

THE PHYSICAL ENVIRONMENT OF THE MENTALLY HANDICAPPED

XI*—CHILDREN'S UNITS IN HOSPITALS FOR THE MENTALLY HANDICAPPED Some Findings Relating to Architectural Briefing

M. DUNHAM, H. C. GUNZBURG, B. OLIVER and V. C. VALSALAN†
Chelmsley Hospital, Birmingham, England

As in many other aspects of mental subnormality there is a conspicuous absence of data on which to base instructions and recommendations. Even the considerable wealth of personal experiences, impressions and principles, should not, by itself, determine decisions, unless supported by hard facts, which can be obtained by an objective analysis of available data. Whether the facts obtained in one small sample are valid and significant enough to indicate a general direction, rather than a local trend, cannot be guessed at even until further data have been collected elsewhere. But in the meantime, the following contribution might help in directing attention to certain areas.—The Editor.

Introduction

There is at present a widespread tendency to stress in any architectural proposal in the field of subnormality "domestic size," "individual bedrooms," "absence of special staff provisions," etc. Whilst these aspects are essential towards creating a new atmosphere in the subnormality hospital of the future, they may, by themselves, not be influential enough to prevent the development of the well-known ward approach which must be avoided at all costs. Of course, this will depend principally on the operational philosophy governing the management practices and the people executing them. On the other hand, physical conditions exercise a subtle influence on living practices and can be engineered to support a particular approach or to avoid interfering with it. From this point of view it appears important that briefing notes to architects contain not merely the very inadequate "schedule of accommoda-

*The titles of the preceding articles in this series are:—

- I. Progress in Building for the Mentally Handicapped (December, 1970).
- II. From Ward to Living Unit (June, 1971).
- III. A Test Ward for the Mentally Retarded (June, 1971).
- IV. A Playroom for Autistic Children and its Companion Therapy Project (December, 1971).
- V. Ward Design and Ward Programme (June, 1972).
- VI. An Architect's Approach to the Design of a Patients' Club (December, 1972).
- VII. Homes for the Mentally Handicapped (June, 1973).
- VIII. "39 Steps" Leading Towards Normalised Living Practices in Living Units for the Mentally Handicapped (December, 1973).
- IX. The Search for a Home Environment (June, 1974).
- X. Ortogardsskolan—An Open Area School (June, 1975).

†The various members of the working party, whose report is herewith presented, had also specific roles in obtaining data on which the conclusions have been based. The psychologist (M. Dunham) made an independent assessment of the Self Help area, using her observations and nurses' reports, the two psychiatrists (B. Oliver and V. C. Valsalan) assessed each child with the purpose of the investigation in mind, and another psychologist (H. C. Gunzburg) acted as co-ordinator of the work and writer of the final report.

tion" required but are an expression of a carefully thought out plan of action, which considers the practical management aspects from the therapeutic/educational points of view, and is not influenced by emotional reactions to the inadequacies of the past.

We have, therefore, attempted to visualise on the basis of a hospital population, the provisions which we would prefer to have for **those** particular children on the assumption that they constitute a representative sample of the future hospital population (irrespective of any policy of not admitting the same number of children as in the past). We have, at the same time, attempted to visualise the practical implications of managing small groups and providing an environment which would assist in **developing** the child, rather than simply accommodate him in a humane manner.

At present it seems to be an unrewarding and merely academic exercise to consider the planning of new residential units within the hospital, since the financial implications appear to have put a stop to further developments. It is also difficult to consider the composition of a future children's population in a hospital for the mentally subnormal, since admission policy would depend entirely on the development of relevant services in the neighbouring local authority. If there are good provisions there will be fewer children in the hospitals and these will be there for very good medical reasons. If, on the other hand, the provisions are less adequate, placements in local subnormality hospitals will be far more in demand, particularly if the hospital enjoys a good reputation for services and facilities.

We have assumed, rightly or wrongly, that, on the whole, the extent of facilities required for children will in future not differ very much from the present situation and that it will be important to consider the type of residential living unit required which should be in keeping with modern ideas of "developing" mentally handicapped children. We believe that opportunities for "developing" and "stretching" should be provided even in the informal "at home" situation rather than considering the home merely as a domestic storage place for mentally handicapped "patients."

The following discussion is based on the children's population resident at one particular hospital because they require hospital facilities. Very few are there for purely "social reasons" and could be discharged from hospital to ordinary community resources. We have, therefore, proceeded on the assumption that in future the hospital's children population will be similar in character to the present one.

In the following paper we have first described the characteristics of the children population at the hospital. We then tried to visualise the type of domestic residential accommodation which would be conducive to domestic living and would help to provide a variety of learning situations which could be made use of by the staff. We were particularly interested to assess how far a purely domestic environment would need adjustment to ward requirements when considering the type of child who would be accommodated. We looked also at one problem of the "operational philosophy," namely whether a normal domestic environment needed adaptation in some ways without contradicting the principles of "normalisation."

