An introductory course to group psychodynamics by Birmingham University extramural department was my first experience of studying the evolution of group atmosphere and relationships. Twelve social workers and myself were allowed spontaneous interaction for ten consecutive meetings, while the senior social work tutor interrupted at appropriate intervals to explain the nature of events which had taken place. The part played by such interactions is of paramount importance to patients in family and occupational situations, as well as to a doctor and his medical and para-medical colleagues.

Comment on internship

Once the excitement of graduating has faded, and the hazards of the pre-registration appointment faced, the young doctor is left with a sinking realization that he is far from achieving a satisfactory standard of medical practice. He still needs to acquire skill in clinical techniques of most subjects in the undergraduate curriculum (and perhaps several more), as well as to become orientated to a more practical viewpoint. House officer appointments fulfil this need to some extent, but cannot be expected to cover the multiplicity of topics necessary for the general practitioner. The flexibility of a rotating internship with short attachments, and little commitment, under the supervision of a paid supportive adviser of studies is essential. Clinical teachers should receive payment for time spent instructing the intern, and excessive clinical commitment reduced. Married accommodation must be made more readily available to minimize the domestic disturbance resulting from attendance in emergency subjects for up to four years in hospital. The temptation to acquire a special interest during the internship should be resisted, as this can be obtained readily by 6 or 12 month senior hospital officer appointments.

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RESEARCH METHOD

The reliability of results obtained from medical questionnaires

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THE METHODOLOGY OF ANY SURVEY of health or morbidity greatly determines the results which will be obtained. It has been shown that significant differences occur when information is obtained from the person concerned compared with that obtained from another member of the

family (Cartwright 1957). It has also been shown that the memory factor and therefore the reliability of the results obtained varies not only from person to person but also varies with different types of illness (Linder 1965).

In the course of a survey of 56 selected families in Traralgon, Victoria, the opportunity arose to assess the reliability of results obtained from the medical questionnaires used.

Method

The families selected were all geographically stable patients (who had young children) of a group general practice. All the practice records were considered; all families who met the criteria were listed. From this list, 53 were invited to participate. Nine were unable to participate and were replaced by a similar number of like families. As well as these 53 families, two of the doctors in the practice and their families participated, as did the research assistant.

At the time of enrolment of the families in the survey, between February and April 1967, each family was visited by the research assistant, a trained nursing sister, who filled in a questionnaire relating to the health of each member of the family, usually by questioning the mother but sometimes with both parents present. In the course of the questionnaire, the question was asked "Do you at present suffer from?" in relation to 30 illnesses. Amongst these were included bronchitis, sinusitis, asthma, hay fever, migraine, headache, anaemia, nerves and depression. Following this the question "Have you ever had?" was asked in relation to 17 illnesses including bronchitis, sinusitis, asthma, hay fever, migraine and anaemia. All patients had been under the care of the medical practice for at least the 12 months prior to the questionnaire and details relating to the conditions for which they had been treated were available. Thus it was possible to contrast the life prevalence ("Have your ever had?"), the point prevalence ("Do you at present suffer from?"), and the annual morbidity prevalence, ie the number treated during the previous 12 months, in relation to the specified diseases.

During June and July 1967 fathers and mothers of the survey families were asked, each individually, to complete Cornell Medical Index questionnaires. These were issued first to one parent and only after that form had been collected was the form issued to the other parent and they were asked to complete them without reference to their spouse. The following three questions occur in the course of this questionnaire:

1. Do you suffer from asthma?
2. Do you get hay fever?
3. Do you suffer badly from frequent severe headaches?

It was thus possible to compare the point prevalence for these conditions shown by this questionnaire with the point prevalence found several months previously in the previous questionnaire.

Results

Table I shows the life prevalence, point prevalence and annual morbidity prevalence of the diseases investigated. The records of five families were incomplete and could not be used.

