

Middle Articles

Health Education by Community Health Team

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Brit. med. J., 1968, 3, 366-367

Many people now feel that family doctors should take a more positive interest in community health, and one way of realizing this is health education. There are few accounts of such work being done by general practitioners, so this report will be of interest. Pike (1965) states that a similar project has been running since 1959 in a Birmingham practice, but when that was started there was no previous experience for guidance.

Planning

In this practice three doctors look after approximately 6,800 patients in a semi-urban and rural area, the majority of these being in social classes I, II, and III. It was considered at the outset that the emphasis should be on a team approach, with general practitioners and attached local authority staff taking part.

There are many topics suitable for inclusion in a health education programme, but it was apparent that only a small selection could be included in the first course. Pike (1967) has suggested that it is better to educate specific groups at a time by invitation, and it was decided to select parents of children under 5 and expectant parents.

The list of appropriate patients was compiled from the age-sex register, eliminating the more distant ones to keep the numbers small. An explanatory letter and a provisional programme were sent to every couple on the prepared list, with a stamped addressed postcard for them to reply if interested. The results (see Table) show that 49% wished to be included.

Response by Parents of Children Under 5 and Expectant Parents to Health Education Programme

Social Class	Yes	No	No Reply	Total
I	30	3	6	39
II	38	14	24	76
III	67	19	63	149
IV	5	1	10	16
V	1	0	2	3
Not known	6	2	7	15
Total	147 (49%)	39 (13%)	112 (38%)	298 (100%)

Course

The 147 interested couples were divided into two groups. The first course was run from September 1967 to January 1968, and the second from January to April 1968. They were identical in content, but the second course was condensed into fewer lectures.

Programme

Health Team.—The concept and composition of the team, and a description of the individuals' roles.

Antenatal Group.—Problems of pregnancy and puerperium. Film: "To Janet a Son." Colour slides of G.P. maternity unit. Discussion on delivery and role of the husband; a popular subject, and nearly all the husbands were present.

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Minor Problems and Child Management.—Sleeping and eating problems. Coughs and colds. Principles of child management. Travel sickness. Aspirin. Enuresis, etc.

Healthy Child.—Immunization. Purpose of infant welfare clinics. Observation registers. Film: "Tons of Teeth."

Ill Child.—The feverish child. Guide to calling the doctor. Antibiotics. Bronchitis. Otitis media. Home visit or surgery attendance. Infectious diseases. How to present a child for examination.

Family Planning.—Various methods and efficiency of birth control. Film: "Peace of Mind." (Another popular subject, and patients outside the one mile radius were also invited.)

Accident Prevention and Simple First Aid.—Potential hazards in the home for children, illustrated with colour slides. (This was the least popular.)

Course Details

The venue varied according to the number likely to attend: most of the meetings were held in the branch of the county library. The programme was sent in advance to each family on the mailing list, and during the first course tear-off slips were included for return, to attempt to gauge the size of the meeting. This did not prove accurate enough to be of great use. The average number present at each session was 30.

At least half of each session was allocated for discussion, and the audience made good use of this. All films were provided free of charge by various drug companies.

All the partners took part in the course, and most of the sessions were run by one doctor, assisted by either the health visitor or the district nursing sister. In addition a midwife, a drug company speaker, and the county health visitor for health education were included for the appropriate sessions. Coffee was supplied at a small charge by a group of volunteers. The accent throughout was on health and self-help.

Response

Questionnaires were circulated to many participants at the end of the course. Few were returned, but my impression is that they may be representative. Virtually all the patients found the course "very helpful." They liked a group of about 25 to 30 or larger. They liked a balance between formal lectures and discussion. They were virtually unanimous in that they preferred health education from their own doctors and nurses rather than from outsiders.

Certain other things became apparent. Many people had no idea of how many patients we looked after. There were a few criticisms of our appointments system which we have tried to remedy. On a number of occasions patients mentioned their doubts and worries on the trend towards less home visiting. They told us they often found it difficult to speak to a doctor on the telephone for advice. This was a two-way exercise and the patients frequently educated the doctors.

Discussion

It would appear from the response that there is a need for health education as a part of preventive medicine. I think

the ideal person to do this is the family doctor with his ancillary staff, and patients seem to agree. The talks can be designed to fit the team's method of working, and can provide useful two-way communication between doctor and patient that is more informal than the consulting-room relationship. Groups larger than 25 to 30 do not seem to hinder discussion.

Our only expenses were stationery, postage, and photographic materials, which were generously met by three drug firms. If, however, it is Ministry of Health policy to provide health education, then it would seem reasonable that expenses be met from its funds.

