Brit. J. Psychiat. (1976), **128**, 513–22

Psychiatric Priorities in Developing Countries

By R. GIEL and T. W. HARDING

Summary. Many psychiatrists assert that an expansion of mental health services in the developing countries is overdue. This will only take place if: (i) the tasks of mental health care are undertaken by a wide range of non-specialist health workers, including those responsible for primary health care; and (ii) services are directed initially at a very limited range of priority conditions. The method of priority selection is discussed, and the process required for translation of priority decisions into health action is exemplified by two illustrations.

Introduction

When in 1972–73 Leon (1972), German (1972) and Neki (1973) wrote their reviews on psychiatry in developing countries, commenting on the nature and prevalence of mental disorders in Latin America, Sub-Saharan Africa and South-East Asia respectively, they left us in no doubt about the importance of mental health problems in their respective regions. They summarized the evidence indicating that mental disorders were not less common than in the so-called developed world. The consequences of our growing knowledge regarding the epidemiology of mental illness in the Third World had already led such leading psychiatrists as Baan (1968), Baasher (1972), Carstairs (1973) and Collomb (1973) to stress the need for training mental health workers and planning services in the developing countries. Their views have been endorsed by a number of authoritative reports (Commonwealth Fund, 1974; Diop, 1974; World Health Organization, 1975). The purpose of this paper is to discuss some of the practical issues involved in introducing mental health care in such countries: in particular, the need to define priorities from the whole range of psychiatric problems, the limitations imposed by the scarcity of available resources and the implications for the training of health workers.

There have already been a number of encouraging examples of innovative approaches to mental health care in developing countries, and in most cases the key to such efforts has been to include in the care of the mentally ill people who were previously not involved—for example, hospital assistants in Sarawak (Schmidt, 1967), medical assistants in Zambia and Uganda (Egdell, 1970), public health nurses in Colombia (Argandona and Kiev, 1972) and relatives and the community in general in the Aro village system in Nigeria (Lambo, 1966). These successful innovations and the apparent consensus of opinion among experts should not be allowed to disguise the fact that the great majority of the mentally ill in developing countries have no access to any kind of modern, effective mental health care and there are therefore today many millions of people suffering from untreated mental disorders. The failure to make significant progress in this field is, of course, part of a much wider failure to provide basic health services to the people of developing countries (World Health Organization, 1974). Nevertheless, there does seem to be a particular inertia in the field of mental health and a lack of recognition of its importance by health planners.

Epidemiological research carried out in developing countries has provided impressive evidence of the overall magnitude of mental health problems and some indication of their nature. Health planners, however, are faced with a wide range of pressing needs (for example, for clean water, sanitation, maternity services and immunization). The inherent difficulties

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

and limitations of epidemiological surveys do not allow us to use the results for the purposes that are needed, namely: (a) to decide on priorities in relation to the overall mental health needs of the population; (b) to define the tasks involved in meeting priority needs; and (c) to establish the kinds of health workers needed and the training necessary. It is indeed evident that community surveys *per se* would never be able to provide such answers, since the definition of priority needs clearly involves a value judgement (Draper, 1973) and there will be considerable variation between communities concerning what is defined as a 'psychiatric' problem and in the relative importance given to different types of mental disorder. For example, the development of education services is now given high priority in many developing countries and this has led to a marked increase in the awareness of childhood psychiatric problems as a source of educational failure.

In our view, therefore, the association between prevalence rates of mental illness in a population and its need for psychiatric services is too complex and indirect to justify costly epidemiological surveys for purposes of planning. On the other hand, it is clear that very little is known with regard to developing countries as to: (a) the extent and duration of disability resulting from mental disorder; (b) the burden the mentally disordered place on their immediate environment; and (c) the problems created by those with psychiatric illness in terms of frequency of attendance at health services and reduced working efficiency (in farming, child rearing, etc). Epidemiological skills and resources would be better deployed in seeking this kind of information. The example of Winslow's (1951) studies in relation to developed countries would suggest that such information might be more useful (and convincing) to planners.

