

# An account of an influenza epidemic from general practice

A. J. HAZZARD, M.B., B.S., M.R.C.G.P., D.Obst.R.C.O.G.  
Stansted Mountfitchet

**I**NFLUENZA, when it arrives in epidemic form, has a considerable impact on the life of the community. The work of industries and services of all kinds is made difficult by the absence of large numbers of staff. Hospitals are unable to take all the patients needing admission, and general practitioners work day and night trying to cope with the increased demands for their services.

In fact, it is only from the viewpoint of general practice that the nature of the disease can be appreciated in its effects on all age-groups, the frequency and type of its complications, and the duration and severity of its assault on the general health of patients. This is an account of the experience of one general practice during the epidemic of influenza which occurred in the winter of 1969-70.

## Method

In a group practice of three doctors working in rural Essex with a list of 6,200 patients, every case of influenza was noted in a day book the day the patient was seen. Complete notes of each patient's clinical progress were added to the record.

## *Clinical features*

The onset of the disease was abrupt; most of the symptoms appearing in the first 24 hours. Patients complained of severe malaise, fever, marked weakness, soreness of the upper respiratory tract and cough.

Most patients were confined to bed for from five days to a week, and complete recovery seldom took place before 14 days had elapsed. In many cases even strong young men were unable to return to work in under three weeks because of residual weakness.

## Results

In all, 329 patients were seen with influenza, accounting for 5.3 per cent of the practice population. Seventy-three patients developed chest complications; an incidence of 22.2 per cent. Other kinds of complications involved 23 patients, giving an overall incidence of complications of 28.2 per cent. Four patients died, so that the mortality of the epidemic in this practice was 1.2 per cent.

The first patient to develop the illness was seen on 1 December. She was a married lady aged 39, with two teenage children. She worked in London and travelled there daily by train. The next patient was seen two days later, and was a girl of 16 who worked locally. There was no contact between these two patients. The first child

TABLE I

TYPES AND NUMBERS OF COMPLICATIONS

Bronchitis	..	..	..	56 cases
Pneumonia	..	..	..	14 cases
Cardiac failure	..	..	..	2 cases
Tonsillitis	..	..	..	5 cases
Sinusitis	..	..	..	4 cases
Otitis media	..	..	..	10 cases
Acute myalgia	..	..	..	2 cases
Convulsions	..	..	..	2 cases

of school age, a boy of 12 was seen on 4 December.

During the first two and a half weeks a large majority of patients were adults under 65 or children of school age. From about the middle of the third week larger numbers of old people and children under school age were seen.

TABLE II  
NUMBERS OF CASES OF INFLUENZA AMONG CHILDREN AND OLD PEOPLE WEEK BY WEEK

Age in years	Weekly incidence											
	1 December—19 January							2 March—6 April				
	1	2	3	4	5	6	7	14	15	16	17	18
Over 65 ..	0	2	10	24	7	3	1	0	0	0	0	1
5—14 ..	1	17	8	5	2	0	0	5	2	0	1	0
0—5 ..	0	6	9	6	2	1	0	0	0	0	0	0

The prevalence of chest complications according to age-group was lowest in late childhood, and increased with advancing age. In early childhood, as might be expected, chest complications were fairly frequent.

TABLE III  
CHEST COMPLICATIONS ACCORDING TO AGE

	Age-group									
	0-4		5-14		15-44		45-64		65+	
	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent
Bronchitis .. ..	5	20.8	2	4.6	12	9.5	22	21.2	15	28.8
Pneumonia .. ..	1	4.2	0	—	1	0.8	5	11.0	7	13.5
Cardiac failure .. ..	—	—	—	—	—	—	—	—	2	3.9
Total chest complications	6	25.0	2	4.6	13	10.3	27	32.2	24	46.2

The four patients who died were aged between 71 and 86. Two died of pneumonia and two of cardiac failure; one of whom had suffered from chronic myocardial insufficiency for several years. Two died in hospital and two at home.

Sixty-seven children under 15 years of age had influenza and 19 of them developed complications.

TABLE IV  
COMPLICATIONS IN CHILDREN UNDER 15

Bronchitis .. ..	7 cases
Otitis media .. ..	7 cases
Convulsions .. ..	2 cases
Acute myalgia .. ..	2 cases
Pneumonia .. ..	1 case

### Discussion

Although the strain on health services during the epidemic was great, it appears that influenza only affected a fairly small proportion of the population in our district. However, the incidence of complications, and particularly chest complications, was high. This was especially true of young children and elderly people, so that patients over 65 had an almost one in two chance of developing bronchitis or pneumonia.

In children under 15, otitis media was seen as often as bronchitis.

The mortality of the disease was not inconsiderable but was, predictably, confined to

the most senior age-group.

Possibly the most remarkable feature of the epidemic under discussion was its abrupt onset, with five cases in the first week of December and 85 in the second week. After that the number of cases steadily fell but the number of complications increased, reaching a peak in the fourth week. It was during this week that all the deaths occurred.

By the end of January the epidemic in the practice district was over, although there was a small resurgence in March amounting to 21 cases. These were included in the study.

### Summary

A general practice caring for 6,200 patients kept records of the progress of the influenza epidemic which occurred in the winter of 1969–1970. There were 329 cases, of whom 28.2 per cent developed some form of complication, and 22.2 per cent developed chest complications. Four patients died, all of whom were over 70.

The proportion of chest complications in children under five was 25.0 per cent, and in people over 65 the proportion was 46.2 per cent.

### Acknowledgements

I am indebted to my partners, Dr R. T. Gabb and Dr A. J. Gregory, for permission to make use of their case notes.

### REFERENCES

- Fry, J. (1970). A report on the influenza epidemic (A2; Hong Kong) 1969/70. *Update*, 2, 369.  
 Masterson, J. (1969). Respiratory complications of epidemic influenza. *Journal of the Irish Medical Association*, 62, 37.  
 Mogabgab, W. J. (1963). The complications of influenza. *Medical Clinics of North America*, 47, 1191.  
 Stuart-Harris, C. H. (1963). The complications of influenza. *Postgraduate Medical Journal*, 39, 578.  
 Stuart-Harris, C. H. (1966). Influenza and its complications (1). *British Medical Journal*, 1, 149.  
 Stuart-Harris, C. H. (1966). Influenza and its complications (2). *British Medical Journal*, 1, 217.

---

### JOSEPH KENNEDY

February 1938 found him installed as Ambassador in London. At his first news conference in the embassy, the energetic new appointee greeted reporters with his feet on his desk. They were slightly flabbergasted and rather taken by the "relentless efficiency" of the sandy-haired Irishman, who had not a single photograph or picture on his office walls, who had the smile of an overgrown schoolboy but tired eyes behind his horn-rimmed glasses, who refused to wear knee-breeches at Court, declared a passion for detective stories, Beethoven's Fifth and chocolate layer cake, and rose at six thirty every morning no matter how late the previous night's reception or dinner party might have gone on. Then, at precisely eight o'clock every morning a horse was delivered to his front door at the ambassador's residence in Princes Gate, and he rode for exactly fifty minutes in Rotten Row, usually with his son Joe.

MARGARET LAING. *Robert Kennedy*.  
 Macdonald. London. 1968. Pp. 58.