and great efforts made in the preparation of the Meeting.

Over the past decade, increasing concern has been expressed with psychosocial and mental health problems in countries of the Region. During a number of regional meetings, representatives have voiced the need to deal more appropriately with the challenging problems in the mental health field and to improve the delivery of mental health care.

Alcoholism, drug abuse, behavioural disorders of children and adolescents, and mental health problems of the aged population are becoming major public health issues in many developing as well as developed countries.

Training and research in mental health, although fundamental components of national health programmes, are still inadequate and poorly organized. Mental health resources are unevenly distributed between developed and developing countries. There is an urgent need, therefore, to promote training and research in mental health at regional level in a more concerted and coordinated manner. Maximum use of the expertise and resources available in WHO Collaborating Centres in Mental Health needs to be made as a prerequisite of regional mental health programme development.

As you know, this Meeting is being held at a critical stage, when all the Member States of WHO are already committed to achieving the goal of health for all by the year 2000.

Mental health is an important aspect of health, which WHO defines in its Constitution as a state of physical, mental and social wellbeing.
Annex 1

Recent years have witnessed big strides in the development of WHO collaborating centres for mental health in the Western Pacific Region. In addition to the existing four centres in Japan and Malaysia, another four WHO collaborating centres were designated in China in 1982, two for mental health and two for neurosciences. In 1983, a new WHO collaborating centre for the epidemiology of mental disorders was designated for the first time in Australia. Thus, at present, there are nine WHO collaborating centres for mental health in the Region, including two centres for neurosciences and one for drug dependency study. Also, several centres in the Region, in Nanjing, Tokyo and Perth, are being proposed as new WHO collaborating centres for mental health.

As some of these WHO collaborating centres have only recently been established, efforts are needed to promote their inter-action and coordination. I trust, therefore, that your deliberations during the coming four days will succeed in achieving an objective of the meeting, which is to promote coordination between centres.

I consider it crucial that, as an outcome of this meeting, you are asked actually to embark on collaborative research and training activities in some priority areas of mental health programmes of WHO.

The World Health Organization will be more than willing to serve as a catalyst or coordinating agency in promoting training and research on mental health in the Region.

Similarly, it is hoped that this meeting will provide a basis for the continuing development of regional research and training programmes. Better coordination and collaboration among WHO collaborating centres are the key to successful regional mental health programmes.

All members attending this meeting are distinguished experts in the field of mental health and behavioural sciences and I therefore look forward with great interest to receiving the results of your deliberations and recommendations.

To conclude, let me express my sincere thanks to Dr Takeo Doi for his thoughtful advice on the organization of this meeting. I would also like to extend my gratitude to Professor Ryo Takahashi, national coordinator of the meeting, and to the staff members of the Department of Psychiatry at Tokyo Medical and Dental School for their dedication. Without their assistance, this meeting could not have been realized.

I wish you fruitful deliberations and a successful meeting. Thank you.
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Japan

3. **Secretariat**

Dr Naotaka Shinfuku  
Regional Adviser in Mental Health  
WHO Regional Office for the Western Pacific  
Manila  
Philippines
ANNEX 3

TERMS OF REFERENCE

1. To review past major achievements, present status and future plans of each collaborating centre, in the areas of training and research;

2. To discuss ways of promoting coordination between centres and to develop collaborative research activities and training in line with the Medium-Term Programme of Mental Health under the Seventh General Programme of Work.
## ANNEX 4

### NAMES OF WHO COLLABORATING CENTRES IN MENTAL HEALTH/NEUROSCIENCES

<table>
<thead>
<tr>
<th>Name of Institute and Head</th>
<th>Field</th>
<th>Date of Designation</th>
</tr>
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<tbody>
<tr>
<td><strong>1. Department of Psychiatry &amp; Neurology</strong>&lt;br&gt;School of Medicine&lt;br&gt;Hokkaido University&lt;br&gt;Hokkaido, Japan&lt;br&gt;(Professor I. Yamashita)</td>
<td>WHO Collaborating Centre for the Study of Psychotropic Drugs</td>
<td>1967</td>
</tr>
<tr>
<td><strong>2. National Drug Research Centre</strong>&lt;br&gt;Universiti Sains Malaysia&lt;br&gt;Minden, Pulau Pinang&lt;br&gt;Penang, Malaysia&lt;br&gt;(Dr Viz Navaratnam)</td>
<td>WHO Collaborating Centre for Research and Training in Drug Dependence</td>
<td>July 1979</td>
</tr>
<tr>
<td><strong>3. Department of Neuropsychiatry</strong>&lt;br&gt;Nagasaki University&lt;br&gt;School of Medicine&lt;br&gt;Nagasaki, Japan&lt;br&gt;(Professor Y. Nakane)</td>
<td>WHO Collaborating Centre for Research in Functional Psychoses</td>
<td>August 1979</td>
</tr>
<tr>
<td><strong>4. National Institute of Mental Health</strong>&lt;br&gt;1-7-3 Konodai, Ichikawa City&lt;br&gt;Chiba-ken, Japan&lt;br&gt;(Dr Takeo Doi)</td>
<td>WHO Collaborating Centre for Research and Training in Mental Health</td>
<td>May 1981</td>
</tr>
<tr>
<td><strong>5. Beijing Institute of Neurosurgery</strong>&lt;br&gt;Beijing, China&lt;br&gt;(Dr Wang Chung-Cheng)</td>
<td>WHO Collaborating Centre for Research and Training in Neurosciences</td>
<td>January 1982</td>
</tr>
<tr>
<td><strong>6. Hua-Shan Hospital</strong>&lt;br&gt;First Medical College&lt;br&gt;Shanghai, China&lt;br&gt;(Professor Shih Yu-quan)</td>
<td>WHO Collaborating Centre for Research and Training in Neurosciences</td>
<td>January 1982</td>
</tr>
<tr>
<td><strong>7. Institute of Mental Health</strong>&lt;br&gt;Beijing Medical College&lt;br&gt;Beijing, China&lt;br&gt;(Dr Shen Yu-cun)</td>
<td>WHO Collaborating Centre for Research and Training in Mental Health</td>
<td>February 1982</td>
</tr>
<tr>
<td><strong>8. Municipal Psychiatric Hospital of Shanghai</strong>&lt;br&gt;600 Wan Pin Nan Road&lt;br&gt;Shanghai, China&lt;br&gt;(Dr Xia Zhen-yi)</td>
<td>WHO Collaborating Centre for Research and Training in Mental Health</td>
<td>February 1982</td>
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### Annex 4

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<tr>
<th>Name of Institute and Head</th>
<th>Field</th>
<th>Date of Designation</th>
</tr>
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<tbody>
<tr>
<td><strong>9. Social Psychiatry Research Unit</strong>&lt;br&gt; National Health and Medical Research Council&lt;br&gt; Australia National University&lt;br&gt; Canberra, Australia&lt;br&gt; (Dr A.S. Henderson)</td>
<td>WHO Collaborating Centre for the Epidemiology of Mental Disorders</td>
<td>November 1983</td>
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</table>
INTERNATIONAL HEALTH WORK UNDERTAKEN THROUGH WHO COLLABORATING CENTRES

Prepared by: Dr Y. H. Paik

Introduction

The idea of using national institutions for international health purposes dates back to the days of the League of Nations, when national laboratories were first designated as reference centres for the standardization of biological products. As soon as WHO was established, it appointed more reference centres, starting in 1947 the World Influenza Centre in London for worldwide surveillance of influenza. The number of such centres increased rapidly from 1958 onwards with the expansion of WHO's intensified programme of health research.

A WHO Collaborating Centre is an institution designated by the Director-General to form part of an international collaborative network carrying out activities to support the organization's programme at the country, intercountry, regional, interregional and global levels, as appropriate. Institutions that possess the necessary expertise on facilities may be requested by WHO to fulfill a specific function or range of functions related to the WHO programme.

Functions of WHO Collaborating Centres

The functions of WHO Collaborating Centres, severally or collectively, include the following:

(a) collection, collation and dissemination of information;

(b) standardization of terminology and nomenclature, of technology, of diagnostic, therapeutic and prophylactic substances, and of methods and procedures;

(c) development and application of appropriate technology;

(d) provision of reference substances and other services;

(e) participation in collaborative research developed under the Organization's leadership, including the planning, conduct, monitoring and evaluation of research, as well as promotion of the application of the results of research;

1Chief, Research Promotion and Development, WHO Regional Office for the Western Pacific, Manila, Philippines.
Annex 5

(f) training, including research training; and

(g) the coordination of activities carried out by several institutions on a given subject.

A WHO Collaborating Centre participates on a contractual basis in cooperative programmes supported by WHO at all levels. It also contributes to increasingly technical cooperation with and among countries by providing them with information, services and advice, and by stimulating and supporting research and training.

Special importance must be attached to the exchange of scientific technical information between centres and other concerned institutions within or outside the country, particularly those forming part of the same WHO collaborative network. The WHO Collaborating Centres are used in various fields, for the purpose of standardization of terminology and nomenclature, of diagnostic, therapeutic and prophylactic substances, of techniques, methods and procedures, etc. Standardization is typically a global function, devolving upon the central echelon of the WHO secretariat, but it benefits all Member States by developing common denominators and a universal language allowing for better international understanding and easier comparison of data on a worldwide or regional basis.