The pattern and utilization of existing services may also be misleading in defining needs. Studies in the developed countries have shown that the 'need' for particular types of service, as indicated by admission or out-patient attendance rates, usually increases with their growing availability and may decrease when it becomes apparent that specialists are of little help (Dewez and Giel, 1973; Giel, 1974). Existing psychiatric services in developing countries are often poorly integrated into general health services, wasteful of resources and, in some cases, counter-therapeutic. Where resources are severely limited, the proposition that 'nervous and mental diseases constitute a public health problem far too great to be handled by the psychiatrist alone' (*Lancet*, 1974) gains particular force, and the choice of a public health approach stressing the integration of mental health care into general health services seems unavoidable.

The Scope of Psychiatric Problems

Despite the reservations expressed above, we will use the results of two series of epidemiological studies carried out in Iran and Ethiopia as a starting point for a review of the relative importance of various categories of mental illness. These studies sought to establish point prevalence rates of mental disorders in rural and urban areas. In the case of Iran, the rural population was in the province of Khuzestan and the urban area (Shiraz) is a large, well-established town. In Ethiopia, the rural population was in the province of Kafa and the urban area is a small roadside town. Data are also presented from a religious community in Addis Ababa.

The data from these surveys can be used to provide an overall view of the psychiatric problems facing communities in developing countries only if such limited information on disability and social consequences of the various disorders as is available is also used. This has been done under four broad headings below.

One important group which must be mentioned in addition is that of the acute and subacute organic psychoses, which are relatively common in developing countries (German, 1972), mainly because of the high prevalence of infectious diseases such as malaria, viral encephalitis, trypanosomiasis and typhoid fever.

1. *Psychoneuroses and personality disorders*

These conditions, many of which may present with somatic symptoms, make up the bulk of mental disorder both in rural and in urban communities. Yet they are by no means as conspicuous as in developed countries because people tend not to perceive themselves as men-

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

TABLE I

Point prevalence rates of mental illness in defined rural and urban areas of Iran and Ethiopia

	Iran		Ethiopia		Religious community[4]
	Rural[1]	Urban[2]	Rural[3]	Urban[3]	
Sample size	(482)	(928)	(370)	(384)	(48)
All psychiatric morbidity ..	14·9%	16·6%	9·1%	8·6%	12·5%
Functional psychosis	0·2%	0·4%	—	0·3%	2·1%
Chronic psychosis and defect ..	5·2%	5·2%	1·3%	1·3%	4·2%
Epilepsy	0·2%	0·6%	0·5%	0·5%	—
Psychoneurosis/personality disorder	9·5%	11·0%	7·8%	7·0%	6·3%

[1] Total population, aged 6 years or more, of 5 small villages in Khuzestan.
[2] Household sample, all members aged 6 years or more, of Shiraz.
[3] Household samples, all ages, of village and town in Kafa province.
[4] Every second person present at a church yard in Addis Ababa.
The table is based on surveys made by Bash and Bash-Leichti (1969 and 1974) in Iran and Giel and van Luijk (1969 and 1970) and Giel *et al* (1974).

tally disturbed, nor does their environment consider them to be so. Nevertheless, they do suffer, as is demonstrated by the fact that many regularly consult traditional healers or religious shrines. The work of Field in Ghana (1960) and Maclean in Nigeria (1971) has shown that many sufferers are relieved by such help and that healers are able to use placebos and techniques of suggestion and reassurance extremely effectively. Surprisingly large numbers are also hidden amongst the masses attending general out-patient services (German, 1972; Harding, 1973b; Dormaar *et al*, 1974), where prevalence rates as high as 20 per cent have been found. The main importance of this group of disorders, therefore, is that as primary health services are developed increasing numbers of patients suffering from neuroses or personality disorders are likely to seek help in health centres, dispensaries and other clinics. Unless health workers are appropriately trained such patients will be misdiagnosed and mismanaged—expensive (and sometimes dangerous) drugs will be used, unnecessary investigations will be carried out and frequent, unnecessary and wasteful attendances will result.