TABLE I

LIFE PREVALENCE, POINT PREVALENCE AND ANNUAL MORBIDITY PREVALENCE OF CERTAIN DISEASES IN 51 FAMILIES COMPRISING 235 PERSONS

Disease	*Number with past history (life prevalence)*	*Number with current symptoms (point prevalence)*	*Number treated in previous year (annual morbidity prevalence)*
Bronchitis	72	1	20
Sinusitis	37	10	13
Asthma	13	2	1
Hay fever	28	7	6
Migraine	25	3	6
Headache	—	23	4
Anaemia	25	1	2
'Nerves'	—	22	8
Depression	—	11	3

The importance of definition of terms and of the time factor in relation to prevalence is illustrated by the large differences between life prevalence, point prevalence and annual morbidity prevalence for the various diseases. Moreover the memory factor, and therefore the reliability of the results, varies with different illnesses. Five of the 20 persons who had been treated during the previous year for acute bronchitis did not give a past history of this illness. However only two out of 13 did not give a past history of sinusitis, usually a chronic and recurrent condition. One out of six did not give a past history of hay fever and none of the six who had been treated for migraine did not give a past history of this illness.

Table II shows the relationship between the results obtained in the initial questionnaire and in the later Cornell Medical Index questionnaire. The relationship between the number

TABLE II

ANSWERS TO QUESTIONS ABOUT FOUR ILLNESSES IN TWO DIFFERENT QUESTIONNAIRES COMPLETED BY 102 parents

	Number of persons answering in the affirmative			
	Asthma	*Hay fever*	*Deafness*	*Headache*
Men				
Family survey questionnaire	4	10	3	6
Cornell Medical Index ..	4	10	5	3
Both positive	4	8	2	2
One or both positive ..	4	12	6	7
Women				
Family survey questionnaire	2	14	0	21
Cornell Medical Index ..	3	15	1	20
Both positive	2	14	0	9
One or both positive ..	3	15	1	32
Total				
Family survey questionnaire	6	24	3	27
Cornell Medical Index ..	7	25	6	23
Both positive	6	22	2	11
One or both positive ..	7	27	7	39

of persons who gave positive results in both questionnaires and the total number of persons who gave a positive result in one or both questionnaires gives a measure of the consistency of the results. The consistency for asthma (six out of seven) and for hay fever (22 out of 27) is fairly high but for headache (11 out of 39) the consistency is low. There is no significant difference between the overall consistency in men and in women and no significant difference between the number of positive answers obtained by the family survey questionnaire or the Cornell Medical Index. There was no significant difference between the consistency of results in normal and neurotic respondents as assessed by the M-R Score of the Cornell Medical Index (table III).

TABLE III

RELATIONSHIP BETWEEN CONSISTENCY OF QUESTIONNAIRE REPLIES AND NEUROTICISM IN 107 PARENTS

Questionnaire replies	*Personality*	
	Normal	*Neurotic*
Consistent ..	59	11
Inconsistent ..	27	10

X2 = 1·6 Not significant

Discussion

The importance of definition of terms and of the time factor in relation to prevalence is illustrated in this survey, as the reliability of results obtained has been shown to

vary with different illnesses. The error here has been shown to apply much more to the acute condition, bronchitis, than to the chronic or recurrent conditions.

The factors which may influence the reliability of results obtained from filling in questionnaires include the exact nature of the question asked, the way it is presented, whether any attempt is made to stimulate memory recall and the medical and psychological status of the patient at the time of the interview. In this survey the questions asked in the initial interview and in the Cornell Medical Index were similar but not identical. They were put in the one case personally by an interviewer and in the other purely on paper and there was a time interval of three to four months between the questions being put.

The results suggest that these factors are of less importance in obtaining consistent results relating to reasonably well defined (at least in the lay mind) chronic recurrent conditions such as asthma and hay fever, than they are in relation to the more subjective and probably more acute transient symptom of recurrent headache. They also indicate that the neuroticism of the respondent is not significantly related to the consistency of the result.

Summary

The reliability of results relating to health status obtained by questionnaire has been surveyed by comparing results obtained from different questions in the same questionnaire and from the same group of respondents answering a different questionnaire on a separate occasion.

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