# *The practice-based dietitian*

## A preliminary report on five years' experience

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With the exception of episodes of infectious disease and accidents, the progress from health to disease is a continuous process which only intermittently or at a late stage comes within the purview of the hospital. A family physician more than others spends his professional life watching the progress of degenerative disease and it is thus in his self-interest as well as his patients' to see how much of this vast pool of pathology has roots in the environment or way of life of his patients which can be tackled at source.

Some of the factors presumed responsible for disease can only be guessed at and their effects only detected at the presymptomatic stage by the aid of screening processes requiring technical resources not always easily available.

This is not, however, true of obesity. The diagnosis of obesity does not require any more than an observant eye and a pair of scales assisted by suitable tables. "The simplest diagnosis" as Kemp (1966) remarks, "in clinical medicine".

There is much evidence of a direct correlation between being seriously overweight and consequences such as diabetes, hypertension, respiratory disease, osteoarthrasis and other conditions.

It therefore follows that as family physicians we should watch for incipient and actual obesity and be prepared to take practical steps to help our patients regain some sort of approximation to their correct weight. How can this be achieved?

What follows is a brief description of one practice's approach to this task over the last five years. This is very much an interim report—an account of work in progress. Evaluation of our results is at present being undertaken but unfortunately is not yet at a stage at which we are able to present firm statistics.

We first became aware of the need for a dietitian working within the practice in 1967 and were fortunate enough to find a suitable person, Mrs Massey Lynch, towards the end of the year. At that time she was part-time dietitian to the Southport Hospital Group but has subsequently become full-time. She began at first for an experimental period of one three-hour session per week but it was soon realised that this amount of time was not enough and from the beginning of 1968 she has done two three-hour sessions per week until comparatively recently when with the introduction of 'group sessions' and becoming full-time at the hospital, she has reduced her time in the surgery to five hours per week. We are informed by the Association of Dietitians that Mrs Massey Lynch was the first dietitian in the country to be practice-based.

By the end of 1968 she had seen a total of 293 patients in just over 12 months and now she has seen over 1,000. She has found that she enjoys working in general practice and in fact the closer contact with both the patients and their doctors has been found to be a distinct advantage. From the beginning, obesity was found to be the main problem—and a very important one.

During her first year, 66 per cent of the patients seen by her were suffering from obesity and one third of these were complicated by some other feature, such as hypertension, heart disease or chronic bronchitis (figure 1). Several were also pregnant. Peptic ulcers formed a major group, consisting of 21 per cent of the patients seen. After this there was a metabolic group consisting of 23 patients including several with steatorrhoea, two of whom were sisters with fibrocystic disease and several with gluten enteropathy. In this group she also had four patients with renal calculi, and two with hypercholesterolaemia. In addition, of course, there were patients with diabetes but these were not included in the number above. There was a small miscellaneous group including subclinical malnutrition.

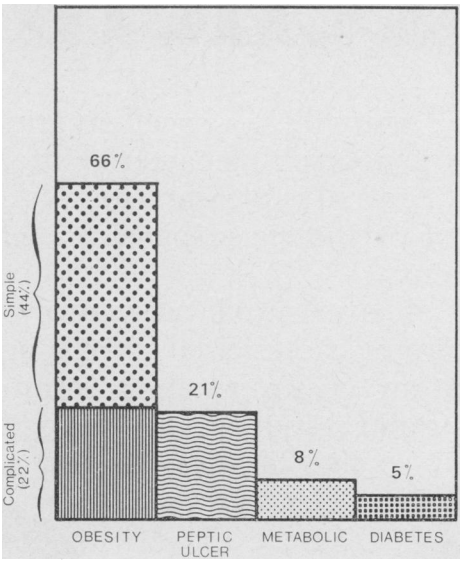


Figure 1

While most of the dietitian's work is done in the consulting room, she occasionally visits, especially elderly diabetic patients and elderly patients subsisting on an inadequate diet. She finds it much easier to find out exactly what they are living on by doing this, rather than relying on their own verbal accounts.