2. *Chronic mental handicaps*

The second largest category is that of chronic psychoses and defects, which in the table includes mental retardation, addiction and dementia. The main problem is more or less permanently disturbing and socially unacceptable behaviour such as: self-neglect, social inadequacy and dependence, profound loss of working efficiency and unpredictable, antisocial behaviour. Not only do such people need constant care and supervision but their problems often implicate their families. They have to make great economic sacrifices which threaten the existence of the whole kin group, and in a number of cases the whole extended family may be ostracized by the community. In other cases the affected individual may be expelled from his or her social group to become vagrant and unsettled. As a result, this category of mentally disturbed people can be found at traditional healing places, amongst beggars in the major urban centres, in prisons and in some cases in one of the few available mental hospitals. Because they have become marginal people they rarely attend health services. It is difficult to locate such patients, to provide treatment or to follow them up. There is no doubt that this group of patients is highly susceptible to many physical diseases and has a high death rate.

3. *Epilepsy*

Epilepsy is considered separately because of its special features. In many cases it is a fearsome disease, attacking young people, out of the blue, gradually crippling them physically (burns), mentally (dementia) and socially (as outcasts). With a prevalence rate of less than

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

1 per cent it may not appear an important disease, but counted as a number of attacks or in patient-years it is a severely disabling condition. Unfortunately, although patients are able to function normally between attacks, they are soon considered disabled for every minute of their life. Their medical problem is apparent in almost every general hospital, where one can always find a few patients who have been admitted for extensive burns after falling into the open fire during a fit. They are rarely treated with anti-epileptic drugs on a regular basis, and so they gradually become demented, showing behavioural disturbances of an impulsive and aggressive nature. Affected children are usually excluded from school and, in the long run, are rejected by their families; they finally become vagrants. Early recognition, including the sometimes difficult differentiation from possession states or hysterical fits, and regular treatment can prevent most of these complications and consequences.

4. *Functional psychoses*

The functional psychoses, which include schizophrenia, manic-depressive and reactive psychosis, have the lowest prevalence, and this illustrates the fallacy of the use of prevalence or incidence rates alone to determine priorities. In the few mental hospitals of developing countries the life-long sufferers from schizophrenia make up two-thirds to three-quarters of the population, and thus a large proportion of the limited resources available may be devoted to these patients. This group has some degree of overlap with the group of 'chronic mental handicaps', since many chronic schizophrenics would eventually fall into this category. We will therefore focus on the problem of patients with active psychotic symptoms: acute, subacute or episodic. Acute psychosis, with its rapid onset of confusion, aggression, paranoid symptoms, inappropriate behaviour or withdrawal, has a dramatic and damaging effect on the local environment. Family disruption and neglect of children frequently result. The effect of such an illness in lactating mothers on a young child is particularly harmful. Patients are frequently restrained with shackles, chains or ropes, or they may be stoned and expelled from a community; the police may detain patients with unnecessary violence. Such unnecessary measures frequently increase or provoke a patient's aggression. Although such management is widespread in developing countries, it should be noted that some traditional healers are capable of humane and effective care of psychotic patients, making use of tranquillizing herbs and a graded programme of rehabilitation (Harding, 1973a). In urban conditions such patients are more readily taken to a general hospital, where the hospital staff rarely know how to handle them properly and regular treatment cannot be given.

The Social Background, Manpower and Resources

The great majority of the population of developing countries live in rural areas (in some countries, such as Indonesia, Tanzania or Niger, the proportion is as high as 90 per cent). Nevertheless the social and demographic pattern of such populations is by no means uniform. Some rural populations are widely dispersed and relatively inaccessible, while in others the population density is relatively high (for example, on the island of Java or in the coastal areas of Bangladesh). More characteristic of such populations than their distribution is their overwhelming economic reliance on agriculture, their lack of amenities such as piped water, sanitation, electricity, their high rates of infant and child mortality and the low life expectancy. The people are remote from any psychiatric clinics or hospitals and it is doubtful whether many would seek such help if access were available.

Several of these characteristics are shared by rapidly growing, sprawling urban areas, with densely populated shanty-towns. The mental health problems in such urban areas are particularly acute because the support of the extended family is to some extent lost and there is a concentration of social isolates of various kinds, including 'vagrant' psychotics and alcoholics. There is therefore a large pool of mentally ill individuals who are not inclined to seek treatment in busy, understaffed clinics and therefore remain hidden in the vast urban crowds. As a result, they are a potential danger because they

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

harbour all kinds of untreated disease (Giel and van Luijk, 1967).

