

## *Editorial*

### AN ENVIRONMENTAL STUDIES GROUP?

1970 is European Conservation Year, in which problems of environmental contamination and disturbance will be intensively explored. The task will be undertaken by almost every scientific discipline and political dispositions have already been made to further it. Every responsible scientific body should examine its resources to see whether it has a contribution to make, and our College is no exception to this.

Studies of the environment are not conducted in a vacuum. They are deliberately related to the influence of the environment on living things and particularly to man himself; thus those who have an opportunity to study mankind at the point at which he reacts to his environment have a special responsibility. General medical practitioners are in this position and they are almost alone. General dental practitioners operate at a comparable level in the human community while veterinary surgeons in general practice are their counterparts in relation to the rest of the animal world.

Family doctors share the environment of the populations in their care to a unique extent and they have special knowledge of the character of the populations themselves. They are familiar with the social and occupational circumstances of their communities and early evidence of the failure of adaptation is brought to them. They are not only 'doctors' but 'observers-of-first-contact'—the first scientifically trained workers to encounter disorders of maladaptation in individuals.

For eight years from its foundation the College, through its research committee, devised ways of measuring differences in the patterns of morbidity observed by general practitioners. By 1960 these methods had developed to an extent which enable them to be applied with reasonable consistency. Further work has increased their range and value. Diseases met with in general practice have been classified, practices can be calibrated in terms of age and sex of their populations and a number of recording methods are in use which provide comparable data in a form capable of mechanical analysis.

In 1961 the College felt able to deploy its new resources in an exercise in analytical epidemiology in which it sought to determine whether differences in the patterns of morbidity were to be found in communities exposed to one particular group of environmental qualities. The qualities were those present in a locality which had been heavily contaminated with many major, minor and trace metals resulting from mining in the eighteenth and nineteenth centuries; they might equally have been inherent in some other aspect of the environment. Thus the College is no newcomer to environmental problems.

The ability of scientists outside medicine to measure environmental qualities has greatly increased and it became clear that, for the first time, measurements of such features could be compared with those of sickness and disability rates recorded by doctors. The College invited scientists in a number of disciplines to carry out parallel studies, and reconnaissances were made by geologists, botanists, geographers and soil scientists among others. A result of this has been continuing direct contact between the College and scientists in many university departments and institutions.

Interdisciplinary collaboration between research workers in practice and those in

scientific disciplines with field components in their work has been shown to be practicable and useful but progress has been spasmodic and slow, slow beyond all proportion to the potential value of the work. The reasons for this have been lack of resources of medical manpower and money and the necessity of undertaking laboratory studies within the marginal capacity of collaborating departments as each opportunity happened to arise.

One solution to these difficulties would be to set up a National Environmental Research Group, concerned particularly with the study of human environmental relationships at all levels. Through our College such a national group would have working access to a network of observers in general practice, specially trained in recording morbidity data from the communities in which they practise.

The area of activity of such an Environmental Research Group would lie at the interface between the environment and man. It would work where the shoe pinches, and studies could be undertaken which might either be long-term and general or short-term and specific; among the latter would be 'before-and-after' studies where it was suspected that a new hazard existed or might be introduced.

The resources existing within general practice alone are insufficient for mounting any long-term or intensive bio-geographical studies. A National Environmental Research Group or Unit would be necessarily interdisciplinary from the start. It should have the capability to expand and develop contacts with environmental scientists in universities and institutions in and beyond the United Kingdom. It would become aware of advances in ability to measure environmental features of different kinds, wherever these were developed, including for example the work of geneticists—animal and human—so that account could be taken of genetic resistances and susceptibilities in any given population.

The group would thus act as an information centre to which anomalies of disease presentation might be reported by the medical profession in whatever branch they worked; it could also receive from environmental scientists information of localities or circumstances which they believe constitute a health hazard.

Were it agreed that more detailed scientific investigation of particular environmental factors in a given locality or situation was desirable and practicable the group would arrange for appropriate studies to be made. This might entail, for example, subsidising a university department by means of grants to cover the work of MSc or PhD students, depending on the character of the problem. Policy for each investigation, both as regards conduct and publication, would be agreed between the group and the university in advance.

Simultaneously, and in parallel with environmental studies, possible influences on human health could be examined in collaboration with designated study practices, which by agreement would be subsidized to enable them to carry an additional research load over and above their normal service commitment to their patients. As observers in close contact with the environment these doctors would be able to put their special local knowledge and experience at the disposal of the environmental scientists. No other medically-qualified doctors are better equipped or more favourably placed than general practitioners to make and record the necessary observations, and unless they are enabled to do so, opportunities will be lost.

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