THE PREVENTION OF MENTAL ILLNESS—MYTH OR MANDATORY*

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There is very much more mental illness than is generally appreciated. The table below shows the prevalence rates found in various recent community studies in different parts of the world (Table I).

TABLE I. PREVALENCE OF MENTAL ILLNESS

Place	*Investigators*	*Mental disorder (expressed as a percentage of the total population)*
Baltimore	Commission on Chronic Illness (1957)	10·8%
New Jersey	Trussel & Elinson (1959)	13·8%
Salt Lake City	Cole *et al.* (1957)	33·3%
Manhattan	Srole *et al.* (1962)	23·3%
Taiwan	Lin (1953)	10·8%
Nova Scotia	Leighton *et al.* (1963)	31%
Western Nigeria	Leighton *et al.* (1963)	23%
Cape Peninsula (Coloureds)	Gillis *et al.* (1965)	11·8%

The difference in prevalence rates is due to several factors, among them being that differing definitions of mental illness and methods of ascertainment of cases were used. The most conservative estimates of mental disorder are, however, not less than 1 in 10 of the population, and although no figures exist for population groups in South Africa other than the Coloureds in the Cape Peninsula, there is no reason to suspect that they are less than elsewhere in the world. It is therefore clear that mental illness constitutes a vast and grave problem.

The psychiatric services of South Africa, and most other places for that matter, are unable to cope with all those who need treatment. Every service, whether it is provided by mental hospitals, provincial hospitals, mental health societies or private psychiatrists, is strained to the utmost and every new psychiatric amenity that opens is inundated within a short time. For example, in Cape Town new services for children were recently made available by the Department of Psychiatry at Groote Schuur Hospital, but in a very short time there was a 4 - 5 month waiting list.

Services are already extensive: for example, there are 23,783 beds in mental hospitals in South Africa which is almost 40% of those available in general hospitals;[34] and the departments of psychiatry of several general hospitals, notably those in Johannesburg, Cape Town, Durban, and Pretoria, deal with tens of thousands more patients every year (Groote Schuur Hospital alone dealt with almost 12,000 during 1964). In addition, mental health societies throughout South Africa dealt with a total of 38,052 cases during the year ended 31 March 1965. Despite this, more facilities of all types are urgently required, and the situation is even worse than the pressure for psychiatric beds would imply, because the cases that present for treatment are only a fraction of the total who suffer from psychiatric disturbance. Gillis *et al.*[14] found among a random sample of Coloureds in the Cape Peninsula, that although only 1% had come for treatment, 11·8% were in need of it. Much of this hidden mental illness is not recognized for what it is, or else people are either too ignorant or prejudiced to consult medical practitioners. Also, a great deal is masked, presenting in the guise of physical illness: Shepherd *et al.*[32] found that approximately 1 in 3 hospital outpatients suffered from a recognized psychiatric disability—in fact, 51% of the series of 200 consecutive outpatients attending medical outpatient clinics and 21% of those attending a surgical outpatient clinic of a general hospital were found to suffer from some form of psychiatric disorder. Even when this was recognized as such, action was only taken in a few cases because of the high priority given to the assessment and treatment of physical disease. Similarly, Morris and O'Neill[25] found no adequate somatic basis for the symptoms complained of in two-thirds of 60 cases presenting in a gynaecological outpatient clinic, and state that emotional disturbances were present in the majority of them. Roberts and Norton[29] found that three-fifths of a sample of new cases in a medical out-

*Based on the Morris Ginsburg Memorial Lecture given to the South African National Council for Mental Health, 1965.

patient department of a general hospital in Connecticut were suffering from 'functional' complaints.

There is, of course, a great shortage of psychiatric personnel, particularly psychiatrists, there being less than 65 in active practice in South Africa. This shortage is felt in all spheres—private practice, psychiatric departments in general hospitals, child guidance clinics, mental hospitals, etc., and it is particularly severe in the mental hospital service, as can be judged by the fact that although annual admissions more than doubled in the decade 1953 - 1962, the number of psychiatrists and medical officers only increased from 60 to 67.[34] Shortages also exist all over the country in respect of mental and psychiatric nurses, psychologists, psychiatric social workers and occupational therapists. The situation is sufficiently grave to be called 'a state of emergency' in a recent editorial in the *South African Medical Journal*[31] which urges immediate action, and the South African Council for Mental Health have proposed that a Commission of Enquiry be set up to go into the matter. The National Group of Neurologists and Psychiatrists have also expressed their concern and have asked for a deputation to see the responsible authorities.