In the developed countries the respective roles of general practitioners, social workers, psychiatrists and other mental health professionals in the delivery of mental health care might be an issue. In many of the countries of the Third World, where even the most basic health services are provided to not more than 15 per cent of the population, this can hardly be a matter for debate. If there is less than one psychiatrist and one psychiatric nurse per one million of the population (World Health Organization, 1975), and the few available physicians are employed mainly in general hospitals, the focus of health care will have to shift to the community through the use of new kinds of health workers. The implications of this situation have recently been outlined in a publication entitled *Health by the People* (Newell, 1975), in which a number of striking solutions to the problems of health care in the Third World are described. Faced with these examples it is difficult to avoid the conclusion that health care must be seen in the context of overall socio-economic development and that increased coverage can only be achieved through a considerable degree of community involvement and responsibility. It is clear that specialist services *per se* in developing countries are an anachronism. The traditional medical pyramid must be inverted. The main responsibility and function of the trained professional health worker is to support and stimulate primary health care. The principal agent of health care will be the village health worker, dresser, dispenser or health assistant whose training may consist of only a few months to a year following two to three years of secondary education. The choice is between no mental health care at all or some limited and defined tasks for basic health workers who will have many other tasks of high priority.

There are several other limitations which have to be considered. One is the supply and availability of psychotropic drugs. Drug treatment is one of the most effective means in the control and treatment of mental disorders. Drugs must often be administered for long periods and they are relatively expensive. Shortages and interruptions of supply are common and constitute a serious problem in most developing countries. The range of available psychotropic drugs is large and the advice of Attisso (1972) that 'restrictive lists of pharmaceuticals considered indispensable in government health units' should be drawn up in each country is highly relevant. It seems likely that outside specialist units a range of only 7 or 8 psychotropic drugs would be sufficient to cover the majority of essential needs and that at peripheral level perhaps only two drugs, chlorpromazine and phenobarbitone, should be available. The advantages of such a system in terms of bulk purchase, local tablet preparation, regularity of supply and rationalization of training would be enormous. For example, maintenance therapy with chlorpromazine tablets (1,500 50 mg tablets per patient per year) from outside commercial sources would cost ten dollars per patient per year or more. Savings by bulk purchase of the chemical and local preparation of tablets could perhaps reduce the cost to less than three dollars per patient per year. In the case of anticonvulsant therapy with phenobarbitone, the cost might be reduced to approximately one dollar per patient per year.

A second limitation is the need for a system for referral. If the primary health worker has absolutely no access to higher echelons of services and to consultation he would be starting a job which he would not be able to complete, and he would soon become frustrated. Support from the health centre, general hospital and ultimately the mental hospital is a requirement for the development of such a system of primary health care.

A third limitation is the need for feedback on the operation of the services, which requires the development of a simple information system. Such a system should be part of the existing system of health statistical reporting, involve no significant extra costs and be operated by the available personnel with some additional short-term training. This could be done by recording relevant information on a standard personal general health card which should be designed for all categories of patients likely to need repeated contacts with services over extended periods of time (e.g. patients with tuberculosis, leprosy or

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

chronic mental disorder). There should also be record linkage at the level of the local clinic which would require simple rules for information flow between different health agencies serving an area and, in particular, referral return rules. Such a system could provide readily available information to planners and decision-makers at all levels.

Selecting Priorities

Having outlined the scope of psychiatric problems and indicated some of the constraints, we can approach the question of selecting priorities for action. Morley (1973) has suggested four criteria for priority selection in developing countries: point prevalence rate, evidence of community concern, seriousness and susceptibility to management. Clearly, specific priorities will have to relate to the particular conditions of a country or region, and the discussion here is meant to illustrate the general approach rather than provide a definitive set of priorities for all situations.

The high prevalence of psychoneuroses and personality disorders might suggest that they should be considered as a priority. Their management, however, requires complex training, and traditional forms of care are frequently effective. The main priority in this area should, therefore, be that health workers should be able to recognize a large proportion of patients attending curative services with physical symptoms without an organic basis. The main reason would be to limit further inappropriate treatment or investigation. The overall approach would be designed to limit unnecessary 'illness behaviour' on the part of the patient and unjustified 'medicalization' by the health worker. In addition, primary health workers should be trained in the rational use of cheap, innocuous substances such as placebos. Morley (1966) has provided a convincing argument for the 'welfare mixture' used in this way based on his extensive experience of 'under-fives clinics' in developing countries.

