ADAPTATION OF E.M.S. HUTS FOR CHILDREN'S WARDS

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In the report of the British Paediatric Association's *ad hoc* committee on cross-infection in children's wards, published in the *B.M.J.* (May 4, 1946, p. 673), sections 6 and 7 deal with the subdivision of wards and other desiderata. With the recommendations of this report in mind, we prepared a plan to show how a typical E.M.S. hutted ward may be modified at reasonable cost and with minimal structural alterations to accommodate infants and children in surroundings where the chances of cross-infection are lessened and other desiderata are provided.

Just after the preparation of our plan, the Ministry of Health published a series of plans, including one for a children's ward, prepared by Dr. T. S. McIntosh and Mr. H. R. Coales, on the adaptation of E.M.S. huts for peacetime hospital purposes (Supplement to the *Monthly Bulletin of the Ministry of Health*, February, 1946). Our plan is not intended to rival or better

theirs; indeed, Dr. McIntosh and Mr. Coales point out that it is all to the good that different methods of adaptation should be explored.

Figs. 1 and 1a show the proposed adaptation and the existing E.M.S. hut in Warwickshire, respectively. Figs. 2 and 2a are reproduced from the Supplement to the *Monthly Bulletin*, by permission of H.M. Stationery Office, for comparison.

E.M.S. huts vary, and the type chosen by the Ministry is admittedly the most difficult to adapt architecturally, with its flat roof and central supporting pillars. It differs structurally from those existing in Warwickshire County Council hospitals in the following details:

Fig. 1a (Warwick)

Pitched roof 35°
Floor to eaves in ward, 10 ft. (3.05 m.)
Ceiling, 12 ft. 8 in. (3.86 m.)
Four pairs of doors in each long wall

Fig. 2a (Ministry)

Flat roof with central columns in ward
Ceiling, 10 ft. 1 in. (3.07 m.)
Two pairs of doors in each long wall

Arrangement of Ancillary Rooms

Overall length, 36 ft. 4 in. (11.07 m.)
Ceiling, 9 ft. 8 in. (2.95 m.)
Corridor, 5 ft. wide (1.52 m.)
Sluice, 9 ft. 1 in. (2.77 m.) by 8 ft. (2.44 m.), adjacent to W.C.s.
Kitchen adjoining ward, with observation window
No store-room
Small heating chamber for domestic hot water, towel rails, and radiators

Overall length, 40 ft. (12.2 m.)
Ceiling, 8 ft. 1 in. (2.46 m.)
Corridor, 6 ft. wide (1.83 m.)
Sluice, 9 ft. 7 in. (2.91 m.) by 8 ft. 7 in. (2.62 m.), adjacent to ward
Sentry near entrance
Store-room, 8 ft. 7 in. (2.63 m.) by 7 ft. (2.13 m.)
No heating chamber. Hot water presumably from central service

Plan showing typical 32-bedded hutment adapted to provide a children's ward with protection against cross-infection. FIG. 1.—Plan after alteration; accommodating 7 cots in separate cubicles, 9 cots in open ward, 2 cubicles for nursing mothers, 1 cubicle for dressings. Cubicles to have plug point and lavatory basins in each. FIG. 1A.—Plan before alteration—32 beds.

FIG. 2A.

The total length and breadth of each ward are the same—viz., 108 ft. (33 m.) by 24 ft. (7.3 m.), so that the differences are really of a minor nature and chiefly limited to the ancillary rooms.

The ward as existing has accommodation for 32 patients. By subdividing it into cubicles (Fig. 1) this number is reduced to 18. Seven of the cubicles are single, which provides a percentage for isolation considerably higher than the 25% minimum recommended by the subcommittee. The 9-bedded open ward allows of a friendly communal atmosphere for older children, who do not need the strict isolation that is necessary for young infants. It should be a rule that no infant under 1 year of age is to be admitted to an open ward. It will be seen that there are two cubicles provided for nursing mothers and their infants. When there are no breast-fed babies in the ward these cubicles could of course be used as single cubicles for children, or two infants could be nursed in each, bringing the total beds available up to 20. (The word "cot" in the plan refers equally to a child's bed.) The existing heating arrangements consist of three centrally placed coke-burning stoves. These are not suitable for a children's ward, and we have substituted an outside heating chamber.