The task is enormous because of the rate at which new cases arise, the large reservoir of those that already exist, and the tendency of many mental disorders to undergo chronicity. There are remedies that can be applied[1] but it is very doubtful if curative services can ever fully meet the demand. The situation cries out for preventive action to arrest the flood at its source, but unfortunately very little is being done.

THE BACKGROUND OF PREVENTION IN PSYCHIATRY

Nothing really practical appears to have been achieved in regard to the prevention of mental illness until the beginning of the 19th century when Itard, a French physician, came across a strange wild boy who had been brought up by animals and was unable to speak beyond making inarticulate noises. Itard was able to teach him so that his behaviour became less abnormal and the notion of using an educational process to prevent mental illness was born. Then Mesmer introduced hypnotism. He himself was probably a charlatan, but he demonstrated conclusively that disorders of the mind could be influenced by psychological means, and from this has developed our present knowledge of psychopathology. The scientific underpinning of these conceptions was done by the early psychologists from the mid-19th century onwards, and by Kraepelin who introduced experimental methods to the study of mental illness.

It was an optimistic age and people felt that most things could be accomplished by science and application, and the new knowledge of human attributes and behaviour supported their view. At this time too, the idea of hygiene was much in people's minds, no doubt because sanitary engineering and public health services were also rapidly advancing. Educational techniques were also being improved, and naturally enough, it was hoped that people could be taught to be mentally healthy. The concept of 'mental hygiene' came into being and lectures, books and instructions on 'how to improve' spread. However, it did not work; many of the notions, although well-intentioned, were naive in the light of advancing knowledge, and inspirational ideas such as 'thinking right', 'activity casts out fear', 'education conquers all', and *'mens sana in corpore sano'*, did not reduce the rate of admissions to mental hospitals. Mental hygiene was also confused with certain Victorian notions of morality, control, and righteousness and with the idea that through exercise you could train anything, even the muscles of the mind. However, most mental illnesses have their origin in the psychological and physiological maturation of the first few years of life—in the emotions and not the intellect, and people just cannot be educated or exercised into mental health by didactic instruction.

The basic cause for the decline of the idea of mental hygiene was that there was insufficient knowledge of psychological, physiological and pathological processes in the brain. And so the mental hygienists became disenchanted and the idea of prevention languished to the extent that even the term was replaced by that of 'mental health'. These early efforts, however, albeit not successful in themselves, were not wasted, for they got the mental health movement started and this is now extensive all over the world. The mental hygienists also placed the emphasis where it was needed, that is, on the prevention of illness.

ORIENTATION FOR PREVENTION

Does psychiatry really have enough knowledge, even now, to talk about prevention in a hard-headed way? The contention is that it has; but clear thinking is needed and there are several fallacies that have to be disposed of. The first is a fallacy of logic; the premise that you cannot prevent a condition if you do not know its cause. It is all too true that only a few absolute causes of mental illness are known, such as the disturbance in phenylalanine metabolism in phenylketonuria, the chromosomal abnormalities in mongolism, the deficiency of thyroid hormone in cretinism, and so on; but they are negligible compared with the vast pool of neurosis, schizophrenia, and senile psychosis where we do not know the basic cause. However, it is perfectly possible to deal with illness without knowledge of its cause; it is in fact an everyday occurrence in psychiatry for we have been using empirical treatments such as ECT and psychotherapy successfully for years.

There are precedents in other spheres of medicine too; for example, the control of tuberculosis was effected long before a specific agent to counteract the tubercle bacillus was known by dealing with the contributing and antecedent conditions of the disease such as malnutrition, poor housing, and other social concomitants of poverty. This points the direction. We need not always look to eradicate a purely medical cause, for the alteration of certain social, economic and other determinants of mental illness can result in an over-all decrease in its incidence. Thus, Hollingshead and Redlich[16] showed that schizophrenia was 11 times more frequent in their lowest social class than in their highest, and Gillis *et al.*[14] found, among Coloureds in the Cape Peninsula, that 17% of persons in the lowest social class were psychiatrically disturbed compared with 5% in the highest. This emphasis is clear in the recent American psychiatric literature, where adverse social conditions are being looked into with a view to decreasing psychiatric disturbance.[3,35]

Another erroneous idea is that the only type of prevention is *total* prevention. However, diminishing the intensity of an illness or guarding against its most crippling manifestations is also prevention. Furthermore, since mental illness is often the complex end-result of several interacting factors—for example, schizophrenia has biochemical, genetic, environmental and psychodynamic determinants—it is possible by influencing one or other of these, as in the case of many bodily illnesses, to prevent its onset or to produce subclinical and abortive forms.

