

Doctor Philip Morgan
Northwood Medical Centre
10-12 Middleton Hall Road
Kings Norton
Birmingham B30 1BY

Dear Dame Deidre Hine

I understand that you have been appointed to review the NHS response to the H1N1 Swine Flu outbreak .

I am a General Practitioner working in South Birmingham. I have taken an interest in Pandemic Influenza planning since 2005, and so during this recent outbreak I kept a record of the impact of H1N1 locally, within my practice and the local community.

I have enclosed three documents which I hope you may find of interest. They cover:

1. The impact within my own practice
2. The impact in the local area
3. The role of the patients.

I must apologise as I have tried to email you these documents, but regrettably have failed in this task.

Kind regards

Dr Philip Morgan

Philip.morgan@sbpct.nhs.uk



14/4/10.

H1N1 Pandemic: Northwood/Alvechurch Medical Centres review

H1N1 “Swine flu” emerged in Mexico in February 2009, and spread to USA, UK, Spain and other countries by March 2009. Locally in the South Birmingham PCT area the cases appeared from the index school “Welford Primary School” which is sited in the neighbouring Heart of Birmingham PCT.

During the initial period, protocols were rolled out, updated and changed. The typical symptomatology needed to be identified and for this information to be disseminated to the frontline health care workers. Initially patients and immediate family were treated actively and prophylactically, a limited number of HPA swabs were available for confirmation, the weekly HPA bulletin was not available, and the National Pandemic Flu line was not available until July 2009.

The following data has been collated from the EMIS consultation software used by Northwood and Alvechurch Medical Centres (NMC TRS and NMC ILI), together with RCGP/HPA/QFLU data when these became available.

(Notes: An increased level is described as an ILI rate greater than 30, the winter of 2008 was the worst recent winter for 8 years prior to the winter of 2009, and the registered population in the practice at this time was approximately 9000 patients)

The first wave

The first cases appeared in the second week of April and the first wave officially ended in the last week of August, a total of 19 weeks. During this period the peak “Influenza like illness “ (ILI) rate reached 273, 3.3 times higher than the peak ILI rate of 2008 (81) and a total of 138 patients were coded as having either “influenza”, “suspected swine flu” or “swine flu”.

A review of these patients identified:

- 0-5=12
- 6-15=25
- 16-64=95
- 65+ = 6
- Male=49
- Female=89
- The female 25 to 54 was the commonest demographic group.

32% of those infected had known chronic medical conditions

There was a hiatus of six weeks. During this time, the doctors would regularly consult in excess of 80 patients per day, with a peak consultation rate of 108 patients seen in one day by one doctor.

The second wave

The second wave commenced in the second week of October and officially ended at the end of 2009 although the Christmas/new year period did produce a skew in data. During this period the peak ILI rate was 174, 2.15 times the peak of 2008 and a total of 118 patients were coded as having “influenza” “suspected swine flu” or “swine flu”.

A review of these patients identified

- 0-5= 9
- 6-15= 14
- 16-64= 80
- 65+ = 15
- The female 25 to 54 was the commonest demographic group
- Male=48
- Female = 70

46 % of those infected had known chronic medical conditions.

The average weekly ILI rate from the beginning of the first wave to the end of the second wave was 102.

During the second wave the staff illness rate was approximately 20% for the peak 6 weeks.

There was a hiatus of six weeks with three weeks of severe cold conditions causing an increase in relapses of heart disease patients and an increase in respiratory cases. However other problems were raised including:

- Just in time society: food supplies to shops
- Lack of sensible stockpiling
- Practicality of home visits on untreated roads.(The Ambulance service had already warned that their vehicles would only visit patients “in extremis” and where access was available)

The third wave

The third wave commenced in the first week of February 2010 and officially ended in the first week of March 2010. During this period the peak ILI rate was 89, the same as the peak of the 2008 and a total of 94 were coded as “influenza”, “suspected swine flu” or “swine flu”.

A review of these patients identified

- 0-5 = 6
- 6-15 = 14
- 16-64 = 59
- 65+ = 15
- The female 35-64 year old cohort was the commonest demographic group
- Male = 47
- Female = 47

53 % of those infected had known chronic medical conditions.