The example of collaborative work in dissemination of information has been well demonstrated in the worldwide programme of epidemiological surveillance of influenza, for instance, two WHO collaborating centres receive from 101 national laboratories in 72 countries epidemiological information on outbreaks of influenza, which is made available to all Member States through WHO's permanent telex service and the Weekly Epidemiological Record.

Since the inception in 1958 of WHO's intensified programme of medical research, the research function of the WHO Collaborating Centres has acquired a growing and rapidly predominant importance. It can be said without exaggeration that the approximately threefold increase in the number of centres in the course of the last two decades has been due mainly to the development of the research component of WHO programme.

By the end of 1978, there were 582 centres in 62 countries. In the Western Pacific Region alone, there were 118 centres as of April 1984. These centres today cover a broad range of programme activities particularly
in research. Their distribution by country/area is as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>22</td>
</tr>
<tr>
<td>People's Republic of China</td>
<td>40</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1</td>
</tr>
<tr>
<td>Japan</td>
<td>27</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>2</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>8</td>
</tr>
<tr>
<td>Singapore</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
</tr>
</tbody>
</table>

Criteria for selecting institutions for designation by WHO

WHO Collaborating centres have been selected until now mostly from among institutions of high scientific and technical standing or at least from institutions having already acquired a good scientific reputation.

In the past, the network of collaborating centres were expected to deal primarily with biomedical research and reference and information services. These reasons explain the quite uneven distribution of the centres among the countries, the largest number being in developed countries. In order to make a more even distribution of centres in the future, the definition of the nature and functions of the centres have been broadened so as to designate more potential institutes in developing countries as collaborating centres in relation to appropriate health technology and health services research so that the WHO collaborating centres in the future must become more directly effective instruments of technical cooperation in support of the organization's overall effort towards the attainment of better levels of "health for all" rather than only for promotion of research.

The criteria to be applied in selecting an institution for designation as a WHO collaborating centre are:

- the scientific and technical standing of the institution concerned at the national and international levels;
- the place the institution occupies in the country’s health, scientific or educational structures;
- the quality of its scientific and technical leadership and the number of qualifications of its staff;
- its prospective stability in terms of personnel, activity and funding;
- the working relationship which it has developed with other institutions in the country, as well as at the intercountry, regional and global levels;

- its ability, capacity and readiness to contribute to WHO programme activities, whether in support of country programmes or by participating in international cooperative activities.

**Title and use of WHO's name and emblem on letterheads**

WHO collaborating centres may use the name "WHO" or "World Health Organization" and the WHO emblem in their letterheads under the following conditions:

- solely for correspondence relating to its activities as a collaborating centre;

- if the term "WHO" or "World Health Organization" is used in a letterhead, the characters of these terms should be of the same size as those for the title of the centre;

- if the language used by the centre for its letterheads is a language other than the official languages of the World Health Assembly or other languages used officially by regional offices, then one of the latter should also be included:

- any letterhead using WHO's name should conform to the pattern described in paragraph 150 above.

**Criteria for giving financial support to collaborating centres**

Designation in itself is an important form of support that WHO can provide to an institution. Financial support should be viewed as an independent type of support which may or may not be connected with designation.

Any financial support proposed should be related to the function to be discharged by the institution and should take into consideration the institution's own needs and resources.

**Redesignation or termination of designation**

The completion of the initial four-year period of designation affords an opportunity for either renewing the designation for another four years or less, or for terminating it if evaluation has shown that the centre has not functioned as had been hoped or if its work is no longer relevant to the Organization's programme.
Conclusion

As it is not possible for any one technical organization, including WHO, to possess all the expertise that may be required by Member States to support them in their national health development efforts, certain mechanisms have to be used to enable the resources of appropriate institutions to be tapped and thereby facilitate the provision of the necessary technical collaboration to Member States. One such mechanism is the designation of a suitable institution as a WHO collaborating centre in a specific technical area. As a WHO collaborating centre, an institution may be called upon to share its expertise with others in the spirit of technical cooperation among countries. It may be requested to provide expert advisory services which may call for the visits of staff of the collaborating centre to the requesting countries, participation in regional and interregional consultations, etc. It may be requested to organize formal training courses or to accept people from other countries on a fellowship basis. It may also be requested to undertake research in specific priority areas or to carry out a special task for WHO under a contractual agreement. As a result, an institution designated as a WHO collaborating centre becomes a partner of WHO in international health work.
ANNEX 6

REPORTS FROM WHO COLLABORATING CENTRES

(1) Beijing - (Professor Shen Yucun)

The Institute of Mental Health of Beijing Medical College was developed from its Psychiatry Department in February 1980, and later on was designated as WHO/Beijing Mental Health Collaborating Centre for Research and Training by the WHO Regional Office for the Western Pacific in February 1984.

The Institute of Mental Health has responsibility for professional teaching, medical services as well as research activities on mental health and mental disorders. All research activities on mental health problems are performed respectively by seven research sections and two research units.

A. Programmes collaborating with WHO.

For the purpose of promoting the mental health services in the country, the following programmes have been performed since the initiation of cooperation between the Ministry of Public Health, PRC and WHO.

1. Five national workshops on various subjects in mental health have been conducted by the Institute, which were sponsored by WHO by inviting and organizing foreign professional experts, namely: WHO/Beijing national seminar on psychiatric epidemiology (1980), WHO/Beijing national workshop on recent advances in psychiatry in medical education (1981), WHO/Beijing workshop on standardized PSE in psychiatry (1981), WHO/Beijing national workshop on the psychosocial aspects of primary health care (1983) and WHO/Beijing national workshop on the psychotropic abuse and dependence (1982); the last one was presided over by both the Institute and the Pharmacology Department of Beijing Medical College.

2. Lectures and discussions given by WHO professional experts invited either to conduct workshops or to participate in scientific collaborating research programmes have facilitated the sharing of a great deal of academic experiences.

3. With the grant provided by WHO, two senior psychiatrists have finished their fellowship, each for half a year. Dr Xu, a psychiatrist of the Institute and I were invited to participate in the workshop organized by the Regional Office.

1It should be noted that these reports from WHO Collaborating Centres are reproduced in their unedited form.
Annex 6

B. Main/current ongoing programmes.

1. Epidemiology of mental disorders and mental health problems

During the process of urbanization and industrialization in our country, social economic conditions and family and population structures are undergoing a great change. They have also been accelerated by advocating the practice of the "one couple one child" policy in a certain historical period in China. Consequently, the traditional patterns of child bearing and care of the aged in the family need to be changed and will possibly continue to change even more rapidly in the next few generations. Thus, the study on the mental health problems of children and the aged and their related factors has become very important and is of great concern to the communities and government administration in our country. The epidemiological study on mental health problems of both children and the aged will become the main subjects of our study in the near future.

2. The Development of community mental health service.

Although the hospital is the traditional institution for mental health care, this kind of medical care is far from satisfying the requirements of our country, especially when taking the wide range of population in China into account. Since it is difficult for the hospital service form to discover and treat mental patients early, prevent relapses and promote the social rehabilitation of mental patients effectively, it has become a task of high priority for the Chinese psychiatrists to develop a proper pattern of community mental health care. The development of our community mental health home care is characterized by (1) integrating mental health care with the primary health service through the training of primary health workers in psychiatric professional knowledge and skills; (2) establishing a psychiatry outpatient clinic in primary general hospitals; (3) requesting the support of local administrative systems to develop family mental health care and to offer suitable work for those convalescent patients, facilitating their social rehabilitation.

3. Clinical research on psychiatry.

It is a current major issue for our Institute to study and modify the classification and diagnostic criteria of some mental disorders (such as schizophrenia, depression and neurasthenia), and to compare them with major international diagnostic classification systems.

4. The biological psychiatry programme is focused on the study of neurobiochemical basis such as the metabolism of the central monoamine neurotransmitter, study of neuroendocrine substances in schizophrenia, depression and other mental disorders; the development of methods for determination of the blood drug level of some psychotropics (Haloperidol) in clinical psychopharmacology; and the study of the bioelectroencephalo activities of patients with mental disorders and certain mental and behavioural problems.
The objective of the current programme of traditional medicine is to assess the therapeutic effects of traditional treatment (such as acupuncture) on certain mental disorders and their underlying mechanisms.

5. The child mental health section has responsibilities for the investigation of etiological factors of child hyperkinetic syndrome and mild mentally retarded children (50-70 IQ) and assessment of the effect of medication treatment, cooperating with the Department of Education to establish a special class within the normal elementary school to train these mild mentally retarded children.

Finally, I would like to propose the development of a collaborative epidemiological study on the topic of mental health problems of the elderly in the different cultures of the Western Pacific Region by inviting some experts in geriatric psychiatry and epidemiology from Australia and Japan as project consultants. It would be appreciated indeed if we could be helped by the Regional Office for the Western Pacific and other Centres through their support for this project.