While we are getting our orientation right, there is another relevant matter. Until now psychiatry has been concerned with the individual patient, his symptoms and his treatment. It is highly questionable whether effective prevention, or treatment for that matter, can be achieved on a large scale in this way. 'Individual case' psychiatry can never cope with the multitudes who need it. According to the standards set by the American Psychiatric Association[32] for public mental hospitals, one psychiatrist is needed for every 30 patients under intensive treatment, one for every 150 patients under continued treatment, a nurse for every 5 - 40 patients depending on the nature of the illness, a social worker for every 80 new admissions per year, and a clinical psychologist for every 100 - 500, depending on the type of case. Not only are there too few psychiatrists now, but there will never be enough to go round; and how about the droves of psychiatric nurses, social workers, psychologists and occupational therapists who are needed? We are faced with a sort of psychiatric population explosion and like other huge national problems (for mental illness is precisely this), piecemeal planning or planning in terms of the individual merely nibbles at the fringes.

The question arises, how this great increase in mental disorder has come about. The answer is, probably, that there is not more illness than previously, but that a much wider range of behavioural deviations and more varieties of painful human experiences have come under the purview of the medical profession. The situation appears desperate—the World Health Organization has called mental illness 'one of the greatest public health concerns' and in the USA it has been called 'the mental health disaster'—however, there are tried techniques for dealing with large-scale physical illness in use by the epidemiological and public health fields, which can be adapted to psychiatry. Wonders have been achieved with tuberculosis, malaria, smallpox and poliomyelitis—why not with schizophrenia and depression? Psychiatrists, whether they like it or not (and most have little training and no predilection for this mode of medical treatment), have to move into the sphere of preventive medicine, learn to speak its language and think its thoughts, and all other mental health personnel, nurses, social workers and psychologists must follow them. Public health phrases such as 'host factors', 'primary, secondary and tertiary prevention', 'transmissible gene pool', should be as commonplace among psychiatrists as ECT, tranquillizers, and the oedipus complex.

PRIMARY PREVENTION

Prevention has to be conceived in terms of the total community, the idea being to reduce the over-all amount of mental illness. This can be a complex task, certainly more difficult than inoculating people against smallpox, for there are many factors concerned, but the public health conceptions of primary, secondary and tertiary prevention are nevertheless most useful. In primary prevention, efforts are directed towards detecting and dealing with the antecedents of illness before they have had a chance to produce damage; this often means altering the balance of factors which contribute to the development of a condition so that, although no specific person is prevented from becoming ill from any specific condition, there is a reduced risk for the whole population. Examples of this occur in the conditions of mental defect, epilepsy, and certain behaviour disorders and reading disabilities in children which have been shown to be associated with abnormalities of pregnancy and childbirth.[18,28-30]

Anything that reduces the incidence of puerperal conditions can be expected to reduce the former; and since the women at high risk are the poor, the migrant, and the unmarried, if these are sought out and appropriately dealt with in the antenatal period, there will be a lower incidence of these conditions in their children. Similarly, premature births are more common in the lower social classes and carry a higher risk for neuropsychiatric sequelae;[21] a severe malnutritional deficiency such as kwashiorkor, can result in mental retardation, and infections such as meningitis and tuberculosis, which give rise to brain damage and subsequent mental disorder, are most common in infants and children in the lower social classes. All these conditions are preventable; it only remains to attack them in an organized community-wide fashion. The remedies are of course often social and economic, but not necessarily beyond the field of operations of mental health workers. Eisenberg[11] puts the matter succinctly: 'All of this may go far afield from what is conventionally labelled mental hygiene; there will be those who contend that it is not our business to go beyond the clinic and the consulting room. But is it any less our business than a contaminated water system is the business of a microbiologist—than a reservoir of uninoculated children is the business of a virologist—than inferior lead-containing paints are the business of a paediatrician—than nuclear fall-out is the business of a physicist? As the experts in behavioural science, we must join those others already in the front line; public health doctors and nurses, paediatricians, teachers, housing experts, welfare workers and others, in order to stop the epidemic of socially induced psychopathology at its source.'