The chronic mental handicaps are responsible for a considerable degree of social disability. Institutional care is both costly and potentially counter-therapeutic. In the long term, it would be hoped that early detection and active treatment would limit the scope of this problem. In coping with the problem as it exists now in most developing countries, the priority aim should be to make use of a wide range of local community agents (development workers, teachers, police, religious leaders, community leaders), as well as peripheral health workers. Their tasks would include providing social support to patients and their families, encouraging their participation in community activities and finding them suitable work. Psychotropic drugs may be useful for some patients in this group (as has been shown by Mahy (1975) in Grenada), but the serious side effects, problems of long term administration and limited efficacy in most chronically handicapped patients makes it doubtful whether providing such long-term pharmacological treatment to this group of patients should be regarded as a high priority.

Epilepsy should be selected as a priority for active intervention because it usually affects individuals at a young age, leading to a wide range of physical and psychological impairments (progressive brain damage with dementia, injuries and burns, death) and social disabilities (educational failure, social rejection, work handicap), and effective, relatively cheap interventions are available. For some, the inclusion of epilepsy in a list of psychiatric priorities may require some justification. The paucity of neurologists is even greater than that of psychiatrists in most developing countries. Any debate about the respective roles of 'neurology' and 'psychiatry' at community level is irrelevant. Epileptic individuals face many of the same problems as the mentally ill, and in operational terms (i.e. training, planning of services, drug supplies) it is useful to group them together as a 'neuropsychiatric' problem. The choice of epilepsy as a priority condition meets at least three of Morley's (1973) criteria: community concern, seriousness and susceptibility to management. Although its point prevalence is relatively low, the burden in 'patient years' is high.

Acute and subacute functional psychoses can also be considered as priority conditions. Although their incidence alone cannot be taken as a justification, the harmful consequences are

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

considerable. Simple, humane, non-coercive management, differentiation between organic and non-organic psychoses (to allow treatment of underlying conditions) and treatment with phenothiazines are all relatively simple methods of intervention with a substantial beneficial effect on outcome.

Implications for training

Priority selection is only the first step in a series, if effective management is to be provided at community level. Once priorities have been clearly defined:

(1) a detailed 'problem outline' should be prepared for each priority condition;

(2) the tasks necessary must be described and assigned to appropriate health workers;

(3) education objectives must be set;

(4) teaching methods must be designed (and supplemented by a practical manual); and

(5) a system of referral and supervision must be set up.

To illustrate briefly, we may consider the problem outline, the tasks necessary and educational objectives in the case of two priority conditions defined above: epilepsy and acute and subacute functional psychoses.

Epilepsy

1. The problem can be outlined as follows: episodic and unpredictable sudden loss of consciousness with tonic and clonic spasms, bloody froth in the mouth, passing of urine, lasting several minutes.