It is obvious from the data from the “third wave” is that the cases were probably not “Swine Flu” H1N1, but rather influenza type B, C and parainfluenza. It, however, did not change the workload demand on the ground and this wave did arrive at the most commonest period, being January to March. The problem was compounded by staff illness of up to 20%, due to both ILI and Norovirus related diseases.

Finally some general impressions of monitoring data:

Anticipating an influenza surge is difficult, but from local data the following are useful:

1. RCGP data was late for the first wave, and failed to identify the second wave.
2. Qflu was an accurate representation of the local status, although it was invariably 1-2 weeks behind the dynamic situation for both the first and second wave
3. NMC Total respiratory illnesses (TRS) accurately identified surges, especially with crossing the weekly threshold of >50 reported cases. It is quite possible that some of these cases were ILI but coded as TRS.
4. NMC ILI rates were numerically very low, but rising cases >4 per week or doubling cases in a week was strongly suggestive of a surge.
5. Both NMC TRS and NMC ILI data provided 2-3 weeks warning before the official start to a surge.

A review of the 2009 “Swine flu” pandemic.

It is easy to criticise the management following a real time infectious disease outbreak but no criticism is intended in the following document - rather a number of observations, comments and questions, aimed towards improved future management.

This personal review is based upon what actually happened. The majority of the management in place to cope with a major infectious disease outbreak worked well, but personal experience “at the coalface” throws up issues in need of clarification.

Even with the current level of modern medicine, surveillance and communications a pandemic appears suddenly and requires a significant amount of time, effort and redirection of available resources to meet the challenge.

My view, as a General Practitioner based in South Birmingham PCT, was at one of the original “hotspots” .Due to local factors, we experienced a greater than average number of patients with influenza and associated complications. The statistics from my own practice produced the “bottom line” observation that for 10 months (from April 2009) the average daily consultation rate was 10% higher than the peak consultation rate for the whole of 2008. The average daily acute respiratory illness consultation rate was 20% higher than the peak respiratory illness consultation rate in the whole of 2008.

Each area of concern is listed in categories:

- Early coping
- GP practice
- Local PCT
- National level
- Patients.
- Comments

One of the main reasons for the slow start to pandemic management is that the National-PCT-GP plans had not been completed prior to the onset of the pandemic.(This was in the April 2009 PCT/GP “must do list” as per the DoH)

Early Coping

1. The index cases were at a local multiracial school. There was a time delay before the local HPA unit recognised that the symptomatology was that of influenza (many gastrointestinal symptoms, less obvious malaise and dry coughs).
2. The ethnic mix of the original cases probably compounded the problem with different perspectives on public health, social mixing, voluntary quarantine and simple verbal/written communication.
3. The specific swabs required to be processed were not available to GP surgeries for several weeks following the initial outbreak.
4. Supplies for PPE (and particularly alcohol gel) were not readily available, and limited stocks took 8 weeks to arrive.
5. The PCT set up its own triaging service as the National Pandemic Flu line service was not operational before the first wave surge peak. There was little liaison or help by the national service to insure that the National Pandemic flu line service would be similar to the local adhoc service. Hence when the national service took over, confusion ensued. I wonder if the NPFS algorithm was reviewed and validated by the RCGP/BMA before it was rolled out? If this was done then a uniform service could be cascaded to all UK GPs. GPs were left in the dark over RCGP/BMA approval of the NPFS algorithm .

GP practice

1. Guidance for staff welfare and health arrived relatively late. As a result, some GP surgeries provided an "in house" occupational service to their own staff. Some even offered the staff Pneumovax vaccination. In other surgeries, the staff members were offered nothing. During the peak of a surge, up to 20% of the staff, including clinical staff, were off work with respiratory illnesses. This produced the classical problem of increasing patients with decreasing available staff.

2. Some GP surgeries were provided with packs of Tamiflu. These were often taken home by GPs for their families.

3. GPs themselves were reluctant to accept the potential risk of influenza - as many had never seen a "bad winter". As such many were reluctant to accept the management of the National Pandemic flu line, the criteria for use of Tamiflu, the strict window of opportunity for the use of Tamiflu and the recommendation of vaccination to several high risk groups, especially pregnant women.

4. Many GPs did not read the weekly HPA reports recommending the appropriate first line antibiotic therapy for community acquired infections. Hence, patients returned for further consultations and medication.

