

## *Editorial*

### THE RESEARCH POTENTIAL OF AN 'ARTIFICIAL PRACTICE'

**A**LTHOUGH research in general practice is still in its infancy, there has been much activity in this field in recent years, and one can now recognize certain trends quite clearly. Much useful work is concerned with morbidity and practice organization and the large scale multi-practice type of investigation is being used with increasing frequency in both fields. This type of study is comprehensive but has the disadvantage that important details may be lost in the volume of results.

In other medical disciplines small scale laboratory observations have led to important general conclusions. This is because it is possible to apply stricter control in the study of detail under laboratory conditions than is possible under natural conditions. As a general rule laboratory study is more useful in physiological than in ecological research or field observation. Large scale studies in general practice correspond to the field observations of the naturalist but although the general practitioner has much in common with the naturalist profit may also be gained from studies in general practice which are closer to laboratory studies in biology.

The essence of the 'artificial practice' is that it is a laboratory situation designed for the study of some of the complex phenomena found in general practice. An 'artificial practice' is a sample population but it is not intended to represent a real community, the constitution of the population is artificial although the individuals in it are not. In an artificial practice people can be studied in great detail because there are not too many. Further, each person's illness record can not only be studied in detail but can also be correlated with the features which distinguish each individual from his neighbours.

The exact nature of the details observed, whether personal or related to illness, depends on the aims and interests of the observer. The important point is that at the end of the study he will be able to say that 'so many people, with certain characteristics present a given number of definable medical problems'. This information can be used to construct logical theories to be tested either in larger scale studies or in later small-scale studies designed for the purpose.

As far as we know only one 'artificial practice' has been studied in detail. The validity of some of the generalizations made from that study may be debated but it is clear that it uncovered information which was not previously available. The patients in the study were classified according to their demand for medical attention, and calculations were made showing the approximate distribution of the different categories in the real practice from which the artificial practice was constructed, and, perhaps less convincingly, the 'general population' of the country.

An interesting conclusion from the morbidity study was that morbidity described as rates per thousand people does not have much meaning. The morbidity pattern of the artificial practice followed the negative binomial distribution which can be interpreted as indicating that some people are more likely to get certain types of illness than others. The figures showed that there are people in the community who are specially vulnerable to breakdown of the respiratory and digestive systems, or to skin and other conditions. Evidence of this kind can lead to constructive speculation. Is it possible that the respiratory vulnerables are more likely to get smoker's bronchial carcinoma?

If this is so, would it be possible to recognize these people from their illness records before the damage begins and so prevent the final catastrophe?

Another curious finding was that while the 'vulnerables' are more likely to experience serious illness than other people, the serious illness is not necessarily connected with the system at risk. There were other interesting results. The high demand groups contained disproportionate numbers of old men and young married women. This may result from local circumstances but it indicates the fallacy inherent in the type of generalization which states that the elderly are *ipso facto* high-demand patients without further qualification. Elderly people in the high-demand group may suffer from a single long chronic illness which is relatively predictable and consequently less troublesome for the doctor than might be imagined from a count of items of service. This is an important point for operational studies with planning as an aim.

Other less frequently studied characteristics are associated with a high demand for medical attention. Thus the 'vulnerables' are either over or under weight, less intelligent and less likely to make satisfactory social adjustments. Their high proportion of failed marriages exemplifies this. The 'non-vulnerables' are employed as supervisors more often than 'vulnerables'.

Neuroticism is an important factor associated with high demand for medical attention, and the author suggests that neuroticism should be regarded as a normal and not a diseased reaction, drawing a distinction between neuroticism and neurosis. This is not a quibble. A disease can be treated and improvement expected but it is unlikely that much can be done to alter normal behaviour patterns. It is even questionable whether healthy people should be treated as though they were ill simply because they are anxious. Neuroticism is not the only personality factor associated with 'vulnerability', introversion and status inconsistency also seem to be associated.

The validity or practicality of these results may be debated but the most striking feature of the study is the quantity of material coming out of it. Clearly a narrow deep study may yield information covering a much wider field than is immediately apparent. If an effort is made to study patients in detail and the resulting information is considered in relation to individual morbidity patterns, the sheer bulk of data necessary may preclude the use of large sample populations. The only effective answer is the 'artificial practice' in which details can be studied under control to allow later generalization.

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### THE NUFFIELD TRAVELLING FELLOWSHIPS

**B**OTH for the family doctor himself and for the future of general practice the Nuffield Travelling Fellowships are most valuable. In the past they have been awarded to doctors to spend six months travelling in countries of their choice studying their chosen subjects. Since 1960 26 general practitioners from the United Kingdom have been able to travel to Canada, the United States, Australia, New Zealand and into the eastern parts of Europe. Six months in the life of an active practitioner is a long time to be away from the continuing care of patients, and many who would otherwise have wished to make use of the opportunities offered by these fellowships may have been deterred on this account. It is welcome news, therefore, that in future the awards will be given for periods ranging from two to six months. (See page 315 for details).