(2) Canberra - (Dr Paul Duncan-Jones)

The Social Psychiatry Research Unit (SPRU) was started by the Australian National Health and Medical Research Council (NH&MRC) in 1975. It was the first Research Unit funded by the NH&MRC; previously only specific research projects and programmes had been funded. Since 1975, SPRU has worked on the epidemiology of neurosis, particularly in the general population. In the last five years, a separate track of work has been developed on psychiatric illness in the elderly, and particularly on the epidemiology of dementia.

"Neurosis and the Social Environment"

The Unit's main work in 1976-1981 was a major study of the epidemiology of neurosis in the community (i.e., anxiety, depression, non-specific neurotic reactions). In this study, we broke new ground in assessing the prevalence of neurotic illness in the general population in an efficient, standardized way, using a two-phase design. However, the main focus was on the aetiology of neurosis, and particularly on the role of social relationship in providing protection against neurosis.

For this study, we developed an interview survey procedure for examining social relationships, the Interview Schedule for Social Interaction (ISSI). This procedure dealt with both intimate relationships of close attachment and also more diffuse social and inter-personal relationships. For both types of relationship, the ISSI assesses both the availability of relationships and also their adequacy (i.e., the extent of satisfaction with the available relationships). The ISSI was subjected to extensive psychometric assessment and validated so far as possible.
The research included a prospective longitudinal study of a sub-sample who were interviewed four times. From the study as a whole, and particularly from the longitudinal data, we largely rejected our initial hypothesis, that social support and good social relationships would protect against neurotic illness. Instead, we concluded that recent work on the etiology of neurosis had severely underestimated the role of personality or temperamental factors. This research was reported in a number of journal articles and in *Neurosis and the Social Environment* by Henderson, Byrne & Duncan-Jones (Sydney, Academic Press, 1981).

More recent and current work on neurosis

The current stream of work on neurosis has included extensive re-analysis of the earlier data, and a new survey carried out in 1982-1983. The Unit is planning another major epidemiological study of neurosis in 1988-1991. This is described more fully in the accompanying draft protocol for a possible collaborative study. We see a need to prepare for this study, in three main areas. These are:

(a) Construction of a broad eclectic theoretical framework appropriate for epidemiological research in the etiology of neurosis, with particular emphasis on the joint effects of personality and environment.

(b) Development of advanced techniques of statistical modelling that can reflect accurately the detailed theoretical structure.

(c) Examining specific measurement problems, particularly bias in symptom reports, and the assessment and classification of more diffuse minor psychopathology (neuresthinia, hypochondria).

The emphasis of the work is on the integration of a theoretical approach, statistical modelling and very careful research design and measurement procedures. This approach is currently exemplified in a study of genetic and environmental factors in neurosis studied in a substantial sample of twins. This is a joint study with Professor Andrews and colleagues in Sydney.

Psychiatric illness in old persons

This work has focused mainly in five areas:

(a) Review of the literature in the epidemiology of dementia and of psychiatric illness in the elderly.

(b) The development of a standardized research interview for assessing psychiatric illness, particularly dementia and depression, in old people. This has been done mainly with day-care patients and has included a reliability study and the obtaining of longitudinal data.
(c) A survey of elderly persons living in the community, assessing the prevalence of dementia and depression and examining social support, using the ISSI.

(d) A study of persons caring for a sick or very old relative at home. This study focuses on the stresses involved in the caring role; the resulting psychopathology and the relationship of coping to personality.

(e) Planning a major longitudinal study of dementia in the community: A funding application for this study, to be conducted jointly with Dr Broe and colleagues in Sydney, will be tabled at the meeting.

WHO Activities

Dr Scott Henderson, Director, SPRU, has attended numerous WHO conferences and consultations in Geneva and elsewhere in Europe. He has also served on the Western Pacific Advisory Committee on Medical Research and is chairman of the sub-committee on Behavioural Science and Mental Health.

Paul Duncan-Jones (representing SPRU at Tokyo meeting) has also consulted at WHO, Geneva and has visited several WHO Collaborating Centres in Mental Health, including Mannheim, Groningen, Zurich and Clondiger. He undertook some data-analysis for the collaborative study on Strategies for Extending Mental Health Care.

SPRU became a WHO Collaborating Centre this year.

(3) Chiba - (Dr Takeo Doi)

Our Institute has no official connection with any particular university, nor with Konodai National Hospital to which it is adjacent. This, of course, limits the type and the quality of work.

Our Institute was established in 1952, in imitation of the National Institute of Mental Health in the United States of America, to assist the Ministry of Health and Welfare with regard to the national policies on mental health and to promote research and training in the field of mental health. It is quite small in size compared with its namesake in the United States of America, and though it has somewhat been enlarged since its inception, the number of its present full-time employees is only 42, including 15 psychiatrists, 3 clinical psychologists, 3 sociologists besides a few other professionals and clerks.
In spite of its small size, the influence of our Institute on Japanese psychiatry and mental health field has been far from negligible. I think the first achievement of our Institute was the introduction of the concepts of the psychiatric team work and mental health counselling. As a matter of fact, the training of psychiatric social workers and clinical psychologists in Japan was started by our Institute. Though we run several courses of training for various mental professions including physicians each year, those for two above-mentioned paramedical professions are far more active than the one for doctors. The total number of those who took courses at our Institute is 2,432 as of March 1984.

As the second achievement, the introduction of social psychiatry should be mentioned, for our Institute took the initiative in all sorts of social approach to psychiatric of children and adults, including the recent emphasis on the psychiatric aspect of the aged population. In this connection, the launching of rehabilitation programmes for psychotics deserves a special citation, as the first experimental day care centre in Japan was set up at our Institute in 1965. Now, since our Government very much encourages to establish day care centres and has made the training of nurses for that purpose under the auspices of our Institute mandatory, the whole staff is kept quite busy throughout the year. The total number of nurses trained is now coming close to 600.

Now, even though the main current of research at our Institute has been psychosocial, it is not the biological research has not been conducted here. One may, for instance, enumerate the twin study, the study of autism and the developmental study of normal children, the study on early detection of congenital abnormal metabolism which leads to mental deficiency and the psychophysiological study of stress, particularly street noise.

It is much more difficult to describe the present state and the future prospect of our Institute, since it is not so clear now what we should aim at as it was when our Institute was established 30 years ago and also there are now so many rival research centres besides ours. I just mention in passing a few ongoing projects among others; family therapy, the study on the changing psychopathology and its diagnosis, the survey of the mental health of mental health professionals, etc. We are hoping to establish a new division of epidemiology in the near future, though our Institute has been heavily involved with the nationwide surveys of mental disorders in 1954, 1963 and 1984. However, we have to admit that the methodologies employed were primitive and the results rather meager in spite of the great efforts and money poured into them. (The results of the 1984 survey have not come out yet).

Our Institute became a WHO Collaborating Centre in 1981.
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(4) Kuala Lumpur - (Professor Paul Chen)

The Department of Social and Preventive Medicine and Psychological Medicine, University of Malaya, Kuala Lumpur.

Both these departments were established in 1963 when the Faculty of Medicine was formed. Both are responsible for undergraduate medical students as well as for postgraduate courses leading to the degrees of Master of Public Health and Master of Psychological Medicine respectively. At the postgraduate level, candidates studying for either of the two Master's degrees share a number of common courses in Social Psychology as well as in the Social Sciences.

As part of the activities of these two departments, a number of research studies have been conducted during the past few years.

Traditional Medicine

A number of studies into traditional medicine particularly in relation to mental health and culture bound syndromes have been carried out by the two departments. Examples of the area of studies include the culture bound syndromes of latah and apok, and local forms of therapy including main puteri, and the role of Chinese temple media known as tang-ki, Malay medicine men known as bomohe, in the treatment of mental illness and general illnesses.

The role of traditional medicine-men in respect of primary health care as well as the incorporation of traditional medicine men and birth attendants at one primary health care level has also been examined by way of research and development projects.

Health care of the elderly

This work has focused mainly on the social and economic as well as health problems faced by the aged in Malaysia. It is part of a wider WHO intercountry study involving the Philippines, the Republic of Korea and Fiji. The survey examines in detail the prevalence of dementia and depression in the elderly, and also looks at the social support systems currently being used by the elderly. It also examines the relationship between persons caring for the elderly and the aged themselves.

Behavioural science studies in relation to health

A number of such studies have been carried out during the past few years to examine the relationship between human behaviour and health. Issues related to ill-health promoting lifestyles and cultural patterns that lead to the spread of communicable diseases such as dengue haemorrhagic fever, filariasis, malaria, cholera and other water-borne
diseases. A recent research and development study, funded by the Special Programme on Training and Research in Tropical Diseases, uses a multidisciplinary approach that combines anthropology, sociology, epidemiology and health education to increase case-finding and case-holding in the leprosy control programme of Sarawak, Malaysia. One of the more interesting outcomes of this study has been the clear evidence showing that there is a positive association between a high prevalence of leprosy and communal living in the form of long house dwellings.

In addition to the above, the collaborating centre at Kuala Lumpur was recently requested to assist WHO to review the current status of behavioural science studies in four Member States namely Japan, Malaysia, Philippines and Singapore. The aim to compile a list of relevant studies as well as lists of centres and individuals active in the field of behavioural sciences in relation to health.