Special opportunities for primary prevention also exist in the psychological sphere. An unwanted pregnancy, a psychiatrically ill mother or an unhappy marriage, can all create an unfavourable atmosphere for rearing children, and all of these are detectable during pregnancy. Other indicators of pending psychological trouble are the many physical symptoms with a psychological basis that occur during pregnancy. Klein *et al.*[19] have shown that symptoms such as excess salivation, nausea, vomiting, constipation, diarrhoea and subjective sensations such as fainting, dizziness and palpitations are all related to the emotional stability of the mother, the wantedness of the child and a favourable marital adjustment. We should be able to pick these women out at our antenatal clinics. We certainly examine them for early evidence of physical illness and

test their urine, blood pressure and weight, but who asks about the mothers' fears, attitudes and competence? How many psychiatrists are there in antenatal clinics or how many midwives with an adequate training in psychology? What a field for prevention, and what a place for mental health workers!

The problem resolves down to providing special training for midwives, public health nurses and clinic doctors who do not have an adequate psychiatric background. Courses in psychology are valuable and have been undertaken for groups such as the public health nurses of the Johannesburg and Cape Town municipal health departments. They are however no more than 'whetters of psychiatric appetites', for lengthy and intensive instruction is not practicable and in any case, these are busy people who do not usually have the time to deal with the psychiatric problems that they come across in their daily work. The important thing is that they should be able to detect the early signs of maternal distress or ineptitude and refer the case to the appropriate quarters.

To this end Levy[23] has developed a technique for recognizing poor mothering in a well-baby or postnatal clinic which can be applied by any intelligent nurse, social worker, paediatrician or clinic doctor. The procedure is formalized so that they are taught to look for several definite phenomena, e.g. How does the mother carry the child? Like a baby, like a doll, like a package? Does the baby appear comfortable in her lap? Does the mother handle the dressing and undressing with an awareness of the baby's reactions? Does she stop to chat while the baby's shirt is covering up his face and making him uncomfortable? If the baby is in her lap while talking to the doctor, how often does she glance at him? If the doctor compliments the mother on the baby, what is her response?—does she smile at the doctor and say 'thank you', or does she glance down at the baby and then acknowledge the compliment? When the doctor gives an injection does the mother hold the baby securely and comfort him, or does she turn her head away and try to escape from the situation? Levy has also worked out a set of observations to detect sibling rivalry in the older children, and to give a clue to excessive dependency. For instance, if the doctor asks a 5-year-old child his name and he turns to his mother for support before risking an answer, this may be sufficient warning to look further for signs of undue dependency.

Feelings of the mother that could be pathogenic to the child are tapped by asking a list of carefully worded questions which enable her to express herself freely without feeling guilty or being too guarded. For example, 'Do you have any help in the care of the baby?' The answer may reveal an unsuspected problem which can lead to poor mothering, i.e. 'No, I have no help at all, I am all alone with the baby. I was so scared at being alone with him at first, I didn't know what to do.' In fact, this particular mother needed a mother herself and begrudged her baby what she had to give him. Or there may be problems in relation to grandmother. Take this response for instance: 'Help? Do I get any help? I get so much help that I hardly know that I am able to take care of my own baby. Between my mother and my mother-in-law and a few of the other relatives, they are always telling me what to do.' The way questions are framed is particularly important. For example, do not ask 'Is Johnny jealous of the baby?' but rather 'Does Johnny show the usual jealousy?'. Or better still, 'Can you leave the children in a room together?'. From the answers it is possible to say with a degree of certainty whether a particular mother needs special attention for her sake or for that of her child. The clinic staff are also taught simple techniques for giving advice and reassurance,[23] or if the case seems more serious, the mother is referred to a psychiatrist.

Another method of handling such cases at a simple level has been evolved by Caplan and his associates.[8] This is called 'mental health consultation' and consists of making the services of a skilled psychiatric consultant (who might be a psychiatrist, a psychiatric social worker, a psychiatric nurse or a psychologist) available to the doctor, midwife or public health nurse to assist in dealing with psychological problems. The consultant does not take over the case but guides and counsels the workers at regular intervals, with the result that they gain enormously in knowledge and skill. For instance, the professional staff at a newly-established mental health centre in Minnesota[26] spend 65% of their time in such consultations. They travel around their area to have consultations with general practitioners in their own surgeries, public health nurses, ministers, and so on.

