Much work still needs to be done to achieve this. To be useful in health policy at this level, all the targets need to be elaborated further and clear, practical statements must be made on their operation—especially the four targets on health policy and sustainable health systems. The WHO should stimulate the discussion of these important targets, but it should also be careful about being too prescriptive about health systems since this could be counterproductive.

In addition, more attention should be given to the usefulness of the targets in member states. One way of doing this is to rank the countries by target and to divide them into three groups. A specific level could be set for each group. For example, for target 2, three such groups could be distinguished as follows:

- Countries that have already achieved this target
- Countries for which the global target is achievable and challenging
- Countries that find the global target hard to achieve and therefore “demotivating.”

The first group needs stricter target levels, and the third group less stringent ones. If a breakdown of this kind is made for each target, some countries may be classified in different groups for different targets. In this way, the targets will provide an insight into the health status of the population and could be useful for policy makers in member states in encouraging action and allocating their resources.

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Statistics notes

How to randomise

Douglas G Altman, J Martin Bland

We have explained why random allocation of treatments is a required feature of controlled trials. Here we consider how to generate a random allocation sequence.

Almost always patients enter a trial in sequence over a prolonged period. In the simplest procedure, simple randomisation, we determine each patient’s treatment at random independently with no constraints. With equal allocation to two treatment groups this is equivalent to tossing a coin, although in practice coins are rarely used. Instead we use computer generated random numbers. Suitable tables can be found in most statistics textbooks. The table shows an example: the numbers can be considered as either random digits from 0 to 9 or random integers from 0 to 99.

For equal allocation to two treatments we could take odd and even numbers to indicate treatments A and B respectively. We must then choose an arbitrary place to start and also the direction in which to read the table. The first 10 two digit numbers from a starting place in column 2 are 85 80 62 36 96 57 17 23 87, which translate into the sequence A B B B B A A A A A for the first 10 patients. We could instead have taken each digit on its own, or numbers 00 to 49 for A and 50 to 99 for B. There are countless possible strategies; it makes no difference which is used.

We can easily generalise the approach. With three groups we could use 01 to 33 for A, 34 to 66 for B, and 67 to 99 for C (00 is ignored). We could allocate treatments A and B in proportions 2 to 1 by using 01 to 66 for A and 67 to 99 for B.

At any point in the sequence the numbers of patients allocated to each treatment will probably differ, as in the above example. But sometimes we want to keep the numbers in each group very close at all times. Block randomisation (also called restricted
Generalisation of salt infusions

The subcutaneous infusion of salt solution has proved of great benefit in the treatment of collapse after severe operations. The practice, it may be said, developed from two sources: the new method of transfusion where water, instead of another person’s blood, is injected into the patient’s veins; and flushing of the peritoneum, introduced by Lawson Tait. After flushing, much of the fluid left in the peritoneum is absorbed into the circulation, and flushing of the peritoneum is a method of transfusion where water, instead of another person’s blood, is injected into the patient’s veins, to be followed by subcutaneous salt infusions are increasing in popularity, and subcutaneous saline infusions are increasing in popularity, and little doubt that their use will be greatly extended in medicine as well as surgery.

One hundred years ago

Generalisation of salt infusions

The subcutaneous infusion of salt solution has proved of great benefit in the treatment of collapse after severe operations. The practice, it may be said, developed from two sources: the new method of transfusion where water, instead of another person’s blood, is injected into the patient’s veins; and flushing of the peritoneum, introduced by Lawson Tait. After flushing, much of the fluid left in the peritoneum is absorbed into the circulation, greatly to the patient’s advantage. Dr. Clement Penrose has tried this treatment with inhalations of oxygen. He has had experience of three cases, all considered hopeless, and succeeded in saving one. In the other two the prolongation of life and the relief of symptoms were so marked that Dr. Penrose regretted that the treatment had not been employed earlier. Several physicians have adopted Dr. Penrose’s method, and with the most gratifying results. The cases are reported fully in the Bulletin of the Johns Hopkins Hospital for July last. The infusions of salt solution were administered just as after an operation. The salt solution, at a little above body temperature, is poured into a graduated bottle connected by a rubber tube with a needle. The pressure is regulated by elevating the bottle, or by means of a rubber bulb with valves; the needle is introduced into the connective tissue under the breast or under the integuments of the thighs. There can be no doubt that their use will be greatly extended in medicine as well as surgery.

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