**Prevalence of disabilities**

Current research activities include studies into the prevalence of both physical as well as mental disabilities in both urban and rural areas.

**Consequence of rapid urbanization**

Work has begun on the social problems faced by migrants as they flow into the cities. In particular, we are concentrating on the problems faced by young migrant women workers who come into the cities to look for work. Such problems include poor housing, illegitimacy, divorce and ill-health.

**Multi-centre studies**

So far, the only multi-centre study carried out has been the one on Health Care of the Elderly. It is envisaged that we will be able to carry out a number of other multi-centre studies with other collaborating centres particularly in the field of behavioural sciences in relation to health and in studies that examine the consequences of rapid urbanization. It is hoped that this meeting will lead to a number of such studies which we would very much like to participate in.

(5) **Manila** - (Professor Lourdes L. Ignacio)

A. The Department of Psychiatry, College of Medicine, University of the Philippines, is not a WHO Collaborating Centre for Mental Health. Several members of the staff have, however, participated in various WHO activities as investigators in WHO collaborating researches. This include the following:

1. **WHO collaborative study on strategies for extending mental health care**

   This study has been completed, preliminary results have been published and final report is in process. The study was one of the main topics for
discussions in a WHO Study Group on Mental Health Care in Developing Countries, a critical appraisal of research findings.

2. **WHO collaborative study on psychosomatic sequelae for tubal ligation**
   
   This study has been completed and final report is in process.

3. **WHO study on the assessment of day centres for children in developing countries**

B. The department in its involvement with WHO collaborative researches

While the various researches provided significant data on the issues regarding innovative strategies for mental health care relevant to developing countries, day care centres for children in these countries, etc. these studies resulted in providing opportunities to strengthen further research activities.

1. **Research instruments**

   The chief investigator for the Philippines in the Strategies Study undertook reliability training in the conduct of the Present State Examination (PSE) through the support of the WHO/Western Pacific. The full version of the PSE is an internationally validated and recognized psychiatric research instrument for use in clinical studies. It has been translated into Pilipino and has since been used in a local collaborative research on Acute Psychoses between the National Mental Hospital and the Department of Psychiatry. The PSE data in this study is being analyzed through the Catego System of data analysis through the (Philippine) National Computer Center. Three resident psychiatrists have been trained to do PSE and they have the potential to train other psychiatrists. This and the fact that its data analysis is being done locally has significant implication for future researches in clinical psychiatry in the Philippines and possibly in the WHO Western Pacific Region.

Both collaborative studies on Mental Health Care and the Psychosomatic Sequelae utilized a modified shortened version of the PSE for use in non-psychiatric settings. This version concentrates in the assessment of non-psychiatric items of the PSE. Research assistants in the two studies who were non-physicians, (psychologists, social workers, public health graduates) were trained and have shown proficiency in the conduct of this version of the PSE. The data on the psychiatric profile of the patients in both collaborative studies were drawn from this assessment and have shown that the PSE can lend itself for use by non-psychiatrists, when trained properly, for researches in community settings.
Annex 6

The vignettes in the Key Informant Interview (KII) schedule used in the Strategies study to assess community reactions on the mentally ill was adopted for use in a Philippine National Disability Survey. The interview has been integrated, as the Mental Impairment Section, in the Disability Survey Form designed for this purpose. The Survey has been completed and final report has been submitted to the National Commission for Disabled Persons in the Philippines. This survey will serve as the basis for planning services for the disabled.

The Self-Reporting Questionnaire (SRQ), a 25-item schedule earlier found in the strategies study to have high discriminating power for psychological symptoms has been tested by two of the participating countries, (Philippines and Colombia) for use as tools for training in facilitating the primary health worker's interview of their patients, for psychological symptoms. This has been found effective and the questionnaire has since been used as the first mode of interviewing patients by workers in health centres in Manila where mental health has not been integrated in the daily health care activities.

2. Training activities.

As earlier mentioned, the Department now has the capability to train (1) anyone interested in the conduct of the PSE (full and modified version) for use especially in clinical psychiatry researches; (2) health workers who are expected to undertake mental health care in primary health care. A training manual and other training materials are now available in the department.

The experiences in the strategies study on the training of primary health workers in mental health workers specifically, those of the psychiatrists as supervisors, have led to a modification in the residency training programme in the Department of Psychiatry. Third year level residents are now assigned to the health centres once or twice a week to act as supervisor to the health workers. The insights gained in the study on the expected changing roles for psychiatrists in developing countries are directly experienced by these training psychiatrists and this is expected to have significant effects on their own perception of themselves when they leave the programme.

The participation of several members of the faculty staff in the department in the experiences of training primary health workers in mental health during the strategies study has led to further clarification of the concept of community psychiatry in the Philippines, as well as probably in developing countries.

The Department of Psychiatry will pursue the clarification of these issues as it intensifies its training and research activities.
Our department was designated as a WHO Collaborative Centre for Research in Functional Psychoses on 31 August 1979 and period of collaboration was prolonged by four years at the summer of 1983.

As is obvious from the name of the centre, we have been making researches mainly on the functional psychoses such as schizophrenia and depression - so-called endogenous psychoses.

Study on depression was at first started in 1972 as the "International Study on Standardized Assessment of Patients with Depressive Disorders". In this study, clinical features of 108 depressive patients were made clear by the Schedule for Standardized Assessment of Depressive Disorders (SADD), a rating scale designed by WHO, and by some other scales. The results were compared with those from the other centres in various other countries and were published in the form "Depressive Disorders in Different Cultures" in 1983. Research group from Jikei Medical University is also taking part in this study, which makes it possible to make comparison between not only Japan and the other countries but also Tokyo, a metropolis of Japan, and Nagasaki, a medium-scaled local city. Owing to the successful ending of the first phase of this study, SADD, which was developed particularly for this study, has been availed generally in all sorts of the studies on depression in Japan as well as in other nations. The success of this study gave rise to the international substudies one after another. One of them is the "Study on Incidence of Depression in General Practice", in which we found out that 6.0% of the outpatients of the internal clinics at the public general hospitals was occupied by depressive patients in the Nagasaki Centre. Next is the "Study on Dose Effects of Antidepressant Medication in Different Populations", in which efficacy and side-effects of Amitriptyline, one of tricyclic antidepressants, was compared in the patients with low dose and those with high dose. This study is already completed and its results is now under the process of comparing with those from the other centres participating in this study. After-five-year follow-up study was undergone in 1977 and 1978 about 108 depressive patients collected for the standardized assessment in 1972 and 1973, and it was made clear that the outcome was not only always good with seven of them being already dead. Symptomatic analysis was made on those with good prognosis and those with poor prognosis. As for the remaining 101 cases, after-ten-year follow-up study is not being carried out.

Besides the above, we are also taking part in the "Study on the Usage of the Dexamethasone Suppression Test as a Biological Indicator of Depressive Illness" and the "Study on Comparison of Oral and Intravenous Treatment of Depressive States", and preliminary results are coming out from the former study.
On the other hand, the "Study on Determinants of Outcome of Severe Mental Disorders (Outcome Study)" on schizophrenia was started in 1978, based upon the achievement of the International Pilot Study of Schizophrenia by WHO. Data from the developed countries as Denmark, Czechoslovakia, Great Britain, the United States of America, the Union of Soviet Socialist Republic and Japan are to be compared with those from the developing countries: Colombia, India and Nigeria. The project contains various substudies as explained below, among which Nagasaki Centre is participating in the studies which are marked here with an asterisk.

*(i) Core (case finding) study of schizophrenics in different cultures.

(ii) Study of the relationship between emotional interaction in the family and short term prognosis of schizophrenia.

*(iii) Study on the impact of life events on the short term prognosis of schizophrenia.

(iv) Study on the impairments and disabilities of schizophrenic patients in different cultures.

*(v) Study of the general morbidity in families of schizophrenic patients.

(vi) Study on acute transient psychoses in different cultures.

*(vii) Study on the perception of schizophrenic patients by key informants.

(viii) Study on the predictive value of monoamine oxidase activity in the platelet of schizophrenic patients.

(ix) Pilot studies of psycho-physiological measures for schizophrenic patients. *(viii) and (ix) were derived from the study, but are not included in WHO substudies at present point. /

Every centre collaborating for the Outcome Study should take part in the core study, by which incidence rate of severe mental disorders is searched. More particularly, this study is to figure out the administrative incidence rate of the first consultation to the psychiatric institutions by the patients with severe mental disorders (mostly schizophrenia) in a certain area and period, to elucidate the clinical features of these patients from various aspects, and to find out the psychosocial and biological factors affecting the outcome of one or two years after.
As the result of the core study, we discovered that the annual incidence rate of schizophrenia among the population aged from 15 to 54 years was 2.0/10 000 in Nagasaki. Clinical symptoms of the schizophrenics collected for this study were assessed by Present State Examination (PSE-8), and the patients were interviewed according to the "Life Event Schedule" contrived by the WHO, in order to examine how the everyday life events affected the onset of the disease during the preceding three months. Further information about the patients themselves were obtained by means of the "Personal Past History Schedule (PPHS)", and how the family members of the patient thought of him was assessed by the "Katz Adjustment Scale (KAS)". All of the assessments were completed in 1979 and 1980; follow-up studies after one and two years were carried out, too. Twenty-three cases that relapsed within those years were subjected to the re-assessments. Results from the above assessments are now analyzed at the headquarters in the WHO, but Nagasaki Centre is also trying to make our own analysis with the help of the Scientific Data Center of Atomic Bomb Disaster in our University.