PREVENTION IN THE POSTNATAL PERIOD

A great deal has been learnt in recent years about the effects of early infant rearing on subsequent behaviour in both animals and humans. We know for instance, that all baby animals go through a short period during which they will form an attachment to whatever living, or sometimes even moving, thing is around at that time. We can condition little ducklings to follow only human beings by removing them from their own mothers for a crucial period of some hours after birth and having a person tend to them at that time. Thereafter they never follow their own duck mothers, only people. Monkeys too, raised apart from their mothers for the first 6 months of their lives, show a very much delayed developmental pattern and do not become properly socialized, their relationships with both their mothers and their playmates being impaired for the rest of their lives.[17] They never learn to play properly with their peers, and do not achieve adult sexual activity although they grow to be physically mature. The males approach normal females with enthusiasm but their approaches are invariably misdirected and none complete normal monkey procreation. Some of these monkey females do manage with the help of enthusiastic males to become pregnant, but most are frigid and show no interest in sex whatsoever. If they do conceive, they become inadequate mothers and ignore their babies.

It may well be that similar situations occur in humans. Certainly human children also pass through critical periods when close association with the mother is essential for further development to proceed, and although these periods are longer than in the case of ducks and monkeys, the probability is that if a baby does not form a bond with anyone in the first 6 - 12 months he will become an affectionless character without the capacity for intimate personal relationships. A personality disorder or a depres-

sive illness may then develop in later life and quite conceivably, frigidity or impotence too. Even if he has achieved close connection with his mother during this time and then becomes separated from her for some reason, ill-effects can ensue,[5] for example, he may develop separation anxiety followed by a sequence of protest, despair, and emotional detachment from other people.

These circumstances give rise to what is called the 'emotional deprivation syndrome', which is a clear-cut clinical entity with profound effects on the personality. It often passes unrecognized, however, in spite of the fact that it has been well studied by workers such as Anna Freud, Spitz, Melanie Klein and Bowlby. Goldfarb[15] was one of the first to delineate it. He studied children admitted to a very depriving type of orphanage before the age of 6 months and found that they later became markedly detached, isolated and incapable of deep or lasting ties. In addition, there was a lack of sustained effort, an intellectual apathy, restlessness, difficulties in concentration and a promiscuous seeking for affection. These symptoms are very similar to those found in personality disorders in adults. He also found inferior psychological performance in respect of general intelligence, visual memory, concept formation, language formation, language function and school adjustment.

Many similar studies indicate that personality defects and delinquent behaviour are especially common among such deprived children, and that the incidence of mental disorders in later life is greater. For example, Barry[2] found that the loss of a mother through death in the first or second five years of life occurred much more frequently among mental hospital patients than in the general population; and also more frequently among patients suffering from psychoneurotic or psychosomatic disorders, than in a control group. Brown[6] showed that the loss of the mother through death was more frequent among depressed patients than in the general population. In clinical practice we see many such patients; some are psychotic because the disturbance in personal relationships was so early and so profound, others are left with a personality disturbance, and still others are so vulnerable that they break down into neurotic symptoms when exposed to even slight stress. Most pathetic of all, perhaps, are those broody, depressed people who can never be assured of being loved and make a 'profession' of demanding more affection. Often they become drug addicts or alcoholics, or the most intractable type of neurotic.

These cases are difficult to treat, for defective mothering causes deep damage and if it is not rectified within a certain fairly limited period during infancy, it remains for life, affecting both emotional development and intellectual functions such as language, abstract thinking, general intelligence, visual memory and concept formation. Many of these cases give the appearance of mental retardation and Klebanoff[20] reports that in a series of children, thought of as intellectually retarded by their school because they failed consistently, 40% were found on investigation not to be so. They were emotionally disturbed, culturally deprived, neglected, deserted, orphaned, brain-damaged or handicapped by being deaf, blind or dyslexic.

