MENTAL HOSPITAL PLANNING IN DENMARK

By

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By 1975 Denmark should have 9 new mental hospitals, each, with one exception, closely linked to a general hospital. This is the most striking of the proposals contained in the Report* of a Commission set up by the Danish Ministry of Internal Affairs in 1952. This Commission was to "report on trends of development of the State Mental Hospital Service in respect of organization and buildings, with special reference to the necessary adaptation of the hospitals to present-day needs and forms of treatment. The Commission's deliberations, which should principally be concerned with the modernizing and extension of the hospitals together with their position in relation to the general hospital service, should also include the possible extension of treatment to categories of patients with mental disorders other than true insanity. The Commission's work should be so arranged that its report can constitute the immediate foundation for the practical organization of future reform work." This Report contains much of general interest and much which might merit wider application.

Before reviewing the Commission's Report, a few explanatory words about hospital administration in Denmark are necessary. With a few exceptions, the general hospitals are under municipal or county authority administration, whereas the mental hospitals (with one exception) are state-administered, the Directorate of Mental Hospitals coming under the jurisdiction of the Ministry of Internal Affairs. In all medical matters the Directorate must consult the Central Health Board, which is itself subordinate to the Ministry of Internal Affairs, and functions in a purely advisory capacity. There are seven State mental hospitals, and one municipal mental hospital; the latter, St. Hans Hospital, serves exclusively Copenhagen.

The Commission assumed that the essential problem was not that of simply providing more mental hospital beds so that the mental hospitals could then function along traditional lines without the handicap of a bed shortage. Rather was it that of adapting the mental hospital system to meet a new situation, which has been arising during the last few decades, created by the increasing emphasis on active treatment, and which requires, for example, a different utilization of the space in existing hospitals. This argument is not a new one, but it seems to have been followed more thoroughly to its logical conclusion in the Danish plans.

The Report opens with a good historical account of the development of psychiatric treatment—an account evidently aimed at the lay reader. Then follows a review of the structure of each of the State mental hospitals. Of these, only four were built as mental hospitals, the last in 1915. The remaining three were created by conversion of other buildings, including an old prison (dating from 1743). The mental hospital statistics for 1955 show overcrowding up to 20 per cent., with an average of 9 per cent. This may be compared with...

* "Betaenkning vedrørende staten's sindsygevaesen" (Betaenkning nr. 165), Copenhagen, 1956.
the English figure (calculated from data in the Board of Control's Report for 1955) of 15 per cent. overcrowding.

Since it is out of the question to scrap the existing hospitals in the foreseeable future, it is proposed in the cases of the four hospitals built as such, that their "normal" bed-capacity should be reduced by 30 per cent. as a step towards reorganizing them along more modern lines. Of the other three, one is no longer to be used as a mental hospital, the ex-prison is to be rebuilt, whereas no change is required in the third—a converted palace. These changes will involve reducing the present number of beds in the State mental hospitals—5,700—by about 1,800.

The figure of 5,700 is remarkably small for a population of 3.5 million (i.e. the population of Denmark outside Copenhagen), giving only 1.6 beds per 1,000 population. This figure, however, has to be viewed in the light of two additional factors. The first is the use in Denmark, since 1915, of special after-care institutions which take from the mental hospitals patients who still require institutional care but not daily psychiatric supervision. These institutions call on local practitioners for the ordinary medical care of their patients and are visited, usually once a week, by a psychiatrist from the mental hospital which the institution serves. There are 10 such institutions, containing about 1,300 patients. The second factor is that the boarding out of mental patients is still used relatively extensively. Since the Second World War, however, social factors have led to diminishing possibilities in this field, and whereas over a thousand patients were cared for in this way in 1945, there were only 770 in 1955. It is justifiable to combine the figures for boarding-out and after-care institutions, since the former provision is likely to decline further, the deficiency having to be made up by increasing the number of beds in after-care institutions. These two provisions together account for 26 per cent. of the total "beds" available in the State psychiatric service, but the Commission proposes to raise this figure to about 30 per cent., since the number of beds in the after-care institutions is inadequate, and the institutions themselves are so distributed that some of the existing mental hospitals are poorly served in this respect.