General Morbidity Study (vii) was planned to investigate physical diseases of the schizophrenic patients included in the core study and their families genealogically, but several problems arose in the investigation, so it was planned to investigate the hypothesis that the prevalence rate of malignancy of schizophrenics was significantly lower than in the general population. Accordingly, this study also belongs to the Outcome Study, though there is no direct relationship with the core study. Since this study is possible only in the areas where the registration system is established for both schizophrenia and malignant tumours, only Hawaii Center in the United States of America, Aarhus Centre in Denmark and Nagasaki Centre are taking part in it. The results from Nagasaki Centre were already published in Japanese in 1981, while those from the other centres have recently been summarized by the headquarters and circulated to all the centres.

Above-mentioned is the outline of what we have done for the collaborative study of WHO. Some of them are already completed, and some of them still proceeded. Collaborating investigators met together about once in one or two years at the headquarters or some other centre to keep the mutual contact well concerning for both the study on depression and that on schizophrenia.

We consider that the studies in process course should be continued, and yet, a comparative study on functional psychoses among the centres in this region is a new interest of ours. As one of such attempts, we are planning a collaborative study with Shanghai Centre, which is now proposed to the Regional Office.
Annex 6

(7) Nanjing - (Professor Tao Kuo-Tai)

A. History and background.

The Nanjing Child Mental Health Centre was developed on the basis of the Child Psychiatric Department of the Nanjing Neuropsychiatric Institute.

The Nanjing Neuropsychiatric Institute was founded in 1947. Till now, the hospital has been enlarged to 500 beds and is composed of five departments. They are Departments of Neurology and Neurosurgery, General Psychiatry, Social Psychiatry, Forensic Psychiatry and Child Psychiatry. The Institute has a large outpatient clinic and is also one of the postgraduate training bases in China. Recently, an institute for scientific research was set up.

The child psychiatric outpatient clinic and child guidance work started since 1954. A child psychiatric ward with 24 beds was established in 1958, which developed into the first department of child psychiatry in China in 1978. Since then, the child mental health work including inpatient and outpatient clinic work, and epidemiological and other studies have been actively carried out.

B. Clinical research and educational work of the department of child psychiatry.

1. From 1958 to 1983, 1,435 children from different parts of China were admitted into the ward. More than 15 categories of mental disorders were diagnosed. About 31.5% of cases were diagnosed as childhood schizophrenia and 14.6% were mental retardation with psychotic manifestation. Infantile autism was quite rare. Only five cases were admitted.

2. From 1978 to 1983, about 29,113 children were examined at the outpatient clinic. Hyperkinetic syndrome and mental retardation were major problems.

3. Since 1980, epidemiological studies of mental retardation among 240,000 population and child mental health case studies among 1,246 kindergarten and primary school children have been reported. The psychological perspective of only child family and case studies of child mental health mentioned above were reported at the "Chinese Culture and Mental Health" conference in Honolulu, United States of America in 1982.

Recently, the investigation of "Family background, number of children and child mental health" was undertaken collaboratively by the members of the Nanjing child mental health centre and Dr Wen-Shing Tseng and Dr Jing Han, Department of Psychiatry, University of Hawaii School of Medicine. The paper was read at the Conference of Child Socialization and Mental Health: The Case of Chinese Culture at Honolulu, 4 to 13 August 1984.
A WHO Technical Services Agreement has been signed under which we could undertake a case study on child mental health and psychosocial development in Nanjing and Chengtu.

Other research works about epidemiological study of hyperkinetic syndrome, chromosome study of mental retardation, long term follow-up study of childhood schizophrenia and brief screen test study of intelligence have also been carried out.

4. Postgraduate training programme of child psychiatry has been conducted for three years already. Till now, more than 40 doctors have been trained on child psychiatry here. This project was assigned by the Ministry of Public Health. Those trainees are now working at child mental health in Beijing, Tianjing, Shanghai and more than 10 other provinces.

The first national seminar on child mental health sponsored by WHO was held in Nanjing in 1981. The seminar was the first attempt of collaboration between WHO and the People's Republic of China in the field of child mental health and formed the basis for future development.

C. Centre's building and arrangement.

The Nanjing Child Mental Health Centre is located in the western part of Nanjing city and flanked by the First Affiliated Hospital of Nanjing Medical College and Nanjing Teacher Training University. The building occupied 2,540 square metres and has four floors. The first floor is the outpatient clinic on one side and child mental health counselling service on the other side. The second floor is a retarded children training school with 30 beds. The third floor is a ward of 50 beds for different kinds of childhood mental disorders. The fourth floor will be occupied by laboratories for genetics, neuropsychology, electrophysiology and behavioural studies.

D. Proposed research projects.

1. National case study of child mental health.

2. Single child per family policy—psychological perspectives.

3. Impact of family structure change on child psychosocial development.

4. Classification and diagnostic and preventive studies of childhood hyperactive syndrome and Tourette's syndrome and of mental retardation.
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E. Preventive and promotive activities.

1. To establish a special relation with one or more schools to provide a model of collaboration with teachers and school health authorities in promotion of child mental health.

2. To establish collaboration with one or more factories where the mother works to explore ways in which child mental health in families could be promoted.

3. Collaboration with general medical facilities to ensure that psychological problems occurring in the course of physical diseases are not neglected.

F. Training programmes.

1. Postgraduate training of child psychiatry.
2. Training of child psychiatric social worker.
3. Training of child psychiatric nurse.
4. Training of personnel for psychological testing.
5. Retraining of primary child health worker on child mental health.

(8) Perth - (Professor G. Allen-German)

The Department of Psychiatry, University of Western Australia consists of eight academic staff, but is associated with the Research Unit of the Mental Health Services of Western Australia, which in turn, has three separate sections concerned with clinical neurobiology, epidemiology and evaluation, and child development. The University's main research interests over the past 10 years have been in the following fields:

(i) Electrophysiology of the brain in psychoses.

(ii) Epidemiology, especially in relationship to migrants, suicide and disorders of old age.

(iii) Service delivery systems with particular reference to developing countries in Africa.

(iv) Crosscultural psychiatry.

(v) Psychological studies of cognition and cognitive therapy.

(vi) Aspects of human psychosexual functioning.
Apart from this, the Department provides the major postgraduate training input for a community of registrars in Western Australia numbering approximately 35-40 at any one time. It is also involved in the teaching of undergraduates, in the supervision of Ph.D. candidates in the above areas, and in mounting occasional special courses on demand.

Research with particular reference to WHO programmes

The major involvement here has been through the activities of the Head of Department, Professor G.A. German. Professor German has worked for many years in the area of crosscultural psychiatry with reference to Africa. This has had three major consequences.

1. Annual involvement in various studies in African countries, including Nigeria, Botswana, Kenya and the Republic of the Seychelles. In Nigeria, he has been consultant in the development of a postgraduate training institute, for the African region, in mental health, research and training.

   In Botswana, he has advised on the development of curricula for all mental health personnel. In Kenya, he has collaborated with local health authorities in the evolution of a national mental health development plan. In the Seychelles, he has supervised the assessment of mental health needs; the development of a mental health service with the emphasis on decentralization of care to primary health workers in various districts; and has undertaken research studies in collaboration with the local psychiatrist. These activities have been described in various WHO reports (AFRO/Geneva) and in various publications.

2. Secondly, these interests have led to specific courses, particularly in postgraduate training, focusing on crosscultural psychiatry, with particular reference to developing countries, and substantially concerned with both theoretical issues and practical issues relating to appropriate service developments, preventive interventions and training technologies.

3. Thirdly, the Department has, for some years, been occasional host to WHO scholars seeking training facilities. Thus, two African postgraduates from Ghana have undertaken postgraduate training in the University Department - the course followed being the three-year programme (previously - current programmes are five years in duration), leading to the Membership of the Royal Australian and New Zealand College of Psychiatrists. One of these candidates spent two years in Western Australia but, for financial reasons, left to complete his psychiatric training in the United Kingdom. The second candidate undertook his entire postgraduate training in psychiatry in Western Australia, qualified as a Member of the Royal Australian and New Zealand College of Psychiatrists, and was later made a Fellow.
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This particular African psychiatrist now is the Director of Mental Health Services in the Republic of the Seychelles and continues to enjoy close links with the University Department.

The Department has also hosted a psychiatrist from South Korea, Dr Kim, who came as a Visiting Fellow to study developments in community psychiatry. This was arranged through the Manila office of the WHO Region.