2. The tasks necessary can be expressed in a 'flow diagram' (this has been simplified for presentation here).

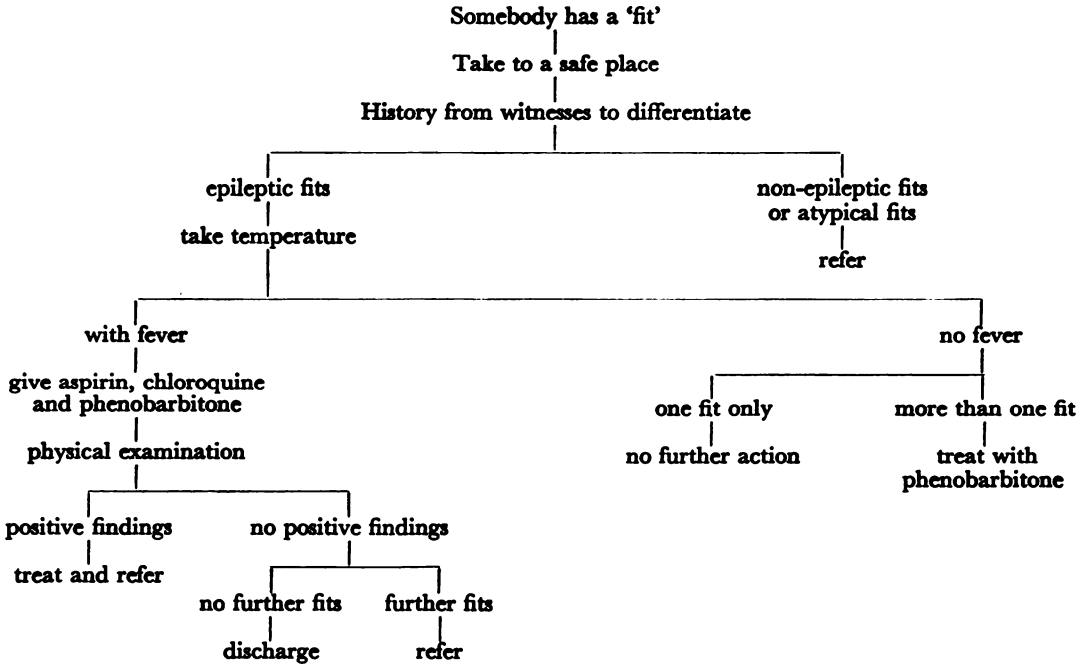
3. Educational objectives for the primary health worker could therefore be defined as:

(a) ability to recognize grand mal fit on sight;

(b) ability to take a history from relatives or bystanders inquiring for relevant features;

(c) understanding and ability to differentiate grand mal epilepsy from atypical epilepsy and non-epileptic fits (hysterical, trance states, etc);

(d) ability to undertake steps to differentiate symptomatic epilepsy due to infections from



https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

idiopathic epilepsy (taking temperature, simple physical examination);

(e) knowledge of basic rules for administration of phenobarbitone (Giel, 1968);

(f) ability to follow up a patient and assess the effect of phenobarbitone on the occurrence of his fits;

(g) understanding of social reactions towards epilepsy and ability to discuss these with patients' relatives.

Acute and subacute psychoses

1. The problem can be outlined as: over a period of days or weeks an individual becomes confused, aggressive, incoherent, withdrawn or self-neglectful.

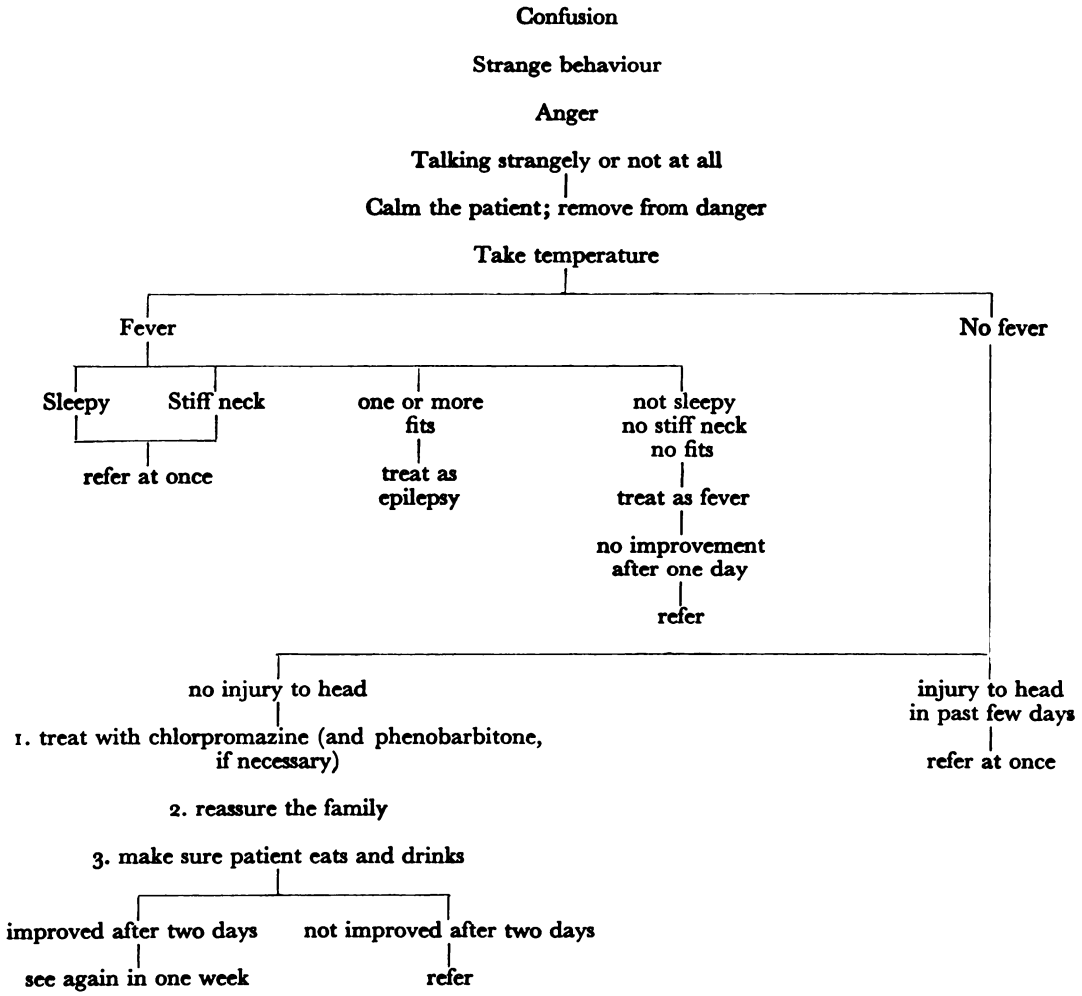
2. The tasks necessary can again be expressed in a 'flow diagram' (also in an abbreviated form).