Much can be done by an informed and understanding approach. Recently, in despair about the enormous number of cases on the psychiatric doorstep with a background of emotional deprivation, and seeking to prevent more, the Department of Psychiatry of the University of Cape Town arranged a special seminar for those in charge of orphanages, reformatories, places of safety, children's homes, industrial schools, and similar institutions, the idea being to gather together those who are most in contact with children at highest risk. I was surprised to find how little many of these social workers, nurses, doctors, and superintendents of orphanages really knew about emotionally deprived children, although their care was their vocation and stock-in-trade, and I was convinced anew of the necessity of instruction and informed discussion on this subject if we are ever to prevent the sinister later effects of such conditions. For instance, it should be generally known that infants are most vulnerable to maternal deprivation during the first 2 years of life, and if they are institutionalized for more than 4 - 6 months at a time without one responsible mother substitute, sequelae are bound to follow. Attention should also be focussed on the management of children in orphanages and institutions, for the same process occurs even with older children. Burlingham and Freud[7] found, for example, that the remedy is to provide a special member of staff for a particular child, in the form of a mother surrogate, and if this is done, the child's behaviour improves and his development proceeds normally. Children in orphanages should therefore be split into small family groups of varying ages and sexes under the care of a housemother and preferably of a housefather too, to encourage the physical and emotional atmosphere of a family. Nothing is more tragic and destructive to mental health than the case I came across recently where 7 children of an alcoholic mother were all put into different homes. Not only did they lose her, but each other too.

Foster care is of course another solution to this problem, for as Margaret Mead[24] has pointed out, institutions are at best only a prolonged and ritualized method of disposing of unwanted infants and children. Once there, they remain unwanted although physically cared for and this is the really lethal element of the orphanage. A good foster placement at an early age will tend to guard the child against this predicament. This is preventive psychiatry if anything is. Several useful and simple rules were recommended by Bowlby:[4] (*i*) Every effort should be made to provide a family for a family-less child; (*ii*) adoption should take place as soon after birth as possible; (*iii*) foster-home placements should be made in the first few months after birth and repeated placements avoided if possible because they weaken the infant's trust in a stable relationship; (*iv*) institutions for children under 4 - 5 years are generally unsatisfactory because they cannot provide the necessary intimacy with some mother figure; (*v*) every effort should be made to move children out into small family groups; (*vi*) in general, a disturbed family is better than no family at all; and (*vii*) removing children from their mothers after a relationship has been established can be highly dangerous.

At first there is a violent protest, but if there be total, sudden withdrawal, physical, emotional, intellectual and social retardation will follow. A child who has suffered separation damage will show withdrawal, or a hostile re-

fusal to recognize the mother, a demanding possessiveness, or a cheerful shallowness.

PRIMARY PREVENTION IN ADULTHOOD

There are several simple techniques that can be put to use. That described by Caplan[9] is based on the observation that reactions to personal and emotional crisis follow a common pattern. At first, there is a disequilibrium of the personality with confusion and then protective psychological defences come into action to help the person cope with the situation. The outcome of the crisis appears to be determined not so much by its cause or even the personality or previous experience of the person (although these do have some influence), as the manner in which it is resolved. Caplan considers that during the period of disequilibrium there is an increased susceptibility to outside intervention and correctly-judged approaches can give rise to a beneficial therapeutic experience; in fact, they can have permanent effects on the personality. He calls this 'preventive intervention' and stresses that really effective work can be done even by non-psychiatric professional workers, namely those to whom people turn in crises such as doctors, ministers, social workers and teachers. Among the crises that can be dealt with in this way are bereavements, severe physical illness, economic reverses, migration, retirement, separation from loved ones, transition of students to university, children facing the ordinary experiences of life for the first time, the adjustment of nursing students to the stresses of hospital work, women during pregnancy, the adjustment of young couples to the stresses of engagement, early marriage, the first baby and so on.

Basically the technique consists of a practical way of handling people under pressure, a type of informed emotional 'first-aid'. It is claimed, however, that its effects go far beyond the moment and that, properly done, it can prevent later disturbances. Briefly, it consists of assisting the person to confront his crisis and to deal with it in manageable doses. The situation is reduced to a realistic level by helping him to find the facts and to accept help. It is important to avoid false reassurance, denial of the circumstances or the need for help and the blaming of others. The procedures are based on sound psychological principles and have the advantage that they are easily taught and applied. Validation experiments to prove the efficacy of these procedures, for example, in the crisis of premature childbirth, are proceeding.[8]