Apart from the above activities, the Department, through the work of Professor German, has been associated with the development of flow chart technologies for the use of primary health care workers in the area of mental health. Specifically, Professor German has been a member of the International Advisory Committee concerned with the development of the Essex and Gosling flow charts, and over the past three years has mounted a study in Nigeria aimed at evaluating the utility of these flow charts in the hands of primary health care workers based in the community. To date, these evaluations suggest that the flow charts represent a substantial advance in equipping various workers with a method of handling unreferred patients with mental health problems, and in identifying and implementing appropriate managements. Currently, the Department is involved with the utilization of similar technologies in Botswana and in Kenya.

Because of these special relationships with Africa, activity in the Pacific region has been limited. However, it is believed that many of the situations, theoretical issues, and technologies appropriate in the African region provide a base for further similar activities in many parts of the Pacific region.

Collaboration within Australia has been mainly informal contact with the Social Psychiatry Research Unit in Canberra, which is now a WHO Collaborating Centre. This relationship has been particularly focused on issues relating to the diagnosis of mental health problems in the elderly. Associate Professor Burvill is particularly involved in this area, and is currently developing major research programmes which should reach the field stage in 1986. In collaboration with the Canberra unit, he is concerned with the development of screening procedures relating to depression, dementia and other disorders in an elderly population, these procedures planned to be effective at the community level. It is also proposed to develop, utilizing such first-stage screening procedures, and second-level assessment techniques, epidemiological studies of geriatric populations in Western Australia (and through collaborative methodologies, in Eastern Australia), with particular reference to comparisons between local born Australians and the various migrant groups which are characteristic of the West Australian population.

Future plans

Some of these have been noted above in the area of flow chart technology and in the field of geriatric psychiatry. It is intended to collaborate increasingly closely in the latter area with the Canberra unit.
Tentatively, it is proposed that experience gained with flow chart techniques might be extended into the Pacific region for the purposes:

1. Of field testing relevant technologies of this type in the hands of mental health workers and general health workers at different levels, and

2. Of providing formal training programmes in the use of such technologies for key health personnel, with particular emphasis on training such persons as teachers of these technologies in their home situation. Thus, key health persons would be involved.

It is also proposed to develop audiovisual teaching techniques with relationship to diagnostic and management flow charts, appropriate for various communities and levels of health workers.

Training facilities are also available and planned to continue in relationship to:

1. Psychiatric epidemiology;

2. Community psychiatry;

3. Theoretical issues in crosscultural psychiatry with the emphasis on research techniques;

4. Neurobiology, with particular reference to psychotic disorder.

In most of these areas, it will be possible to mount courses extending from the relatively elementary (over a period of weeks) to the highly sophisticated at M.Sc. or Ph.D level.

In summary, the Department would plan to tailor its programmes to contribute to WHO interests in three major areas:

1. Neuropysiology specifically, and neurobiology of mental ill health in general;

2. Epidemiology generally, with emphasis on aging populations specifically;

3. Theoretical aspects of crosscultural psychiatry, including epidemiology; with studies of service delivery technology, including the use of diagnostic flow charts, etc.

Through collaboration with the Research Unit of the Mental Health Services of Western Australia, the available expertise in the above areas can be extended. In addition, the area of child development and child
mental health can be included in regional WHO programmes. Western Australia is developing sophisticated child mental health services. Workers in these fields have the expertise to address issues relating to such services in a variety of developmental settings. It will also be possible to provide training programmes in child psychiatry for qualified psychiatrists; and training programmes at different levels of intensity and duration for general and specialised health workers in disciplines relating to child mental health. From this base, it would be desirable to consider the development of collaborative studies in the child mental health area, since such studies have been relatively rare in developing regions despite the numerical importance of populations under the age of 15. Such plans, apart from the training area, are currently embryonic but requiring only specific collaborative tasks to become operational.

(9) Sapporo - (Professor Itaru Yamashita)

Founded in 1928, our Department of Psychiatry and Neurology, Hokkaido University School of Medicine, has been the centre for research and training in psychiatry in the Hokkaido Island, Japan, where about 5.5 million people live at present. It has 72 beds, outpatient clinic and research laboratories. Two other medical schools in Hokkaido were instituted more recently; in 1950 and 1976 respectively.

The clinical practice and researches in the Department developed mainly in line with German schools in the early days, but have adopted a great deal of psychodynamic approaches since the end of war. Aside from common psychopathological, epidemiological and therapeutic researches on endogenous and organic psychoses, and neurosis in general, a famous study was performed on a peculiar form of psychogenic reactions (imu) observed among female aborigines of Hokkaido area (Ainu people).

Concerning laboratory investigations, neuropathology had been a principal tool of research for years. Then neurophysiological studies began to flourish soon after the war. Chemical studies, including endocrinological, pharmacological and neurochemical approaches followed in connection with the introduction of psychotropic drugs. An English book entitled "Psychophysiological Studies of Emotion and Mental Disorders" by N. Suwa and I. Yamashita was published in 1972 as an issue of Hokkaido University Medical Library Series and in 1974 by Igaku-Shoin. At present, we have in our Department three laboratories: (1) neurophysiology, (2) neurochemistry and neuropharmacology, and (3) neuropathology, each of which has five to ten psychiatrists working in the ward and laboratories simultaneously.

Our department was appointed in 1968 as the WHO Collaborative Centre for Research and Training in Psychopharmacology in the Asian region. Soon after the appointment, we made contact with a number of institutions recommended by Ministers of Health in Asian countries, and tried to collect information on new drugs and unusual side-effects appearing in the region, and reported them to the Head Centre in the National Institute of Mental Health. The need for such a work has decreased recently.
During 1978-1981, we had participated in the WHO-coordinated Study on Dose Effects of Antidepressant Medication in Different Populations. Also, we hosted in Sapporo the Fifth Exchange of Visits of Heads of WHO Collaborative Centres in Biological Psychiatry in 1979. Thereafter, we have been heavily involved in a series of researches by the WHO Collaborative Centres of Biological Psychiatry: dexamethasone suppression test, naloxone on schizophrenic symptoms, comparison of oral and intravenous antidepressant for therapy-resistant depression, imipramine binding sites of platelets in depression and many others. We are going to carry out as the lead centre a biological study of alcohol dependence syndrome with reference to ethnic difference, which will be mentioned elsewhere.

Main topics of ongoing researches in our Department are: radioreceptor assay of various amine receptors and effects of psychotropic drugs thereupon, high performance liquid chromatography of amine metabolisms, clinical and experimental studies of epilepsy-related disorders using electrophysiological instruments, electron-microscopic studies of slow virus infections, etc.

We are accepting every year 8 to 10 new graduates for a period of first one year of the three year's postgraduate training. Position for research associates aiming at clinical training and doctor's degree is 10 at present.

In future, we wish to continue the system of research and training above-mentioned and also devote as much time and energy as possible for the WHO collaborative studies on global as well as regional levels.

(10) Seoul – Department of Psychiatry, Yonsei University
(Professor Chae Won Kim)

Yonsei University College of Medicine consists of two medical schools: one at Seoul, the other at Wonju which is located about 80 kilometres from Seoul. The former was founded in 1885 and the latter in early 1960s. Both are coordinated by one Vice-President for Medical Affairs which has the office at Seoul campus. The number of hospital beds for both total to over 2 000 beds. Likewise, both departments of psychiatry which has far in excess of 100 psychiatric beds are coordinately functioning under the guidance of the Chairman at Seoul campus.

Both Departments of Psychiatry place particular emphasis on biological researches, although in training and clinical practice, they do follow invariably "comprehensive or eclectic approaches". The following have been of major areas of interest:

1. Psychopharmacology.

(a) Systematic study of potentiation between alcohol and psychoactive drugs;
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(b) Immunopsychopharmacological studies centering around T-Lymphocytes functions;

(c) Problem of benzodiazepam habituation and its management method.

2. Carbon monoxide intoxication, both acute and chronic, including delayed sequelae.

3. Cross-cultural epidemiological studies of depression, close cooperation with Department of Psychiatry, University of Illinois.

4. Psychiatric studies in hemodialysis.

Very recently, we have undertaken a very intensive epidemiological studies in Kanwha island, which is located about 30 kilometres from Seoul and the health care of which has been mainly under Yonsei Medical Centre these two decades or so. Also, all these aforementioned activities are to be continued for the next several years and perhaps some more new activities will be added to ones continuing.

(11) Seoul - Department of Neuropsychiatry, College of Medicine, Seoul National University
(Professor Chung Kyoon-Lee)

This department is the oldest in this country that has been founded in 1910 as Dae-Han Hospital. Until now, about 200 psychiatric specialists have come forth who are now working as pioneers all around this country.

The department is composed of eight full time faculties, 20 clinical staffs with 1 fellow, 24 residents, 20 registered nurses and 12 aid nurses, 7 clinical psychologists, 2 social workers and some volunteers. They are working according to the weekly schedule.

For inpatients, there are more than 70 beds for closed and open wards, day hospital, child day care centre. The other activities include outpatients clinic for adults and children, consultation-liaison team, special clinics for psychogenic dermatologic diseases, psychotherapy, and psychopharmacology. Also, we covered the medical centre in Seoul National University and other affiliated mental hospital.