Turning to the question of what new building is required the Report sets out the premises on which its proposals are based. The figures show that in 1950 there were 2.17 beds (of all kinds) per 1,000 population (outside Copenhagen), and it is proposed to raise this figure to 2.5 per 1,000 (or 3.5 per 1,000 population over the age of 15, if it is calculated on the basis of the population at risk). The population concerned being 3.5 million, this reform will involve the provision of a further 1,160 beds. The figure of 2.5 per 1,000 is adopted as a minimum, and is low in comparison with the English Ministry of Health recommendation (1950) of 4 mental hospital beds per 1,000.

The proposals for new building avoid piecemeal planning aimed only at correcting present deficiencies. Instead, plans are put forward for those needs which can be foreseen up to 1975. Assuming that the population will thereafter continue to increase at its present rate, it should then be sufficient to provide 90 new beds annually to keep pace with current needs.

Of the future needs on which such plans would have to be based, those related to population factors are most easily predictable. The future growth of population is considered in relation to both urban and rural communities, in view of the fact that the incidence of admission to mental hospitals is higher in urban communities. Urban communities are here defined as those with a population of at least 2,500; this figure has been chosen on the basis of Malzberg's
finding (1935) that the curve of admissions to mental hospitals shows a sharp rise for communities of over 2,500. Extrapolation of the Danish census figures shows that in the period 1950–1970 the rural population at risk (aged over 15 years) can be expected to decrease by 4 per cent. (from 1.32 to 1.27 million), whereas the urban population (aged over 15 years, outside Copenhagen) will increase by 45 per cent. (from 1.24 to 1.80 million). These trends will accentuate that part of the increasing need for mental hospital beds which is directly due to progressive ageing of the population. This conclusion is based on the present-day experience that the possibilities for home care of the milder senile confusional states and dementias are less in an urban than in a rural community.

The problem of the increasing number of old people actually in mental hospitals is shown, however, to be due principally to the striking fall in the death-rate of chronic patients. In 1937 the proportion of patients in the State mental hospitals who had been there more than 10 years was 35 per cent., whereas in 1952 it was 51 per cent. Indeed, a Norwegian investigation (Ødegaard, 1952) has estimated that 65 per cent. of the increase in the need for mental hospital beds in Norway in the period 1930–48 was due to this one factor. Admissions of patients over 60 to Danish mental hospitals have constituted a fairly steady proportion (10–12 per cent.) of the total, although their actual number has risen steadily—this trend being offset by a corresponding rise in the turnover of mental hospital beds.

In addition to these factors, which can be assessed quantitatively, others of a more qualitative kind are pointed out. For example, improvement of the State Mental Hospital Service will tend to increase the demand for beds. When modern or modernized hospitals free of overcrowding are available, both patients and their relatives will presumably be more willing to accept the prospect of admission. Furthermore, figures are given showing that the rate of admission falls with increasing distance between the hospital and the patient’s home. The proposal to build several small hospitals rather than a few large ones, so that each hospital serves a relatively small region, should therefore lead to increased demand for admission. On the other hand, the out-patient treatment of marginal cases, instead of their admission, is more feasible when the region served by the hospital is small, so that these two factors may in fact tend partially to cancel each other out.

Finally, the proposed linkage between mental and general hospitals should reduce lay, not to mention medical, prejudice against the mental hospitals.

As mentioned before, the plans aim at meeting demands up to 1975. This period is evidently chosen as a compromise between the greater uncertainty involved in taking a longer period, and the very high rate of capital expenditure which a shorter period would involve.

On the basis of those factors which are quantitatively predictable, it is proposed to provide an extra 4,800 beds (3,200 mental hospital and 1,600 after-care institution beds)—1,800 of these compensating for the deficiency created by modernizing the existing hospitals.

The Report discusses at length the less costly alternative of establishing psychiatric wards within the general hospitals. This alternative is rejected on the grounds that beds so provided would not relieve the mental hospitals sufficiently, and also the latter’s isolation would remain unchanged. It should, however, be made clear that the Commission is not opposed to general hospital psychiatric units on principle, but only as a substitute for new mental hospitals. Psychiatric units in general hospitals are, in fact, a well-established feature in Copenhagen,
which has 62 such beds per 100,000 inhabitants. This figure may be compared with Blacker's provisional proposal (1946) of 10 per 100,000.