5. General Practice never got the promised "capacity to benefit" guidelines.

6. If you worked in a "hot zone" patients attended their GP whatever the government plan. (Modellers in the Department of Health believed that with a clinical attack rate of up to 30% the extra consultation rate in a GP surgery would be 10%). Personal experience indicated that less than a 1% attack rate nationally could produce a 10% increase locally.

7. As patients became infected, the influenza revealed occult chronic medical conditions including diabetes, IHD, asthma and CoPD.

8. There are standard prescribing guides for antibiotic use with respiratory infections. However the higher than average number of raised BMI patients infected may have actually received a suboptimal mg/kg dosage.

9. During any winter, you notice that staff work harder and are more likely to become tired. This has a negative effect on their ability to work. In this instance, the winter of 2008 was relatively severe, and the first wave started in early April 2009, with the second and third wave of activity locally following resulting in staff having up to 17 months of raised activity. This chronic high workload had a detrimental effect on them, particularly from the peak of the second wave. Staff health, and morale did suffer, with an increase in short term physical ailments, exacerbations of chronic ailments and a rise in psychological disease.(This was also noted in Toronto following SARS in 2003)

Local PCT

1. During a surge there was a shortage of first line antibiotics(especially Oxytetracycline) at the community pharmacies due to “ just in time” supplies.

2. There were no local arrangements if the PCT was a “hotspot”. Why did the local PCT have to conform to national criteria when the national criteria were inadequate for the local needs?

3. Could an agreed raised ILI threshold allow local services to suspend GP access criteria, secondary care waiting list initiatives and 4 hour A+E targets?

4. Despite the obvious pressures of caseload, and surges, and relative lack of pre-planned surge management, the PCT coped well.

National level

1. There was an obvious problem between the DoH and BMA/GPC over swine flu vaccination for healthy under 5s. The delay was not constructive to providing optimal frontline clinical care. There was also a perceived delay and restriction in initial provision of vaccines, despite the national media campaign, and no advice on priority subgroups within the “high risk” groups.

2. QoF protection thresholds were not agreed by DoH/GPC before the pandemic, so that GP practices needed to continue with all their normal services, causing an increase reluctance to take on any extra “voluntary” services

3. Despite DoH efforts only about 1/3 NHS staff, 1/5 of pregnant women and 1/3 of the early priority groups were vaccinated in the first 3 months of the vaccination programme. It seemed that scepticism, disbelief and the lack of appreciation of this “free” vaccine suggested to some that it had no worth.

4. Why did the DoH modellers not consider there would be a third (winter) wave when historically pandemic influenza and seasonal influenza was mostly likely to appear between December and March? Why was the NPFS withdrawn on 11.2.2010 with the third wave status as it was?

Patients

1. There seemed to be a battle (which I think the DoH lost) between the media and the DoH relating to the efficacy, appropriateness and safety of antiviral agents and vaccinations.

2. “High risk group” lists were produced based upon scientific evidence. Why were the over 65s added to this group, despite the scientific evidence indicating a greater risk to the under 5s?

3. Patients were not made aware of areas of high infectivity, times of surge, and were provided with minimal advice relating to self care and sensible stockpiling.

4. DoH decisions were sometimes presented to the media before GP surgeries were informed. GPs often heard of decisions on their car radios on the way to work, or had patients demanding the service. In some cases GP surgery waiting rooms were filled with healthy patients reacting to that day’s media report before the GP surgery was informed, had received a protocol or supplies to provide the service.

Comments.