For one thing, as Children's Hospital will be openly newly in 1985, they are to have their own department of child psychiatry.

The training of residents are separated to their years in this department such as for the first year, they are in charge of adult inpatients. And the second year, neurology, child psychiatry, consultation-liaison psychiatry, day hospital and the third year, they are
experiencing outpatient clinics and chief role in ward to be qualified as a staff in the future. After three years of training, they achieve the certificate of psychiatric specialist via the examination for special Board.

Much more, they are studying themselves and have supervisions by full time faculties and clinical staffs at least twice a week with the weekly schedule of Psychiatric Grand Round, Journal Club, Case Conference, Psychotherapy Seminar, Consultation-Liaison Case Conference, Graduate-School Classes and Seminars for each year of Residents.

Classes for undergraduate students are behavioural science and general concepts and specified disorders of psychiatry each for their levels, followed by four weeks of ward clerkship. They also are supposed to take part in weekly scheduled meetings and alternatively in group or individually have to be tutored. Finally for seniors, they have elective course for psychiatry that one who is interested in psychiatry could have his intensive studies more deeply.

For each ward, there is a team composed of director of ward, resident, nurse, clinical psychologist, social worker that all members of therapists try to maintain the therapeutic community as a milieu in ward circumstance with the meeting three times a week, and advice after-care, rehabilitation and education of family.

After orientation and observation, the psychiatric nurses are in charge and work on shifts. They take care of mental patients not only as a nurse but as one of the therapists by modified primary nursing.

The social workers also take part in therapist meeting by the works of visiting home, school, etc. With psychological tests of outpatients and inpatients, the clinical psychologists attend the meeting and support doctors with information of patients and researches.

This department has devoted itself as a pioneer for updating information and researches and now many views on biology, psychology and sociology are being worked as a landmark.

The most outstanding works and majors are as follows: First of all, the epidemiological study has been continuously performed since 1950. In the beginning especially, a limited survey in rural counties searching for prevalence rate of mental disorders was done. But, as Korea has been developing economically, the population has gathered to the urban area that enthusiastic surveys have been tried such as a large scale of epidemiological study by use of DID-III (Diagnostic Interview Schedule by the National Institute of Mental Health, United States of America) Korean version, a point prevalence study in all hospitals, and follow-up study for schizophrenia.
The neurotic disorders and other disorders such as suicide, alcoholism and drug abuse which are quite sensitive to culture, especially about symptom pattern as the income of western culture and civilization, how they are becoming has a good point for our studies.

The biological research has been vigorous since 1929 in the field of psychopathology, neuropathology and biological treatment. In the decade of 1970, biological research was rather inactive. However, lately, the department takes a large part in the section of schizophrenia for its etiological process. And what we are studying now are those; blood levels and concentrations in cerebro-spinal fluid of various bioenzymes, neurotransmitters and their metabolites and neuropeptides, clinical psychopharmacology, clinical application of newly developed drugs, the tardive dyskinesia and mechanism of action of electroconvulsive therapy.

By the faculties of this department, the psychological theory and case-work are led at the seminars in viewpoint of psychoanalysis and analytic psychology as the background of them have been active far before the study of biological research.

In order to be sure of the special items of the mental patients in Korea, the study of transcultural psychiatry and co-related section began to be studied. From the beginning of 1970 until now, the psychiatric approaches towards the ancient thought of Korea, shamanism and literature are prevailing with the rapid westernization and its social problem, so that social unrest and transculture could be good samples of our studies.

As for the child psychiatry, only partial studies were being worked until the middle of 1970 although, from the end of 1970, as the division of child psychiatry was established, new understandings and researches are in process among the most part of child psychiatry. Now this division is the only systematically organized one for the research of autism. On this ground, the studies of organic cause of autistic patients and child psychopharmacology are worthy of notice.

In the end of 1970, as the consultation-liaison activity in general hospital is emphasized, we have been accumulating the studies and experiences of practical problems of each case study and the attitude of doctors as a consultee. Moreover, we are constructing the liaison activity of hemodialysis unit and disabled patients, so that we are opening and enlarging the basis of the consultation-liaison activities in general hospital. Very lately, behavioural therapy including the Biofeedback is settled at outpatient clinic and its active treatments and researches are started with the recognition and understanding of the importance of psychophysiological disorders in clinical psychiatry.
Shanghai - (Professor Xia Zhen-yi)

Shanghai Institute of Mental Health (SIMH) was founded in 1981. It is an affiliated research unit of Shanghai Psychiatric Hospital. In February 1982, it was designated as the WHO collaborating centre for research and training in mental health. Closely cooperating with Shanghai Psychiatric Hospital, it engages in the research on the field of biological and social psychiatry.

A. Organization

SIMH is directed by well-known experts Professor Xia Zhen-yi and Associate Professor Yan Heqin, composing of three departments and four sections, which are (1) Biochemistry and Genetics Department; (2) Biometry and Biostatistics Department; (3) Psychiatric Rehabilitation Department*; (4) Clinical Psychology Section; (5) Epidemiology Section; (6) Neurophysiology Section; and (6) Psychosomatic Medicine Section*

B. Review of research work (1981-1983)

1. Research on diagnostic criteria and assessment.

In order to have the common criteria and assessments for the psychiatric diagnosis, we have introduced and modified varieties of structured interview and rating scales, including BPRS, HAMD, SAS, SDS, SCL-90, TESS, GAS and CGI. The reliability and validity of BPRS and HAMD have been tested in schizophrenic and affective disorder patients, and those rating scales have been popularized in other Chinese cities.

Using computerized programme for DIS and PSE diagnosis (Chinese version), we carried out a project of re-evaluating a group of cases diagnosed as neurathenia in the outpatient department. We found 25% of the cases have changed their diagnosis as different types of depression. Twenty percent of the cases were diagnosed as dysthymia (neurotic depression). Thirty five percent were diagnosed as anxiety neurosis.

2. Biological research

Eighty high density families of schizophrenic, including 2 765 family members have been investigated (37 male index cases and 43 female index cases). The prevalence of schizophrenia run by the children of one parent with schizophrenia was 36.82% while the prevalence of schizophrenia in the children of both schizophrenic parents was 66.6%. The risk of schizophrenia in the children of schizophrenic parents was positively correlated with birth order. There is no statistical differences in the risk of schizophrenic children who were born before or after getting mental trouble of their parents.

*Just established in August 1984.
Fifty pairs of twin schizophrenics were studied in their zygocity determination, clinical diagnosis and concordance rate. It was found that the concordance rate in monozygotic twins ($C_{MZ}$) is 46.4%, and dizygotic twins ($C_{DZ}$) is 18.2% indicating that the inheritance is an important factor in the etiology of schizophrenia. The age onset of both schizophrenic twins of MZ pairs is quite close, and their concordance rate in female (52.9%) is higher than male twins (36.4%).

Twin study of mental retardation has aroused much more interest than schizophrenic twins. The pairwise concordance rates of MZ mental retardation were much higher than DZ mental retardation, 80% and 22.2% respectively.

The visual evoked potentials (VEP) and auditory evoked potentials (AEP) in 82 cases of schizophrenics and the contingent negative variation (CNV) in 76 schizophrenics were observed with the automatic summation technique. The characteristics of their waveforms of schizophrenics were more variable and less steady than that of the normals. Maximum negative voltage of CNV was markedly decreased. Duration of the post-imperative negative variation (PINV) was greatly prolonged in the schizophrenics.

HLA antigens of A-locus and B-locus were typed in schizoaffective psychosis (SAP). We found decrease in frequencies of HLA-A2 and increase in frequencies of HLA-B5 ($P < 0.05$), suggesting that SAP most probably be a "spectrum disease" ranging from schizophrenia to affective psychosis from the clinical and genetic aspects. They may have a common biological basis in pathogenesis.

In the neuroendocrinologic fields, we have carried out DST in major depression, acute schizophrenics, chronic schizophrenics and neurotic patients. DST is now widely used in our hospital.

We have tested 22 psychotropic and hypnotic drugs which have been widely used in clinical practice for genetic toxicology test. Only Chloral hydrate could induce the mutagenecity effect on Salmonella Typhimurium. Most of the psychotropic drugs do not appear to be harmful from the genetic viewpoint.

3. Research in clinical psychology.

Modified MMPI, WAIS and HRB (Halstead-Reitan Neuropsychological Test Battery) were performed and worked out in our clinics.

Collaborating with other general hospitals, we try to search for the possibility of improving the intellectual function of the aged by increase in $P_{O_2}$. It was found that there is definite improvement of intellectual function after increase in $P_{O_2}$ for two weeks. We also collaborated with the hospitals of gynaecology and obstetrics to investigate MMPI in pregnant women. It showed that those with nervousness, anxiety and unsteady mood
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are prone to having difficulties in delivery and prolonging labour course. MMPI was tested on a group of patients with neurosis and the results showed 78% of the MMPI diagnosis were in concordance with their clinical diagnosis.

HRB was tested on a group of acute schizophrenics. We found moderate brain damage existed in those cases.

