

# History lessons: the Asian Flu pandemic

*'Although we have had 30 years to prepare for what should be done in the event of an influenza pandemic, I think we have all been rushing around trying to improvise investigations with insufficient time to do it properly. We can only hope that people will have taken advantage of their opportunities and at the end it may be possible to construct an adequate explanation of what happened.'*<sup>1</sup>

So wrote J Corbett McDonald of the Public Health Laboratory Service, to Ian Watson, Director of the College of General Practitioners' Epidemic Observation Unit in the autumn of 1957. He was referring to that year's Asian flu pandemic. In the event, neither the Unit nor the PHLS undertook any large scale research projects during the outbreak and later studies were limited. The Unit's retrospective investigation had a response from 42 practices, of which only 29 provided useable data. Could or should more have been done? By 1957, unlike 1918, there was a global network of laboratories linked to the World Influenza Research Centre in London, which aimed to create a clearing house for research and tracking the virus.

In 1957 it had all seemed initially quiet on the UK influenza front. Dr McDonald's quarterly report (November 1956–March 1957) mentioned a 'remarkably low level of respiratory illness so far this winter.' However, a *Times* newspaper comment (17 April) that 'an influenza epidemic has affected thousands of Hong Kong residents' heralded the start of rapid movement across the East with 100 000 cases in Taiwan by mid-May and over a million in India by June. Five months after the Hong Kong outbreak it was reckoned to have traversed the globe. As an entirely new strain there was no immunity in the populace and the first vaccines were not distributed until August in the US and October in the UK, and then on an extremely limited basis.

The first cases in the UK were in late June, with a serious outbreak in the general population occurring in August. From mid-September onwards the virus spread from

the North, West, and Wales to the South, East, and Scotland. One GP recalled 'we were amazed at the extraordinary infectivity of the disease, overawed by the suddenness of its outset and surprised at the protean nature of its symptomatology.'<sup>2</sup> It peaked the week ending 17 October with 600 deaths reported in major towns in England and Wales. There was some evidence of a limited return in the winter.

By early 1958 it was estimated that 'not less than 9 million people in Great Britain had ... Asian influenza during the 1957 epidemic. Of these, more than 5.5 million were attended by their doctors. About 14 000 people died of the immediate effects of their attack.'<sup>3</sup> Not only was £10 000 000 spent on sickness benefit, but also with factories, offices and mines closed the economy was hit: 'Setback in Production — "Recession through Influenza"' (*Manchester Guardian*, 29 November).

Despite Watson's early prediction that 'in the end, and in spite of the scare stuff in the lay press, we will have our epidemic of influenza, of a type not very different from what we know already, with complications in the usual age groups,'<sup>4</sup> the core group of main sufferers was aged 5–39 years with 49% between 5–14 years. In London, 110 000 children were off school suspected of having influenza. With adults there was usually a connection to children; for example, parents, teachers, doctors, or a closed group such as the armed forces and football teams. As the *Manchester Guardian* put it: 'Fit Go Down with Flu' (20th August). There was also a rise in influenzal deaths in January 1958 of an older age group but it was not clear how much of this was the usual seasonal deaths attributed to influenza as opposed to Asian flu.<sup>5</sup>

## SYMPTOMS AND TREATMENT

Patients were often able to pinpoint the start of Asian flu to the very minute with wobbly legs and a chill followed by prostration, sore throats, running nose, and coughs; together with achy limbs (adults), head (children), and a high fever following. Young children, particularly boys, suffered nose bleeds. Edgar Hope-Simpson observed that the

illness had two or three phases, the second being 2–14 days after the first and of a more severe nature.

Symptoms were mostly mild and patients usually recovered after a period in bed with simple antipyretic measures. There were complications in 3% of cases with 0.3% mortality. Pneumonia and bronchitis accounted for 50% of these, the rest being cerebro- and cardiovascular disease brought on by the flu. The incidence of known post-influenzal pneumonia rose during the pandemic — the percentage of deaths from this in the Midlands was 4% in the week ending 14 September, but by 19 October it was 22%.

John Fry treated 15% of his list and suspected that another 10% had not bothered to consult him. This assumption was questioned however, considering that a signed certificate was needed for sickness benefit.<sup>6</sup> Watson, himself, noted few complications in the patients he saw, but did mention depression that required treatment in 3 out of 10 women aged 20–25 years. Arthur Watts, (author of *Psychiatry in General Practice*) found that, in contrast, 'the depression usually associated with influenza was absent.'<sup>7</sup>

There was a lack of uniformity in treatment, some GPs prescribed antibiotics to all uncomplicated cases; one doctor in Salford used 100 000 units penicillin intramuscularly, while others only used antibiotics for serious cases. It was later noted however, that 'indiscriminate use of antibiotics' was not beneficial.<sup>8</sup>