1. In retrospect, the feared H5N1 Bird flu did not arrive, and the novel influenza was, fortuitously, of low virulence. Bird Flu is , regrettably, still a force to be reckoned with
2. There are some conditions that have been known to predispose poor outcomes, including Asthma and Diabetes. However minority groups also had a raised risk. (This has been confirmed with the CDC) However some “new conditions” predisposed patients to poor outcomes, particularly raised BMI. These patients fared relatively badly due to the increased risk of contracting influenza (possibly poor cell mediated immunity), an increased risk of becoming a severe case (9 fold increased on a matched pair patient of normal BMI), the usage of higher dose therapy, and longer convalescence.
3. It is difficult to assess the effect of the UK recession on the response to the outbreak.
4. It is difficult to assess the effect of the prolonged cold 2009 winter (locally 79 days of continual frost or snow) on the outbreak.
5. The relationship between the General Practitioners and the Department of Health did not optimise the health response. The reasons behind this include the general poor morale of General Practitioners due to continual moving health priority targets, circumstances since the 2004 New Contract, the issues of “Extended hours” and the negative campaign facilitated through the media.
6. There is a continual emphasis on vaccination of the over 65 year group in preference to children. The healthy under 5 year old group will not have H1N1 California vaccination after 31st March 2010 although the Chief Medical Officer acknowledges their increased risk of death if exposed to this influenza. However in September 2010 the seasonal influenza vaccination will contain H1N1 California but again it will be offered to the healthy over 65 year group and not the healthy under 5 year group.

Patients: self-care and responsibility.

Following the influenza pandemic in 2009 I noticed in my practice in South Birmingham PCT that the patients who became infected typically had a number of risk factors. Apart from the known factors of early age, chronic respiratory disease, diabetes, and pregnancy, a large number of patients locally infected had factors of “lifestyle”; smoking status, diet, medication compliance, immunisation status and raised body mass index.

These factors not only increased the risk of illness and death for influenza but also raise the health risks outside a pandemic. These factors increase the burden on the NHS to provide care.

The NHS provides a good “socialised” medical care to the population. We have a low child mortality rate and good life expectancy and, in general, medical services which are “better” than other developed countries including USA.

However it is not the best. Currently Japan and France provide probably the best medical service, with the lowest child mortality and the highest life expectancy.

The question should be asked as to why Japanese and French health care systems are working better than the NHS?

Although the health service in Japan is partially state, and partially privately funded, a major factor relates to patient responsibility. The Japanese culture encourages community and personal responsibility. As such each citizen understands their own responsibility for their own health and acts upon it. This is not new.

Galen, the public health doctor in Imperial Rome, advised every citizen to:

- Eat modestly
- Drink in moderation
- Exercise regularly
- Get sufficient sleep
- Avoid all noxious drugs.

This could be modernised as:

- Take regular exercise
- Have a normal body weight
- Eat low fat, high fibre diet with 5 pieces of fruit or vegetable per day
- Drink no more than 2 units of alcohol per day
- Do not smoke, or take any illegal drugs
- Have good compliance with prescribed medication

In Japan the attitude to eating is summed up as follows:

“ Eat what tastes good, but only if it is also healthy”

Unfortunately, from my experience, this minimum self-care advice is not practised.

In France, patients learn to selfcare to a level unseen in the UK. Patients pay for doctors' consultations (although the French government reimburses the majority of the cost). This factor “encourages” better self-care and improves optimisation of the health care service.

[Currently the incidence of “self care” in the UK is 5% of the population (NHS Library 2007)]

The French public health laws are based upon Napoleonic principles which include every citizen should maximise the available immunisation and vaccination. This civic responsibility is again not new. This has been recorded as early as Confucianism in China. (500BC)

[The OECD in 2009 reported that child hood immunisation rates in the UK were between 85-93% and in France and Japan in excess of 95%]

Despite recent efforts by the Department of Health, several factors, especially obesity are rising rather than falling.

The incidence of adult obesity (defined as a body mass index of greater than 29) was 15% in 1993 in the UK. By 2007 this had risen to 24% and is predicted to reach 33% by 2012. (Office of National Statistics)

In Japan, the incidence of adult obesity is 5%, France 15%, and the average across the G20 countries is 19% (OECD 2009)

The current attempts by the Department of Health to educate the population do not seem to be working. The Office of National Statistics reported in 2009 that:

- 29% of adults had not heard of the advice on dietary advice
- 32% of adults had not heard of the advice on exercise.

This information does not indicate how many adults hear the advice, accept the advice and act upon the advice.

Unfortunately, locally, since the start of the recent recession (in September 2008) the incidence of obesity has risen by 70%(NMC).

Therefore despite the Department of Health current efforts, without patient involvement, the NHS will not be able to improve or optimise the service provision.

The current voluntary input by patients into their health care is inadequate. Unless active means are used, which might include restricting care options, the NHS will increasingly fail to provide a satisfactory service and will continue to be called "the sick man of Europe".