Union of the new mental hospitals with general hospitals is accepted as axiomatic. It is hoped, by this means, to establish a day-to-day collaboration between psychiatrists and their colleagues in other clinical fields, and to strengthen the trend of latter years towards abolishing the artificial isolation of psychiatry from the rest of clinical medicine. The economic advantage of the mental hospital being able to share various facilities with the general hospital is obvious, and it is hoped that the close link with general hospitals will also ease the problem of obtaining nursing staff.

In Denmark there is no training for mental hospital nurses which is distinct from general nursing training. Trained mental hospital nursing staff is recruited from those who are doing, or have completed, their general training. At present, a nurse in general training may elect to work in a mental hospital for 6 months but it is intended to replace this by a compulsory period of 4 months.

It is stressed that all these advantages can only be achieved if the mental hospital is built close to the general hospital. The new mental hospitals are thus to be built adjacent to general hospitals, but, as mentioned earlier, there is to be one exception. One of the new hospitals is being built on a somewhat isolated site in North Jutland and is intended for those with illnesses of long duration, especially in the older age-groups. The advisability of such a project is questionable; it was originally planned as an ordinary mental hospital before the Commission was set up, but even though the site was clearly unsuitable it proved to be impossible to drop the project, hence the present compromise.

It is clear that if the new hospitals are to be closely linked to general hospitals, they must be smaller than those built hitherto, but, on the other hand, they must be large enough to permit the necessary degree of subdivision into different types of ward, and the Commission proposes 300–350 beds as the best compromise. According to the specimen plans included in the Report, a new mental hospital is to be so arranged that staff accommodation and convalescent wards will be nearest to the adjoining general hospital, followed by the admission wards, administration offices and special investigation departments, and with the wards for long-stay patients furthest away. Whereas pavilions are proposed for chronic patients, present-day requirements for admission wards, treatment, investigation and administration departments are more adequately met by a more concentrated kind of building. Nevertheless, in the latter case, single-storey buildings, with their more pleasant and non-institutional appearance, have been used, grouped in such a way that they can be interconnected by short corridors. Well away from the main part of the hospital is a child psychiatric clinic, with a small in-patient unit for acutely disturbed children.

The largest ward contains 24 beds, but this number is reduced to 16–18 in the admission wards, and 4 beds per room is the maximum. In addition to 10 admission wards, there are 3 convalescent wards and 8 wards for chronic and more severely disturbed patients. These plans are reproduced with English text in an article (1956) by Professor le Maire, Director of State Mental Hospitals in Denmark.

Eight new after-care institutions are to be built, with from 80 to 250 beds, and placed as near as possible to the "centres of gravity" of the populations they will serve.

Besides the planning of new building, the Report also discusses problems presented to mental hospitals by certain groups of patients. Treatment of the criminal insane, for example, is a particularly vexed question in Denmark.
There is no separate mental hospital corresponding to the English Broadmoor and all insane criminals are treated in the ordinary mental hospitals, one of which, it is true, has a special security unit with 30 beds for the most dangerous. Even in the case of this special unit, patients are transferred to an ordinary ward if their state improves sufficiently, and it is used only for male patients. It may be mentioned that this unit originally had 50 beds and, until as recently as 1955, was usually full. In the last 2 years, however, the number of patients has fallen to 25–30; this change is apparently due to the extensive use of chlorpromazine and reserpine, which has made it possible for many of these patients to be transferred to ordinary mental hospital wards.