SECONDARY PREVENTION

The aim of secondary prevention is twofold; firstly, to reduce the amount of mental disorder in the community by detecting early cases, and secondly, to treat them actively so that the total number of persons who are ill at any one time is diminished. Again, stress is laid on the community rather than the individual. The first objective is the early recognition of illness, and this, by and large, is not a matter for psychiatrists at all. They are acutely aware anyway of the large numbers of babies and children who are being made into psychopaths, depressives and schizophrenics, 'in the kitchens', as it were, of ordinary average homes. It is the public who must learn to recognize mental illness early and know where to bring patients suffering from it, but there is a lack of knowledge, particularly among the lower social classes, of its symptoms, as was evident in a recent study of advanced and demented schizophrenics done in Cape Town by Gillis and Keet,[13] who found that in spite of hallucinations, delusions, and grossly disturbed behaviour, in most cases relatives did not really acknowledge that these patients were ill. Similarly, only half the cases went to doctors for help; most turned to ministers, social workers and the police. The point is that everyone can tell that a child has a temperature, a bad cough or measles, but the general awareness of psychiatric conditions lags behind. Parents should, for instance, be able to say: 'My child has a behaviour disorder', or: 'She has an unhealthy depression', or: 'I don't like the way Johnny withdraws from intimate personal contact and he better see a doctor'. The aim of secondary prevention is just this—to raise the titre of psychological knowledge in the community so that more parents become more aware of the reactions of their children and the way they are handling them. Sigmund Freud, when asked by a young mother after a lecture on the psychological effects of bad child-rearing what she could do to prevent mental illness in her children, replied: 'Why, madam, you can but do your best and hope for the best'. Prevention is simply that more people know what is the best. The same of course applies to foremen in factories, teachers in schools, ministers in their parishes, kings in their counting-houses, queens in their parlours, and ordinary people at home and at work.

A dilemma develops here. Talks to laymen about psychological matters often arouse their anxiety and guilt without really dealing with their underlying problems; psychological disturbances are often deep-grained, and the help they need is often not easily obtained. For this reason many psychiatrists and psychologists have doubts about the effects of talks on a popular level, for example, at nursery schools, parent-teacher associations, mental health meetings and so on. Public education also has the effect of unmasking some of the hidden illness that exists in the community. In a recent investigation in Cape Town, for instance, it was found that only one-tenth of those persons who needed psychiatric help actually came for it.[14] It is also a question of coping with those that do: advertising brings results, but also, in this instance, problems, for there are not enough assistants in the psychiatric shop to serve the customers, as a mental health society in a small South African city recently found to their consternation. They conducted an energetic and very successful mental health campaign, but so many psychiatrically ill people came forward for assistance that their service was completely flooded. We are in somewhat of a cleft stick; on the one hand we must increase public understanding about mental illness and on the other, in doing so, we raise anxiety and cases and inundate ourselves with work. It is clear however that we cannot shut up shop—the sick are there and we must mobilize and treat them; more than this, public information must go on, in fact, it must improve and extend. There is no help for it—prevention has become mandatory, for curative services cannot cope with the demands made upon them and we must try to stop mental illness at its early beginnings.

Another method of secondary prevention is to provide effective treatment services for as large a number of people as early as possible. Once again from the larger point of

view, successful treatment *is prevention*, since it removes the patient from the pool of established cases and so diminishes the amount of specialist time and attention he will need. This technique is effective only if we get the patient before he becomes chronic; however, there are so many mentally ill people at the doors of psychiatrists and hospitals that those who knock loudest get in first. Now these 'loud knockers' have, for the most part, well developed mental illness—the schizophrenics, the mentally retarded, the senile dements, those with arteriosclerotic brain disease, and so on, but unfortunately we can do the least for those who knock the loudest. They have nevertheless to be taken in and cared for, and gradually, because their recovery rate is low, these patients come to fill the available accommodation from the bottom up. Consequently, all mental hospitals are full of chronic schizophrenics and senile psychotics who absorb their limited resources like blotting paper. The many early and recoverable patients with a good prognosis tend to be softer knockers. They need urgent short-term treatment, and while some do get it, many do not. This is not an easy problem to resolve. The needs of the chronic cases have to be met, but at the same time we must get to the acute cases.

