

TABLE 11. Children in hospital: percentage distribution of admissions for each diagnosis by age

	Age (years)							
	0-1		1-4		5-14		Total	
	MRC/PHLS	HIPE	MRC/PHLS	HIPE	MRC/PHLS	HIPE	MRC/PHLS	HIPE
Common cold	16	—	17	—	13	—	16	—
Pharyngitis and tonsillitis	9	—	25	—	26	—	18	—
All URTI	25	32	42	56	38	66	34	50
Croup	3	—	10	—	7	—	7	—
Bronchitis	24	26	21	21	15	13	22	21
Bronchiolitis	27	—	3	—	1	—	14	—
Pneumonia	21	42	22	23	37	21	24	29
All LRTI	75	68	57	44	60	34	66	50

HIPE = Data from Hospital In-Patient Enquiry, 1967.

(Table 11). The frequency of admissions with upper respiratory tract conditions also seems high. Presumably many of these children were admitted with hyperpyrexia or convulsions (see Court, this symposium) or because of poor social circumstances. The results also showed the critical importance of bronchiolitis as an epidemic condition in infants. The predominance of croup in small towns and of lower respiratory illnesses in conurbations is difficult to explain without access to information on admission rates for each diagnosis and it needs to be seen in relation to the viruses prevalent in the different localities.

It is interesting to note that whereas nearly half the children admitted to hospital were under 1 year old and more than four-fifths were under 5, of the children seen in general practice only 1 in 10 was under 1 year old and only one-half were under 5. This implies a much greater admission rate in infants than

in older children which is not surprising since analysis of the causes of admission shows that the great majority of children under 1 year of age who were admitted to hospital had a serious lower respiratory illness. In contrast, in general practice, though consultation rates for lower respiratory illnesses were highest in young children and infants, upper respiratory illnesses remained by far the most important reason for consultation in these age groups.

References

- LOGAN, W.P.D. & CUSHION, A.A. (1958) Morbidity statistics from general practice. I. *G.R.O. Studies on Medical and Population Subjects*, No. 14. H.M.S.O., London.
- MEDICAL RESEARCH COUNCIL (1965) A collaborative study of the aetiology of acute respiratory infections in Britain 1961-4. A report of the Medical Research Council Working Party on acute respiratory virus infections. *British Medical Journal*, 2, 319.

Discussion

Question 1. Could differences in the observed morbidity between practices have been due to the existence of an appointments system.

Answer. No information is available on this point. All but three practices had very similar rates per doctor. In one practice with a particularly high rate the doctor encouraged patients to consult him early, even if they had only minor symptoms, and he had a very careful system for recording every contact between patient and doctor. These two factors may account for the high figure.

Question 2. Was any limit set to the number of days from the onset of illness at which swabs were taken and how were the controls selected? Was the control the nearest member of the household in age to the index patient, as in the previous M.R.C. study?

Answer. Patients had to be swabbed within 5 days of onset of illness. Controls were children with non-respiratory illnesses in the same age group and admitted to the same ward or seen in out-patient clinics within 1 week of the index case.

Question 3. What happened to patients seen initially by the G.P. and then referred for urgent hospital admission? There would clearly have been less opportunity to document symptoms in such people.

Answer. Only 1 or 2% were admitted to hospital which would not have significantly influenced the results.

Question 4. All the children studied were selected because they were the ones who reacted to the infection and were ill enough to be admitted to hospital. Other children infected with the same virus were less ill. Was the past experience of the child in relation to the pattern of illness studied?

Answer. In general practice the past history was not recorded. It was felt that it would not be possible to sort out predisposing factors in a relatively short study. I agree, however, that the personal characteristics and susceptibility of the patients and a variety of other selective factors such as the attitudes of mothers, and of

doctors to admission of children, influence the kind of patient the hospital doctor will see. Detailed studies of environmental and personal factors must be carried out in individual practices or hospital units to sort out the problem.