The Children Population

There were 77 children resident at the time of the survey in December, 1973. The Consultant Psychiatrists (B. Oliver and V. C. Valsalan) assessed the type of major problem each child presented and a staff psychologist (M. Dunham) assessed the type of behaviour which required assistance.

Following a type of approach employed previously in an investigation at the hospital (Browne *et al*, 1971), the psychiatrists were asked to indicate clearly the

major problems of the child which made it difficult to place him elsewhere than in a hospital type facility and also those handicaps which, whilst making life more difficult for the child and people looking after him, could, nevertheless, be handled without specialist care, though they had definitely to be considered in the management. Thus it was, for example, seen that "blindness" will be the major problem in two children, but was only an additional complicating factor in three other children, whose main problems were elsewhere. Whilst in 30 children the care problem was the only problem, in another 25 children the care aspect was a complicatory factor in addition to the major problems.

We thought that such an analysis of factors to be considered would help in forming a more realistic picture of needs than simply referring to a high dependency group of children (see Table 1).

The behavioural assessment results were reduced to the simplified presentation shown in Table 2. The social competence of the 77 children in five areas of Self Help indicated that in certain areas a majority of children did not require much help (e.g., mobility) whilst much attention had to be given in other areas (e.g., toileting and washing). Since, however, all children were living in overcrowded and understaffed wards, these figures did not indicate that this situation was necessarily a permanent one. There was little doubt that a considerable improvement in the degree of independence could be achieved with attention, the pursuance of a systematic training approach and living in smaller units.

The Distribution of Children in Living Units

As will be seen from the following section, we felt that part of our operational philosophy would be to keep children together who had common interests. We therefore looked at the present population and tried to work out whether it would be possible to establish three types of home for different age groups. In this connection we thought of homes with children under ten, then a second type for children aged 11 to 13, and a third type for older children. We also thought that no home should contain more than 14/15 children to form a viable residential unit, though, of course, we would be very happy if smaller units could be created.

We distributed (on paper) the present children population among six homes, each containing approximately 14/15 children, and found that it would be possible to have each age group quite comfortably housed in two homes. There were, therefore, in the end, two homes for those under 10, two for the 11 to 13 age group, and two homes for the 14-plus group, each house containing approximately the same number of children.

Pursuing our policy of keeping children in age groups, we found that we were able to give each home an approximately equal number of physically handicapped or highly dependent children, sharing out, so to speak, the workload evenly among units and avoiding making particular units too specialised.

There were, therefore, in each home, children who would present certain problems in mobility and also children who required more than ordinary attention to their self-help skills. On the other hand, there were also children who were competent to some extent, and the whole population seemed to fall quite naturally into homogeneous groups which had age interests in common and provided reasonable mixtures of various degrees of handicap. We concluded, therefore, that it would be possible to provide home family groups with a balanced spread of handicaps and that these family groups could be organised quite easily on the basis of age.

An Operational Philosophy for Children's Living Units

Whatever the size of a Living Unit the problem arises whether it is preferable to make each unit "comprehensive" in the sense of taking the whole age range of children or to make various units particularly suitable for a limited age group. In the first case, each group would be of a very heterogeneous character, containing the very young highly dependent child and the nearly adult child of 15-plus who may be physically well developed, destructive, manneristic. We are not happy with such an arrangement, though, of course, a comprehensive age range is typical for a normal family. We feel, however, that a large group of 15 children is in itself not normal and that the members of such a group will indeed be far less able to follow their own interests outside the house, as would occur naturally in a "normal" family. As far as the hospital children are concerned, they have to spend longer periods together (i.e., after school hours, weekends, holidays), and we thought it would be far more helpful, and provide more stimulation and encouragement, if children could be kept together who had common interests. A basis for this could be provided by grouping them according to age, though, of course, there will be many exceptions.

If, for argument's sake, we were to classify the children population into the three above-mentioned age groups and consider their needs as far as home support is concerned, it will be seen that the living unit for each group will have a different characteristic. One might say that the young ones will need a sand-pit in the house, but the older ones a tinkering place. In this connection it might be argued that a flexibly-designed Living Unit might serve all purposes. It seems to us that such a multi-purpose scheme would defeat achieving our aim of an individualised domestic Living Unit. It seems to us unavoidable that individualisation will be more supported by an environment designed for a particular purpose, than by an environment which serves all purposes, and, in the end, none at all. Thus, we see the young mentally handicapped children growing up in a nursery environment, complete with sand-pit, wet area and other stimulating features, and moving as a group into the next home at an appropriate stage of their development, later still into another home where the tinkering shed and noisy room for record players, wireless and other features dominate.

