

have been demolished. A new Nurses' Home has been erected on the site of the old Jellicoe Ward. Plans are now in preparation for a single-story block of three wards, and this should be in use by the end of the present year. The Hospital will then have 130 beds plus twenty beds in the old shelters, and this should be sufficient to meet the needs of the district for some years. At present the Hospital has sixty beds in the restored wards, twenty in shelters, and twenty in two marquees, a total of one hundred. In addition, about twenty-five beds are in use at the Soldiers' Memorial Hospital at Hastings.

During last year considerable attention has been focussed on hospital activities in the Dominion, the contentions being mainly that there are (1) too many Hospital Boards, (2) too many hospitals, and (3) that the cost of the hospitals was too high. With regard to the first contention, it is now generally acknowledged that amalgamation of certain adjacent districts should take place, and the indications are that negotiations towards that end would now meet with some success. It is to be hoped that definite progress will be made in the direction of reducing the number of hospital districts. With regard to the second contention, undoubtedly there are in some districts too many subsidiary institutions, but no doubt transport facilities were not so efficient when these hospitals were built as they are now. In a few instances, however, it is difficult to see any valid reason for the establishment of a hospital.

The fact that transport facilities are much improved, is, however, only one reason why consideration should be given to closing or reducing the status of some of the subsidiary hospitals. The great and logical reason (apart from financial considerations) is the impossibility of obtaining modern facilities for diagnosis and treatment in these small institutions. This applies not only to subsidiary hospitals in a Board's own district, but also applies in some instances to the main hospital administered by these Boards, which have neither the population, finance, nor medical resources to justify the establishment of a fully equipped general hospital, and is in fact a strong argument in favour of, if not full amalgamation, then at least a close and full measure of co-operation between Boards. Efforts have been made by the Department to close or alter the status of some small hospitals, but the measure of success obtained is somewhat disappointing. Generally speaking, local influences have been too strong, and the Boards are unwilling to take any decisive action.

Much controversy has been waged around this subject of the cost of hospitals, and comparisons on as equitable a basis as possible have been made between the cost of hospitals in different districts and the cost of hospitals in different countries. The unit of comparison has been "the cost per occupied bed per annum"; this again being divided into several constituents, such as (1) provisions, (2) surgery and dispensary, (3) establishment, (4) salaries and wages, (5) domestic, (6) miscellaneous. On this basis it can be shown that New Zealand hospitals compare not unfavourably with hospitals elsewhere.

In comparing costs in this manner where hospitals are grouped quite fair conclusions may be drawn, as anomalies existing in one institution are smoothed out. In, however, comparing one hospital with another "the cost per occupied bed" as a basis is more open to criticism, owing *inter alia*, to variations in prices. For instance, take the item "coal." One hospital, such as Auckland, pays £1 0s. 3d. per ton, and another such as Wellington, pays £1 16s. 3d., the difference in price being almost entirely governed by transport from the mines and the quality of coal used. Another factor governing the total consumption of coal used is its calorific value, an item which has not always been given sufficient consideration. Similarly, with charges for electric current, for lighting the cost to our hospitals varies from slightly over 2d. to 7d. per unit.

These are only two instances where increase costs are due to factors partly beyond the control of the Board or its officers. Whilst this may be so in numerous instances there is undoubtedly need for greater attention to buying methods, and this was emphasized in a recent case where different prices had been paid for separate purchases of the same article (not subject to market fluctuations) in the same month by the same Hospital Board. A high cost per occupied bed should, it appears to me, be used only as an indication that further investigation is required.

A more informative and reliable basis of comparison can be used. If, instead, we compare hospitals not only on costs, but also on a quantity-consumption basis, better conclusions can be drawn. In this connection the late Sir Napier Burnett stated:—

"Hitherto the question of cost has almost entirely monopolized the thoughts of the administrator, but I suggest that no one who wishes to administer a hospital efficiently can do so on a cost basis alone. There is a science that has been neglected in military and civil hospital administration—namely, *the science of measurement*. Apply this science of measurement to every department in a hospital, no matter what it is; measure your staff—so many nurses, so many doctors; measure your drugs and dressings—the quantity consumed per one hundred patients per month; measure the laundry; watch your meters; measure your coal-consumption; and if your measurements are right, obviously the cost will look after itself. I am not speaking now of the initial expenses of buying, but of the costs within the hospital. If your consumption-measurement is right, then my point is that your cost will come out all right also."

The above is a quotation from a departmental reprint of Imperial Army Form 24/6671 issued in 1920.

In making this quantity-consumption test the unit used is "quantity consumed per one hundred patient-staff days" or "quantity used per annum per occupied bed." As long as the same unit is used in comparing the consumption of the same article in different hospitals, then reasonable criticism can be made. Needless to say the question of price and quality must also be considered.

A reference to Table XV of the appendix to the annual report for the year ending the 31st March, 1931, will show that great variation occurs in the quantities of many items used. As a further example, during the inspection of two base hospitals this year the quantity of meat, fish, rabbits, and poultry