From the family doctor's point of view, we found that the great weakness in general practice dietetics was lack of time 'to get the message across' and that it was simply no good just handing a diet sheet to the patient and asking him to follow it. Mrs Massey Lynch has usually spent 20 minutes on each of her patients at her initial consultation. The diabetics are seen at monthly intervals to begin with and then at regular three monthly intervals and always between at their or the doctor's request. Peptic ulcer patients are seen at regular three monthly intervals until it no longer becomes necessary. Patients on reducing diets, especially asthmatics, have been seen at fortnightly or three weekly intervals, and others at regular monthly intervals until their target is reached. They have then been asked to report back after six months and Mrs Lynch has kept a card index of all the patients seen so that we can follow their progress.

Most patients are managed by diet alone without any appetite reducing tablets.

The total number of patients seen is now over 1,000—of whom approximately two thirds are overweight. The majority of patients have been seen on several occasions. In addition to the consulting sessions, for the last two years Mrs Lynch has run a fortnightly group session in a local old-age pensioners' club, mainly for the patients of the practice but also including a few patients of other practices who have their own doctor's consent to attend.

On referral of an obese patient to the dietitian the doctor's main task is to impress on the patient the need to lose weight, some indication of the possible consequences of failure often being given. By referral to the standard tables we calculate how much in excess of the top end of the normal range the patient's present weight is. This excess amount of weight is demonstrated in concrete terms to the patient by asking him to imagine he or she is of normal weight for age and height but continually condemned to carry a suitcase, the weight of which corresponds to their excess (often of the order of two stones or more). A 'reasonable' target figure is set, often a compromise between the ideal weight and their present weight gauged on our impression of their ability to co-operate with treatment. The patient's age and height as well as weight are recorded and a note made of any peculiarities of build. The existence of any special pathology, relevant history and drug therapy are noted. Note is also made of relevant social factors, such as 'living alone', 'job involves much entertaining'.

At this stage the patients may sometimes say "But I have already had a diet sheet and it didn't work, doctor." It is explained that most seriously overweight people need continuing dietetic supervision at least for a period and that if they are male patients it is most important

that their wives are also conversant with their recommended dietary regime. It usually turns out that they are equally in need of it! They are then asked to book an appointment at a conveniently early date to come to the dietitian together.

## Criteria of success

Success in weight reduction may be estimated in several different ways, preferably related to the individual's initial weight or to the amount that he or she is overweight.

In Craddock's (1969) series of 79 followed over a period of seven-and-three-quarter years the criterion of success was a loss at the end of the survey period of ten per cent of the initial weight. As a proportion of the total amount overweight this varied from 25 to 100 per cent, although usually in the range of 40 to 60 per cent. Other authors take a weight loss of 11 kg (20 lb) to mean success. Kemp (1966) arbitrarily rates success as the loss of more than 60 per cent of the surplus weight while Lord (1966) defines success as the loss of one third or more of the surplus weight, and who had maintained this at follow-up.

Perhaps a stricter criterion is the loss of enough weight to bring the patient to within ten per cent of the desirable weight.

In our series we are at present allocating a score which is calculated from the weight loss of pounds expressed as a percentage of the desired weight loss in pounds. This method of scoring puts the emphasis on the proportionate weight loss.

We selected 213 patients at random from the series. This group contains some who are still under active surveillance, and in whom maximum weight-loss has not been reached. The age distribution in these patients is shown in Figure 2 and is seen to be a normal binomial distribution curve, for both males and females composed of 70 per cent females and 30 per cent males. This is clearly unlike the age distribution curve for the practice which is shown separately for males.