The system described above is flexible and humane, but also has disadvantages. In practice, these patients come into one or other of two categories: either they are sentenced to psychiatric treatment during which admission to and discharge from hospital are at the psychiatrist's discretion, or they are sentenced to "detention" in a mental hospital. In the latter case, not only is the question of discharge decided by legal authority, but the hospital is expected to perform two distinct functions—treatment of the offender in accordance with medical requirements, and his detention in accordance with juridical requirements. Although these patients are relatively few—25 to 30 a year—many Danish psychiatrists feel strongly that the enforcement of a degree of detention, which would not otherwise be indicated on medical grounds, hampers the current trend towards greater freedom for mental hospital patients in general. It is maintained also that the presence of these patients reinforces lay prejudice against mental hospitals. To these arguments the Commission itself adds the point that the criminal patient himself suffers if the juridical demand for secure detention means, as it may do, that he must be kept in the environment of a closed ward when in fact his mental state justifies greater freedom. Nevertheless, considering that many of those sentenced to detention in a mental hospital have committed serious crimes, including murder, the attitude of the legal authorities seems on the whole conciliatory and sympathetic. In fact, the Danish Ministry of Justice prefers the present arrangement to setting up a special criminal mental hospital. The Commission on the other hand, proposes a special institution for those insane criminals who present particular security problems.

Other problems, including staffing problems, are touched on, and one or two of these may be worth mentioning. For example, only a very few of the mental hospital male nurses are at present fully trained and male nurses have played altogether a much more subsidiary role than in Britain. This tendency is to be reversed in order to help to meet the increasing need for nursing staff. However, the problem of nursing staff will presumably be a formidable one. According to private opinion, only 50 per cent. of the staff of the new hospitals is likely to consist of those who have completed, or are engaged in their full training.

The question of medical staffing is reviewed, but no proposals are given concerning the staffing structure to be adopted in the new hospitals, although, as the Commission itself states, the solution of the various staff problems will determine the standard of treatment and care in the new hospitals.

Appropriately, in view of the improved status which the mental hospitals are to have, the Commission suggested reform of the procedure for certification. According to Danish law, certification of a patient must be sanctioned by the local Chief Constable or, in his absence, by one of his deputies, and the transport of the patient to hospital is a police responsibility. It was particularly the latter feature which the Commission wished to have changed, but this
proposals was rejected by the Ministry of Justice. In fact, the element of deprivation of individual liberty involved in admission to a mental hospital does not seem to be taken quite so seriously in Denmark as in Britain. For example, a voluntary patient who intends to discharge himself can be detained at the discretion of the medical superintendent, subject to the Minister of Justice’s consent and subject to appeal to a Court.

Finally, what are the prospects of these plans being fulfilled? The proposed building will involve an annual expenditure of £1,000,000 until 1970, thereafter £600,000–700,000 annually until 1975; it is unlikely that the Commission’s plans will stand unaffected by economic factors for 20 years, but it is hoped that the building planned for the next ten years will be carried through, by which time the greater part of the modernization of the existing hospitals should be complete.

Some indication that these problems are being tackled in earnest is afforded by the fact that nine months after the Commission was set up, it put forward detailed proposals for dealing with what it considered to be the most acute problems. This interim report proposed the building of two new mental hospitals, and two new after-care institutions, to be followed by modernization of the most obsolete of the existing hospitals—involving in all an expenditure of £3,300,000. These proposals were accepted in their entirety and the necessary law was passed in March, 1953.

The two after-care institutions were opened in April, 1957, and it is clear that they have been thought out with great care. A possible criticism is that the same upper limit of 4 beds per room, which has been laid down for the new hospitals, has been applied to these after-care institutions, and when an institution of this kind is to take a considerable number of senile patients, the large number of small rooms will increase the problem of supervision.

The modernization of the most obsolete mental hospital—that based on an old prison—is in progress, and the prison building itself, a forbidding structure which dominated the rest of the hospital, is being demolished.

The first new hospital was to be finished by October, 1957. The second is being built together with a new general hospital. It has been possible in this case to plan the two hospitals as a combined whole from the beginning, so that when they are completed in 1960, they will provide the best attainable model of the new principle in the Danish State Mental Hospital Service.

**Summary**

The Report of a Danish Commission which was set up in 1952 to examine the present deficiencies and plan the future reform of the Danish State Mental Hospitals is reviewed. The plans put forward aim at anticipating needs up to 1975 and include the building of 9 new mental hospitals, with 350 beds each, closely linked to general hospitals and also 8 new after-care institutions. A summary is given of the premises on which these plans are based.

Other proposals, including those for the criminal insane, are mentioned.

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