4. International cooperative studies.

A preliminary study on "housing environment, family function and child mental health" in collaboration with Singapore and supported by WHO, was carried out since 1981. Using the Achenbach's Child Behaviour Checklist, (CHBL), 2 400 subjects were being surveyed and all the data analysis will be completed later this year.

(13) Tokyo - (Professor Ryo Takahashi)

The Department has been working together with the WHO Collaborating Centre for Research in Functional Psychoses in Nagasaki since its former Director, Dr Takahashi came to the Department in April 1983. Work has focused particularly on the WHO projects of Standardized Assessment of Patients with Depressive Disorders in Different Cultures and of Biological Markers of Affective Disorders. The Collaborative Study of Dexamethasone Suppression Test in Endogenous Depression has been completed and the results were presented at the 14th Congress of CINP in Florence, June 1984. A study of platelet imipramine binding as a biological marker of endogenous depression is now being undertaken in collaboration with other WHO Collaborating Centres in Biological Psychiatry. In addition, a project on comparison of efficacy of carbamazepine and lithium on acute and prophylactic treatment of affective disorders is a WHO collaborative study in which the Department will engage.

For the past three decades, research has been continuously ongoing in the Department in three major areas: neuropsychophysiological, psychopharmacological-neurochemical and psychopathological studies of mental disorders and epilepsy. The following gives brief summaries of past achievements until the present time as well as future plans in biological research areas.

A. Neuropsychophysiological area.

1. Epilepsy and clinical neurophysiology.

Among many of the studies in epileptology and the clinical EEG which have been done, the results of studies on psychomotor seizures (complex partial seizures) are especially important in that various symptoms observed in psychomotor seizures which had previously been described without any reasonable sequence of symptoms were revealed to have their own
phasic structures by the EEG and polygraphic findings. The seizure process would come to the highest level in "psychomotor lapse phase" or "oral automatism phase". "Behavioural automatism phase" could be regarded as nothing but a postictal phenomena. Several determining factors of outcome of psychomotor seizures were investigated.

Some genetic factors involved in epileptic patterns in the EEGs of children after mild head injuries were verified. The criteria for stopping medication in patients with a favourable course of epilepsy have been explored, and the precise conditions including plasma level of antiepileptics as well as EEG findings shall be studied.

For many years, staff psychiatrist in the neurophysiology research laboratory have been training psychiatric residents for routine EEG analysis.

2. The automatic EEG analysis and clinical neurophysiology.

The automatic EEG analysis has been studied since 1970. The pattern recognition method by which the wave form of the basic EEG activity is inspectsively and recognized by clinical electroencephalographers was transferred to a computer system. About 1 500 EEGs of healthy subjects ranging from children to adults were analyzed. Based on these normative data, any deviations from the standard EEG distribution can be printed out on routine EEG examination. At the present time, a quantitative EEG diagnosis system for clinical use is being developed. EEG diagnosing system for clinical use is being developed. Further improvement of this apparatus is being studied.

The quantitative EEG studies have been done on epilepsy and dementia in reference to diagnosis, treatment, outcome and prognosis. Effects of psychotropic drugs on the EEG and pharmacokinetics have also been studied. The event-related potentials (ERP) have been studied with special regard to clinical utility in neuropsychiatric field.

3. Eye movement and functional psychoses.

Using an electrooculogram, eye movements of patients with chronic schizophrenia, endogenous depression and amphetamine psychosis were studied. Generally, rapid eye movements (large one = R type, small one = r type) tended to appear in the subjects in a state of anxiety and tension. On the other hand, slow eye movements (s type, s type) appeared in the subjects in a relaxed state. The eye movements of r type appeared more frequently in chronic schizophrenics than in normals and neurotics. Slow eye movements were less frequent. Accordingly, it was concluded that chronic schizophrenics might be in a state of anxiety or mental tension in spite of their external appearance of apathy, or withdrawal. In addition, the relationship between the eye movement and the effects of several psychotropic drugs have been studied.
Using an eye mark recorder, eye movements and fixations of subjects with open eyes during the perception of pictures were examined. These studies indicated that the number of fixations and total distances of scanning path increased after instruction in normals and depressives. However, these parameters remained lower in chronic schizophrenics and their relatives. Eye movements in amphetamine psychotics are being studied in comparison with those of schizophrenics and normals. The effects of psychotropic drugs on pursuit eye movements are also under the study.

These eye movement studies have proved useful in terms of clarification of cerebral dysfunction underlying biological mechanisms of functional psychoses.

4. Polyxomnographic studies of mental disorders.

Dissociated stages which cannot be classified by the criterion of Rechtschaffen and Kales, were observed in the records of patients with delirium tremens and delirious state induced by the administration of the anti-cholinergic drug biperiden. The dissociated stages were also observed in patients with brain stem diseases such as OPCA, striatum nigra degeneration and embolism. Dissociated stages were classified into D stage, D stage 2, D stage REM and D stage W. The patients with delirious state showed a high appearance rate of both D stage W in the daytime and D stage 1 in the all night records. On the other hand, D stage REM was observed in the patients with brain stem lesions.

The effects of the cholinergic drug lecithin on sleep have also been studied. REM latency was remarkably reduced, but % REM was unchanged. Polysomnographic study on affective disorders is a proposed WHO project in Biological Psychiatry in which the Department will engage.

B. Psychopharmacological-neurochemical research area.

1. Neuroendocrinological and biochemical studies of subtypes of depression.

Prolactin response to TRH loading test has been studied in depression and it was found that rate of over response of PRL to TRH 500 ug infusion was significantly higher in primary major depression, unipolar type than bipolar type of depression. Deuterated phenylalanine loading test also indicated that the decrease of turnover of tyrosine in vivo was found only in unipolar depression. Biochemical mechanisms of affective disorders are being investigated on each type of depression in terms of monoamine metabolism in bodily fluids.
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2. **Clinical and psychopharmacological studies on L-threo-3, 4-hydroxyphenylserine (DOPS).**

The effects of an artificial precursor of physiological norepinephrine, DOPS on human depression as well as norepinephrine metabolism of animal brain have been studied. The results obtained so far indicated that in some NE-deficient conditions, NE could be formed from DOPS in the brain parenchyma, and DOPS therapy may be effective in some depressive illness. We are now trying to evaluate clinical effects of DOPS on refractory depression.

3. **Platelet monoamine oxidase (MAO) activity in depressed patients.**

The results have shown that Vmax of platelet MAO in depressed patients is significantly higher than that of normal controls and returns to normal range on recovery of depression. When Vmax of depressives remained high, recovery from depression was delayed.

4. **The studies on methamphetamine-induced reverse tolerance as an animal mode of schizophrenia.**

It has been suggested by many studies that repeated administration of methamphetamine to animals could provide as suitable animal model for the study of underlying alterations in neuronal functions that cause schizophrenia. We have been neuronal mechanisms of this animal model using $^3$H-spirperone binding technique as well as biochemical pharmacology. From all of these studies, it was postulated that behavioural reverse tolerance may result from hyposensitivity of dopamine receptors mediating inhibitory influence on subcortical dopamine neurones. To further study this mechanism, we are investigating the changes of glutaminergic and GABAergic neuronal activity.

5. **The studies of the antidepressant effects of sulpiride.**

It is expected that studies on the biochemical mechanisms of anti-depressant effects exerted by a low dose sulpiride, which is widely used in the treatment of depression in Japan and other countries, will shed new light on the action mechanisms of antidepressant drugs and subsequently serve to clarify etiological mechanisms of depressive illness. The experimental studies have indicated that the behavioural and clinical effects of low dose of sulpiride are due to the preferential blockade of some population of dopamine receptors, the stimulation of which inhibits subcortical dopamine neurons, except for the nerve terminal dopamine receptors regulating dopamine synthesis.

6. **Beta-phenylethylamine (PEA) in urine of psychotic patients.**

We have been studying the urinary excretion of PEA in manic-depressive patients and paranoid schizophrenic patients by gas chromatography/mass spectrometry. It was observed that PEA excretion was elevated
significantly on the day prior to the switch from mania to depression. In paranoid schizophrenic patients, urinary PEA excretion was significantly higher than in non-paranoid schizophrenia or normal controls. From these results, it was suggested that PEA might play a certain role for some psychotic patients. Further studies are now under way.

7. Peptide analysis of schizophrenic postmortem brain.

This study is carried out in cooperation with the Department of Neurobiology, National Centre for Nervous, Mental and Muscular Disorders. Methionine-enkephaline immunoreactivity (MEL) was measured in many discrete areas of the brains of the patients and normal controls. The results suggest metabolic changes of metenkephaline in the prefrontal cortex may have a role in the schizophrenic symptoms. Investigations on the characteristics of opioid receptors and on cholecystokinin immunoreactivity in schizophrenic brains are now in progress.

8. CT-scan and schizophrenia.

Enlargement of cortical sulci and ventricles of the brain of chronic schizophrenics has been investigated and confirmed by CT-scanning of large number of chronic patients. The findings were traced four years later. The results indicated that improvement of positive symptoms of schizophrenia was positively correlated with recovery of cerebral cortex atrophy. However, negative symptoms and ventricle enlargement of the brain did not change.