3. Educational objectives could be defined as:

(a) ability to recognize the symptoms and signs listed above;

(b) ability to use chlorpromazine and phenobarbitone (if necessary, by intramuscular injection);

(c) knowledge of common causes of febrile delirium;



https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

(d) ability to reassure relatives and promote tolerance of mental illness.

It will be obvious that the selection of priorities, problem outlines and educational objectives need further elaboration in a given situation. It is the task of local psychiatrists to carry out this process so that mental health care can be made more widely available and more effective than at present. With regard to training programmes, we would stress the importance of practice, in-service training and the use of simple illustrated manuals. Continuous and sympathetic supervision and support of primary health workers will be vital if they are to carry out this work and this implies a major role for the mental health professional.

References

ARGANDONA, M. & KIEV, A. (1972) *Mental Health in the Developing World: A Case Study in Latin America*. New York: Free Press.

ATTIBO, M. (1972) Pharmacology and public health: African characteristics. In *Biomedical Lectures, AFRO Technical Papers No. 4*. Brazzaville: World Health Organization Regional Office for Africa.

BAAN, P. (1968) Sir Aubrey Lewis and the Institute of Psychiatry. In *Studies in Psychiatry* (eds. M. Shepherd and D. L. Davies). London: Oxford University Press.

BAASHER, T. A. (1972) Review of state of mental health services in the countries of the Eastern Mediterranean Region. In *Report on the Group Meeting on Mental Health, Alexandria, 4–7 September 1972*. Alexandria: World Health Organization Regional Office for the Eastern Mediterranean.

BASH, K. W. & BASH-LIECHTI, J. (1969) Studies on the epidemiology of neuropsychiatric disorders among the rural population of the province of Khuzestan, Iran. *Social Psychiatry*, **4**, 137–43.

—— —— (1974) Studies on the epidemiology of neuropsychiatric disorders among the population of the city of Shiraz, Iran. *Social Psychiatry*, **9**, 163–71.

CARSTAIRS, G. M. (1973) Psychiatric problems of developing countries. *British Journal of Psychiatry*, **123**, 271–7.

COLLOMB, H. (1973) L'avenir de la psychiatrie en Afrique. *Psychopathologie Africaine*, **9**, 343–70.

COMMONWEALTH FUND (1974) Mental health services in the developing world. *Occasional Paper, No. IV*. London.

DEWEZ, J. TH. M. & GIEL, R. (1973) About the regional responsibility of the mental hospitals in the Netherlands. *Psychiatrie Neurologie Neurochirurgie*, **76**, 267–74.