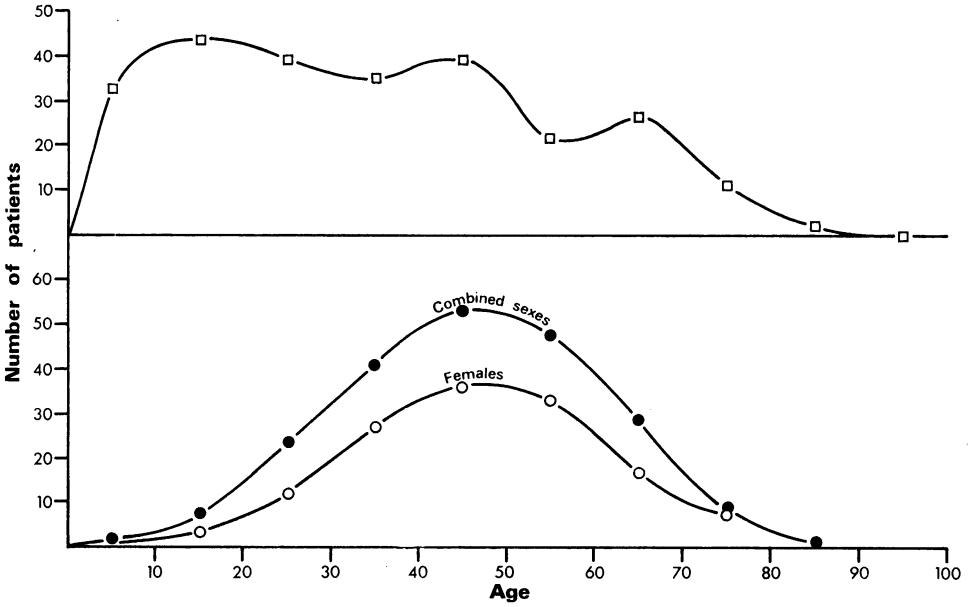


Figure 2
(*a*) Age distribution of random 'control' sample (male)
(*b*) Age distribution of obese patients

Of these 213 patients, 37 could not be scored for various reasons. The success of the remaining 164 is shown in the next diagram (figure 3). Twenty-two per cent were in the group deemed 90/100 per cent successful, i.e. had reached within ten per cent of their target. From this group there is a linear fall-off of lesser degrees of attainment down to a zero score.

A follow-up survey is proceeding to find out whether the degree of success in any individual patient several years ago has been maintained. We are also interested in knowing more about

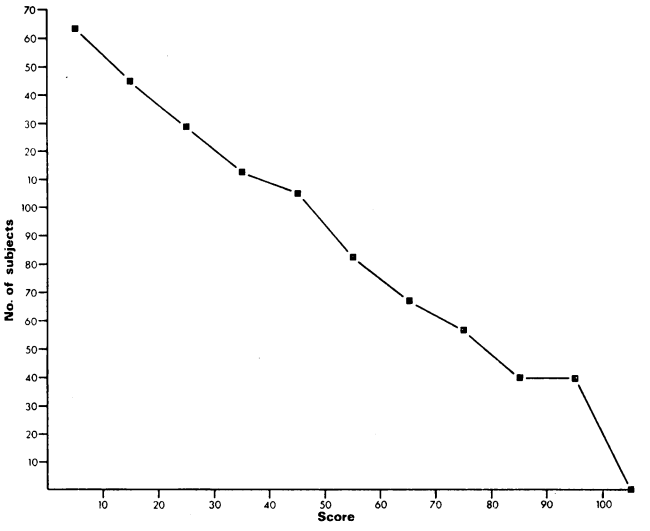


Figure 3
Score plotted against numbers of patients (Poisson distribution)

the causes of failure of those who were unsuccessful and the relative success of the different age groups and social groups. These results we hope to include in a further account of the experiment to be published shortly.

## Dietitians in the community

Our Mrs Lynch was the first practice-based dietitian in the country. Subsequently, Dr L. A. Pike's practice in Birmingham employed Mrs Pike, a trained dietitian, for a few months and just recently it has been reported that a dietitian is a member of the general-practitioner team in the health centre at Livingston New Town. Dr Connan's practice have employed a dietitian at Huntingdon since April 1971.

Some hospitals, notably Chelmsford and Ipswich, have offered local general practitioners open access to their dietetic clinics.

Among local authorities, Rotherham, Hereford, Bristol and Hammersmith, now employ dietitians in their community health teams; Paisley and Aberdeen also employ dietitians and Glasgow has an establishment for two.

At the 1972 conference of the British Dietetic Association at York, there was much discussion on the introduction of dietetic services into the community, in particular to deal with the obesity problem—but of course there is a limit to the number of dietitians available—even to the hospital services.

In the meantime, what is to be done in the absence of enough community-based dietitians? In our view much greater use could be made of health visitors. The health visitor's role has recently been undergoing review. At one time her duties were almost entirely confined to the extremes of life and her way of work has been underlined by her title 'visitor' based as it has been on visits to patients at home, children at school or alternatively, seeing children of school age in welfare clinics.

With the increasing implementation of health visitors' attachments to general practice—now the rule rather than the exception in many areas—the time has come for her greater participation in practice-based prophylactic programmes, both for diagnostic purposes and for health education, including the giving of dietetic advice and running slimming groups on a much greater scale than before.

### References

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