What can easily happen in a situation of shortage of services and staff such as exists at present, is that large institutions are put up to meet what are taken to be all the current needs. The authorities are lulled into a false sense of security in having made this provision, but in effect all that has happened is that there is now more accommodation for chronic cases. The acute cases to a large extent still continue to be dealt with as they always were—mostly by psychiatric amateurs, or rather non-psychiatric professionals—casualty officers, general practitioners, public health nurses, social workers in various welfare agencies, housing managers, ministers, school teachers, and so on. This is our community service—but with all the respect in the world, it is random, unorganized and catch-as-catch-can and is staffed largely by psychiatrically untrained people.

The problem is similar to that which faced public health authorities in dealing with tuberculotics many years ago. They had to decide whether to concentrate on the developed chronic cases, or to divert their interests into detecting and curing early cases and dealing with their contributing and antecedent circumstances. The choice can be painful, but fortunately it need not be made, for psychiatry is literally jumping with good ideas for the so-called chronic cases these days. I do not wish to give the impression that the problem can be quickly dealt with, but there are techniques which, properly used, could help greatly, such as industrial therapy, the village treatment of psychotics, day centres, halfway houses, low cost infirmary care with semi-trained staff, care in hostels by general practitioners, remotivation techniques, sheltered employment and rehabilitation. Experience overseas has shown that it is perfectly possible to attack this problem in an effective way. Then we can get on with our job of early help and bring psychiatry into the actual fighting line, instead of waiting to catch the mortally wounded in the rear. The forward casualty stations should consist of psychiatric first-aid, walk-in services, community clinics, community nurses, psychiatrically trained social workers in welfare agencies, psychiatrically sophisticated general practitioners, public health nurses, and an aware public and these should be developed as soon as, and wherever possible.

TERTIARY PREVENTION

Tertiary prevention aims at reducing the effects of loss of capacity and residual defect resulting from mental illness; that is, to reduce the total amount of defective functioning in the occupational and social life of the community and also to prevent further breakdown of those who have already been treated. This boils down, quite simply, to rehabilitation and aftercare. Once again the term 'prevention' is used in respect of persons who are or have been already ill because, by these measures, they are removed from the total burden on the available psychiatric resources.

About 20 - 30% of patients discharged from mental hospitals in America relapse, and it is this rehospitalization that, to a considerable extent, forces hospitals to remain full and even to expand their services in spite of the present-day efficiency of treatment. With adequate aftercare, however, the rehospitalization rate can be considerably lowered, e.g. in one American programme it was reduced by about half,[20] and Orlinsky and D'Elia,[21] report that 25·7% of 1,336 discharged schizophrenics with aftercare were rehospitalized compared with 45·5% of 796 patients without aftercare. It is one of the tragedies of our time that we fail to recognize that hospitalization for mental illness is only part of the total range of services we must offer. If we are ever to win the battle of mental illness we must tackle it on many fronts and aftercare *is* a major front. 'Treatment' does not necessarily mean 'hospitalization' and we must use our services and staff to keep patients out of hospital rather than plan in terms of the number of beds in institutions.

Psychiatry has changed and new methods demand that we change our attitudes too; some beds are necessary surely, but if this is all we provide we deploy our limited staff and funds inefficiently and leave vast reservoirs of early illness and preventable suffering untouched.

Then there is the matter of rehabilitation which has just not had the emphasis it deserves. Much mental illness is chronic and leaves a residual defect both in the personality and in the person's productive capacities. However, many abilities remain and even chronic patients can be usefully and gainfully employed to the limit of their remaining capacities. The basic techniques of rehabilitation are known and already applied to the physically disabled in the form of sheltered workshops, industrial therapy and so on; it only remains to use these techniques in a purposeful manner for the mentally ill. There is much catching-up to do in South Africa. We have no halfway houses and hostels for the recovering and convalescent mentally ill people, very little in the way of industrial rehabilitation units and no specific sheltered employment schemes for the mentally ill.

SUMMARY

Mental illness, apart from the suffering it causes, is a major public health hazard. Not less than 1 in 10 persons living and working in the community are in need of psychiatric assistance and many more suffer from symptoms of psychological distress. However, curative services can never cope with the de-

mands for treatment, and there is much that can and should be done, to prevent psychiatric disturbance or diminish its effects. Psychiatry is not at present orientated in this direction to any extent, although there are several practical techniques available. Some of these are discussed.

The single most important factor would seem to be a correct orientation, that is, to see the possibilities of prevention and to have the zeal to exploit them. This involves planning and action on a community basis and on the model of public health.

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