DIOP, B. S. MB. (1974) The place of mental health in the development of public health services. *AFRO Technical Papers, No. 8*. Brazzaville: World Health Organization Regional Office for Africa.

DORMAAR, M., GIEL, R. & VAN LUIJK, J. N. (1974) Psychiatric illness in two contrasting Ethiopian outpatient populations. *Social Psychiatry*, **9**, 155–61.

DRAPER, P. (1973) Value judgements in health planning. *Community Medicine*, **129**, 372–4.

EGDELL, H. G. (1970) A rural psychiatric service in Uganda. *Psychopathologie Africaine*, **6**, 87–94.

FIELD, M. (1960) *Search for Security, an Ethnopsychiatric Study of Rural Ghana*. London: Faber and Faber.

GERMAN, A. (1972) Aspects of clinical psychiatry in Sub-Saharan Africa. *British Journal of Psychiatry*, **121**, 461–79.

GIEL, R. (1968) The epileptic outcast. *East African Medical Journal*, **45**, 27–31.

—— (1974) A survey of psychiatric outpatient services in the province of Friesland (the Netherlands): II. The epidemiology of mental illness. *Tijdschrift voor Sociale Geneeskunde*, **52**, 589–93.

—— & VAN LUIJK, J. N. (1967) The plight of the daily labourer in a coffee growing province of Ethiopia. *Tropical and Geographical Medicine*, **19**, 304–8.

—— —— (1969) Psychiatric morbidity in a small Ethiopian town. *British Journal of Psychiatry*, **115**, 149–62.

—— —— (1970) Psychiatric morbidity in a rural village in south-western Ethiopia. *International Journal of Social Psychiatry*, **16**, 63–71.

—— KITAW, Y., WORKNEH, F. & MESJIN, R. (1974) Ticket to Heaven: psychiatric illness in a religious community in Ethiopia. *Social Science and Medicine*, **8**, 549–56.

HARDING, T. W. (1973a) Psychosis in a rural West African community. *Social Psychiatry*, **8**, 198–203.

—— (1973b) The detection of psychiatric illness by questionnaire in Jamaica. *West Indian Medical Journal*, **22**, 190–1.

LAMBO, T. A. (1966) The village of Aro. In *Medical Care in Developing Countries* (ed. M. King). Nairobi: Oxford University Press.

LANCET (1974) Primary care of mental illness, *ii*, 1362–4.

LEON, C. (1972) Psychiatry in Latin America. *British Journal of Psychiatry*, **121**, 121–36.

MACLEAN, U. (1971) *Magical Medicine*. London: Penguin Press.

MAHY, G. E. (1975) Fluphenazine enanthate in a community psychiatric programme. *West Indian Medical Journal*, **24**, 61–4.

MORLEY, D. (1966) The under-fives clinic. In *Medical Care in Developing Countries* (ed. M. King). Nairobi: Oxford University Press.

—— (1973) *Paediatric Priorities in the Developing World*. London: Butterworths.

NEKI, J. S. (1973) Psychiatry in South-East Asia. *British Journal of Psychiatry*, **123**, 257–69.

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press

NEWELL, K. W. (ed.) (1975) *Health by the People*. Geneva: World Health Organization.

SCHMIDT, K. E. (1967) Mental health services in a developing country in South-East Asia (Sarawak). In *New Aspects of the Mental Health Services* (eds. H. C. Freeman and J. Farndale). Oxford: Pergamon Press.

WINSLOW, C. E. A. (1951) The cost of sickness and the price of health. *Monograph Series No. 7*. Geneva.

WORLD HEALTH ORGANIZATION (1974) The Work of WHO 1973: Annual report of the Director-General to the World Health Assembly and to the United Nations. *Official Records of the World Health Organization No 213*. Geneva: World Health Organization.

—— (1975) Sixteenth Report of the Expert Committee on Mental Health. Organization of mental health services in developing countries. *Technical Report Series No 564*. Geneva.

R. Giel, *Professor of Social Psychiatry, University of Groningen, The Netherlands*

T. W. Harding, *Office of Mental Health, World Health Organization, Geneva*

(*Received 1 August; revised 16 October 1975*)

https://doi.org/10.1192/bjp.128.6.513 Published online by Cambridge University Press