It will be objected that a normal family will not usually move from house to house on account of the upgrowing family. However, a normal house will be adapted by the family to the changing needs which seems to be difficult to execute within the hospital environment. It appears to us an extremely useful and stimulating experience for the mentally handicapped child to have to move to other environments which will have to be newly explored, adjusted to and which will introduce variations of living patterns.

We suggest, therefore, as a principle to aim at, that Living Units for children should be designed in different styles and that the children will "move house" rather than stay put in one particular environment for many years on end.

Table 2 indicates the degree of attention which would be required as far as Self Help skills are concerned. The main findings of this Table appear to be that in each group there are only a few capable children but that the majority require much assistance. On the other hand, three of the areas (Toileting, Washing, Dressing) would not require more than ordinary domestic provisions, such as the bathroom and toilet for attending to children's needs. There is no reason why any non-domestic features should be introduced. The proportion of wheelchair cases—which, however, does not exceed 50% in each group—indicates quite clearly that some ground floor bedroom accommodation is required. This need could be met by building bungalows, but it would be even better to provide also first floor bedroom accommodation for

those who are able to go up and down stairs and who require very often this type of experience.

Studying Table 2, we have, therefore, come to the conclusion that it is feasible to provide ordinary domestic two-storey Living Units if bedroom accommodation for half the number of residents is situated on the ground floor. There is no need for a bungalow type of Living Unit, and indeed it is preferable to give children the skills of going up and down stairs as a natural daily experience. There are also no reasons, as far as we can see, for making any special adaptation to the domestic character of the houses, which should be designed as ordinary homes with no special provisions. If the children are to be "stretched" to come as near as possible to "normal living," then they will have to learn to adjust to the physical environment, rather than to grow up in the expectation that the environment will adjust to them.

Similarly, the analysis of Table 1 shows there are scarcely any reasons for adapting the domestic environment to ward requirements, considering that the group is fairly small and that it will contain only a few children who require particular nursing attention.

We have come, therefore, to the conclusion that it would be possible to suggest strongly that in future Living Units for children should be purely domestic in character and that there is no justification for making special allowances for the type of handicap we are usually catering for except the ones which have been mentioned in the text. It will, however, be advisable to add to the stimulating features of the domestic environment by designing different types of domestic units which give opportunities for learning to live and adjust to different types of environment. There is really no justification for continuing institutional uniformity by erecting the same type of Living Unit throughout a hospital and to differentiate them only by different decorations and furnishings. It should not be beyond the ability of designers to provide enough variations of the domestic designs to create residential units within an institution which are so different in character that they can be experienced as something new and something of a challenge. When children move to the next step, this should also provide opportunities for individualising the structure of homes in the sense that more attention should be paid to the age-determined interests of the inhabitants.

Summary

The child population of a hospital for the mentally handicapped has been analysed with a view to obtain information regarding the type and degree of attention required by their physical handicaps. The purpose of this analysis was to establish whether the domestic design of Living Units had to be adjusted considerably in order to provide for the children's needs or whether these needs could be met adequately within the domestic environment. An operational philosophy was put forward suggesting that it would be feasible to group children according to interest and to adjust the domestic environment to their interests and needs. It was also pointed out that these needs change and that it is a logical consequence to provide domestic accommodation which would take into account those changing needs. Avoiding uniformity and emphasising the challenges contained within the domestic environment would help in the task of developing and stretching the mentally handicapped child.

TABLE 1

Type of major and minor medical/psychiatric handicap in 77 children

	Number of children where the condition was of major importance			Number of children where the condition was not of major importance		
	Under 10 N=29	11-13 N=22	14-15+ N=26	Under 10 N=29	11-13 N=22	14-15+ N=22
Care Problem Only	11	8	11	11	6	7
Neuromuscular Disorders	11	5	8	—	—	—
Blindness	1	1	—	1	1	1
Deafness	—	—	—	1	1	—
Language Disability	1	—	—	14	12	13
Constant Medical Treatment Required	1	—	1	15	11	8
Odd and Difficult Behaviour	—	2	1	6	10	29
Needs Help in Regulating Personal Life	4	6	5	—	—	—

TABLE 2
Degrees of attention required in Self Help skills

	Under 10 N=29	11-13 N=22	14-15+ N=26
MOBILITY			
1. Able to move about but may have walking aids.	17	17	19
2. Wheelchair cases.	12	5	7
TOILETTING			
1. Generally continent.	5	9	7
2. Incontinent or must be taken to toilet.	24	13	19
WASHING			
1. Washes reasonably well (hands and face only).	5	8	7
2. Needs assistance in washing.	24	14	19
DRESSING			
1. Does not need much help in dressing.	4	9	7
2. Needs much help in dressing.	25	13	19
FEEDING			
1. Can feed self using knife and fork or spoon.	15	13	13
2. Needs to be fed with spoon.	14	9	13