One of the subcommittee's special points was the desirability of having a separate room in which to do surgical dressings,

lumbar punctures, aspirations, etc., and this is provided. There is also a small room for testing urines. The milk-room, which is 11 ft. (3.35 m.) by 9 ft. (2.74 m.), is more adequate in size than the one proposed by the Ministry, which is only 8 ft. 7½ in. (2.63 m.) by 5 ft. (1.52 m.). In our plan, the ward and all the cubicle doors can be under direct supervision from the duty room.

The Ministry's plan allows for a store-room 9 ft. 9 in. (2.97 m.) by 8 ft. 7½ in. (2.63 m.), a housemaid's closet, and an additional sluice. This arrangement of a sluicing compartment and lavatories in the central part of the ward is advantageous from the point of view of access, but we wished to undertake a minimum of structural alteration in our plan, in which cost was also taken into consideration. We think one bathroom would be sufficient, but if necessary the end bed in the open ward might be sacrificed and a small bathroom, lavatory, and sluice included for the use of the nursing mothers. The other modifications in the ancillary part of the ward are as outlined in the plan.

Summary

A plan is suggested for the adaptation of a typical E.M.S. hutted ward for the accommodation of 7 babies in single cubicles, 9 children in an open ward, and 2 nursing mothers with their infants, together with a room for dressings, a milk kitchen, and the other usual ancillary offices.

SOCIETY OF APOTHECARIES AWARD TO PENICILLIN DISCOVERERS

At a special meeting of the court of the Society of Apothecaries of London on Nov. 28 Sir Alexander Fleming and Sir Howard Florey were presented with the Society's gold medals in therapeutics in recognition of their discoveries in penicillin. The presentation was made by Dr. C. Thackray Parsons, the Master, in the presence of a large number of freemen and of guests, who included Sir Alfred Webb-Johnson, President of the Royal College of Surgeons, and Sir Hugh Lett, President of the British Medical Association. The Master referred with pride to the addition of these names to those of Dixon, Gowland Hopkins, Dale, Banting, and others on the Society's roll of medallists. "In the nurseries of the future the contaminated Petri plate of Fleming will probably displace the legend of Newton and the apple, and as future generations eat their prophylactic breakfast of mixed moulds they will pray for the good estate of Fleming and Florey."

Prof. E. C. Dodds, in a brief oration, compared the present occasion to the gathering at the Sorbonne in 1892, when Pasteur on his seventieth birthday was acclaimed by the President of the French Republic and a distinguished company which

included Lister. In the work of Fleming and Florey they saw one of the last acts in the drama which opened with the work of Pasteur. The veil of mystery which for centuries had covered the processes of infection had been rent, and an uncertain empiricism had given way to scientific principle. Never before in the history of the world had it been possible to honour two men who had been personally responsible through their labours for the fact that literally millions of people to-day were alive who would otherwise be in their graves, and, unlike many brilliant discoveries of science, not even the most malignant mind could suggest that this discovery could be applied in an offensive or destructive manner.

Sir Alexander Fleming, in receiving the medal, said that it had been his good fortune—he emphasized the word "fortune"—to be in at the beginning of a movement which had done something for medicine and surgery. He contrasted the conditions obtaining in the first world war with those obtaining in the second from the particular point of view of fracture of the femur. In 1918 he was in charge of a hospital for cases of fractured femur, and it was a grim experience, very different from that which attended these cases during the recent war. Not all the difference, of course, was due to penicillin, but it helped. He paid a warm tribute to his co-recipient.