In my opinion there is a great need for more modern and varied health education films and filmstrips. Many of the films are hopelessly out of date.

I should like to thank Dr. P. M. R. Hemphill, Dr. T. I. Stewart, Miss F. McCallum, and Mrs. N. C. Boyle for their assistance.

Also Dr. D. G. French for his advice and criticism in regard to this article. I also wish to thank G. D. Searle and Company Limited, Imperial Chemical Industries Limited, and Upjohn Limited for their generous financial assistance; Miss B. Gange, Health Visitor for Health Education for Oxfordshire, Mrs. M. Porteous, of G. D. Searle and Company Limited, and Sisters Johnson and Slater, of Townlands Maternity Unit, Henley, for their assistance with the talks; Mr. Ives, of Farleys, for showing the film of pregnancy and childbirth; Mr. L. Williams, senior medical photographer, Royal Berkshire Hospital, for making some of the colour slides; Mr. Heath, of Peppard Hospital, for duplicating the circulars; and Peppard Hospital League of Friends, Sonning Common Primary School, and Oxfordshire County Library for the use of their premises.

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MEDICINE AND THE COMPUTER

VII—Better Basis for Management Decisions*

[FROM A SPECIAL CORRESPONDENT]

The London Hospital records about 750,000 outpatient attendances every year, of which about 430,000 are clinical attendances. The satisfactory administration of these clinics is a problem shared by all hospitals with a large outpatient service; the overflowing waiting-room is an all-too-familiar sight to the British outpatient. Satisfactory staffing of emergency treatment services, such as anaesthetics, is another administrative problem the London shares with other hospitals. Both of these services experience the queueing problem inherent in all service situations, and in both the problem is to ensure that there is a satisfactory balance between waiting times of patients and medical staff. In most hospital outpatient clinics the balance is in favour of the clinician; in emergency anaesthesia, on the other hand, it is usually in favour of the patient. In both services a better balance can sometimes be obtained without any detriment to quality or an increase in the cost. In the past attempts at achieving this balance have usually been by trial and error. Nevertheless, the use of a computer, together with some operational research techniques, such as queueing theory, can help to cope with the variable and complex patterns of arrival and consultation. In this way a satisfactory balance can be achieved between patient-queueing time and staff-waiting time. Both services at the London have been studied in this way. Some improvements have already been made as a result.

As well as queueing many other management problems today have extremely complex and variable structures. For really complex problems computer simulation techniques have been evolved. From detailed observations of the problem situation an exact mathematical replica or simulation of it is built up inside the computer. This computer model can be played through repeatedly, changing the value of the variables each time, until that combination of factors is found which provides the best solution to the problem for the particular circumstances then prevailing. Simulation is also a useful means of educating staff about the effects of their decisions.

* Previous articles were printed as follows: Part I (29 June, p. 823), Part II (6 July, p. 51), Part III (13 July, p. 116), Part IV (20 July, p. 180), Part V (27 July, p. 247), and Part VI (3 August, p. 309).

Introduction of the Computer

In 1963 it was evident that the hospital's punched card equipment used largely for accounting work would have to be replaced either by more equipment of the same type or by a small computer. At the same time a number of the scientific staff were anxious for computing facilities. In response to these two requirements the Board decided to install a small Elliott 803 computer. This decision was taken on a straightforward commercial basis (in other words, as a normal capital investment which should pay for itself in time through increased efficiency), but it carried a rider that half the time should be available for scientific and medical research. Since its installation in 1964 the computer had been in ever-increasing demand, so that by last year the average running time was 105 hours per week.

One of the unexpected developments from this work had been the emergence of the patient administration system,¹ which is gradually being built up to form a sensitive management information system of interest to medical and administrative staff alike. The objective is to provide staff with information about their use of the hospital's resources, rather than conventional statistics—which should be a by-product of the system rather than its main function. At the moment the system handles detailed summary returns from the wards and outpatient clinics as well as extensive hospital activity analysis type records of discharged patients. The extensive analysis routinely available from the bedstate record files includes information on the use of beds by consultant, medical specialty, and ward, as well as information on the interchange of beds between consultants.

The outpatient clinic files give information on the duration of the clinics, the spread of the appointment times, the starting and finishing delays as well as standard "statistics." A detailed analysis of such factors in the file for 1967 has revealed a number of interesting differences between clinics.² In addition, as might be expected, the rate at which patients were discharged from the books differed from clinic to clinic. The demand of new patients on clinics, however, continued