Hospital wards were closed when nurses and doctors fell ill. Robin Pinsent was a GP who succumbed. Watson was intrigued; neither he nor his assistant had developed any antibodies despite daily exposure for 4 weeks:

*'Whether ... I will eventually develop a detectable antibody in my serum is the very point ... Until I get the answer to this, I, at any rate will not accept any doses of vaccine because I believe that even this may upset the delicate symbiotic balance which I appear to have struck up with the virus at present.'*

*What happens if I cease to be in daily contact with fresh doses of the virus? It may be that at that stage a dose of the vaccine may be useful if I have not yet developed any detectable antibodies in the blood.*<sup>78</sup>

Watson ran a retrospective study which, based upon 66 responses found a 35% rate of GP infection, 8% had no clinical symptoms but tested positive. Those without families were slightly more likely to have a subclinical infection.<sup>3</sup>

## PANDEMIC GUIDANCE AND ADVICE

Six weeks before the virus struck in the UK there were almost daily reports in the press despite the advice of the World Health Organization that it was unlikely to strike until the winter.

'The public seems under the impression that nothing can be done to prevent the calamity that is threatened by the advance of influenza in the Far East. On the contrary there is a great deal that the Government can do; by acting at once they may save hundreds and thousands of lives', argued a Dr Kitching to the *BMJ*.<sup>9</sup> The government, he said, should organise a locum system to cover sick doctors, mobilise reserves of health visitors and nurses, and lastly arrange a reprieve from 'the chore' of signing certificates.

Watson read Kitching's letter and wondered whether the College should circulate something to all members, perhaps in a newsletter:

*'I feel that we must go very carefully and only underline what is really needed from our own point of view. The Ministry and Colindale are no doubt on their toes in this matter. I think that we must be very sure of the need for any extra pre-epidemic publication before we rush into print.'*<sup>74</sup>

By July there had been a number of localised outbreaks, and the Minister of Health was asked to issue a statement to allay fears, having declined to do so a month earlier. He replied that it was unnecessary as the flu was not spreading in the UK. However, in August when Asian flu was hitting communities and closing

schools across the North West, a broadcast went out advising the public not to visit the doctor if they felt the flu coming on but to stay at home and take aspirin. Watson, hearing this 'deprecated the Ministry's encouraging self-diagnosis and prescribing drugs.'<sup>10</sup> He asked the College Council to take a stand and condemn it but they did not think it appropriate to get involved, although their representative raised Watson's point, without success, at the next GMSC meeting in September. The GMSC Chairman reported that he had recently attended a Ministry meeting, to devise a national procedure to cope with a large scale epidemic. It had, however, been decided that such a scheme would not be workable and that local Medical Officers of Health (MOH) would be responsible for devising their own schemes 'they would know almost as soon as the GPs that there was an epidemic.'<sup>11</sup> Watson, not appeased wrote to the *BMJ* reiterating his point and deploring that the broadcast had not specified an appropriate dose, method of taking, or allergic reactions to aspirin.<sup>12</sup>

Was a clear message being given to the public as to what to expect and to do in the event of illness? Was there a leadership role for medical organisations such as the BMA or the College that was not taken up? The broadcast did not seem to dispel public concern. Is it reasonable to expect that it would do so? By late September, the *BMJ* correspondence column was full of complaints:

*'It is time the BMA took urgent steps to counteract the ... exaggerated publicity in the press ... There have been no cases in this neighbourhood; patients have already started sending urgently on most inadequate grounds. One woman in the best of health had obeyed instructions given her in a woman's magazine.'*<sup>13</sup>

Another called for an announcement that the influenza was highly contagious but quite harmless without evidence of serious complications. This drew the ire of Dr Agnes Wilkinson, as many doctors were flat-out caring for their flu patients; it was deemed dangerous to describe influenza as harmless and to advocate complacency in patients.

How effective was allowing outbreak management plans to be delegated to local MOH? The *Times* (28 September) reported that 'emergency epidemic plans' had been put into operation, which was denied; all that had been sent out were the usual reminders to be vigilant for epidemics over the winter. The actual policy of having local action plans drew criticisms of inconsistencies of practice. In some areas officers ordered complete closure of schools while in others only assemblies and physical training were banned. Was there any central mechanism to ensure that MOH reports were reviewed and the most effective measures identified and disseminated?

Are we able to learn anything from 1957 as we deal with H1N1? Will our guidance be examined for lessons in the future? It is already being collected for just this purpose. On 13 May 2009 the College received an email from the British Library asking if they could archive the section of the RCGP website devoted to H1N1 and pandemic planning. 'The swine flu outbreak is of international interest and the British Library believes it has a responsibility to archive relevant materials for the benefit of current and future researchers.'

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