

EDITORIAL

What Have We Learned From the H1N1 Crisis?

Several years ago we used this space to write about the 2002–03 SARS (severe acute respiratory syndrome) pandemic. Slightly over 8,000 cases were confirmed, with an overall fatality rate of almost 10% (much higher among the elderly). In that editorial we discussed the tragedy of the pandemic both in Hong Kong and in Canada, the impact of global travel on the spread of infectious diseases, and the long-term and downstream consequences of the casualization of the nursing workforce in Canada.

The SARS crisis was a bleak time in Canadian hospitals. As cases accumulated in the province of Ontario, fear mounted. A number of health-care providers fell ill and some died. This raised public concerns internationally. Hospitals scrambled to fit workers with protective equipment as the crisis unfolded. Families were abruptly denied access to their hospitalized loved ones.

Other impacts were seen as well. Throughout the 1990s in Canada, a common human resource management strategy in the health-care field was to hire many workers, including nurses, on a part-time basis. This meant that nurses who held positions at multiple institutions in order to make a full salary could no longer work across these institutions when control measures were introduced or if they fell ill. Staffing, already tight, became tighter.

The H1N1 influenza pandemic of 2009 was a very different crisis. With perhaps 700,000 cases confirmed through laboratory testing (although laboratory confirmation was abandoned quickly in most communities), and perhaps 10,000 deaths worldwide (more than 400 in Canada), H1N1 appears to have made less of an impact than even “regular” seasonal flu. In vulnerable patients, however, H1N1 struck quickly and dramatically. The fatalities were widely reported. Emergency rooms in some cities rapidly became crowded with the “worried well” and those who were infected but were in no immediate danger. Staff in intensive care units treated small numbers of patients in respiratory failure; they were able to save many.

What was different this time, more than 5 years after the SARS pandemic? To state the obvious, H1N1 was a different illness. (We use the past tense because, as of this writing, many consider the crisis over, although experts and authorities have not ruled out the possibility of

another wave of infections in the coming months.) It spread less aggressively than SARS and was less often fatal. On a superficial level, virtually all health-care workers and trainees — in Canada, at least — were fitted with protective masks by the time the pandemic was in full swing. The nurse shortage had perhaps eased slightly, and casualization (and employment at multiple health-care facilities) was probably less widespread, but nurse employment participation is now at an all-time high, due to the global financial crisis more than to policy initiatives.

So did we really learn from SARS? More importantly, what lessons can we take from H1N1?

With SARS fresh in the minds of many, and with officials and policy-makers attempting to ready communities for H1N1 by insisting on immunization and preparing to redeploy health-care personnel, the tension mounted. Around dinner tables, in hospital cafeterias, and elsewhere, health-care workers talked through their choices — first about immunization and then about whether they would agree to work with afflicted patients in the event of a true crisis. Questions surfaced as regulatory bodies and health-care employers sought to clarify obligations and duties. With SARS, there was no vaccine available. With H1N1, a vaccine had been developed, but, as with seasonal flu vaccines, doubts were raised about its effectiveness (and not only by malcontents, apparently). Health-care managers and executives attempted to combat scepticism about the effectiveness and safety of vaccination by strongly recommending it, and even, in some cases, issuing dire warnings about the consequences of refusing it. In the end, perhaps because of effective infection control, perhaps because of a fortuitous lower-than-expected rate of transmission, or perhaps because of aggressive immunization campaigns, the spread of H1N1 never hit crisis levels or strained the limits of the health-care workforce. Still, it is now clear that we have a generation of health-care workers who are unaccustomed to isolation procedures and who practise on a daily basis with virtually no concern for their own safety. The H1N1 pandemic of 2009 may have foreshadowed a crisis that will bring us face to face with thorny questions around the risks and obligations confronting health professionals in a modern society.

The H1N1 pandemic of 2009 also highlighted new challenges in evidence-based practice and policy. Officials in a number of provinces attempted to use data from vaccine field tests to decide how to deploy staff in immunizing against H1N1 versus seasonal flu. Ontario, for instance, delayed H1N1 vaccination for the elderly and put off seasonal flu vaccination for younger individuals based on such data. Other provinces pursued different approaches, and as the media reported the differences many Canadians became perplexed. Scientific controversies about the risks and benefits of influenza vaccination and about the use of

antiviral medications were reported in the media but not always fully explained. Thus, the decisions facing policy-makers around mass vaccination were excruciatingly difficult; choices had to be made when evidence and ongoing surveillance data were suboptimal, slow to arrive, and unclear in their implications. Although H1N1 highlighted these challenges, many walked away with a sense of cynicism rather than empathy for the leaders involved.

The H1N1 crisis also offered a glimpse into the difficult resource-allocation decisions that lie ahead when a “real” pandemic strikes. Vaccine supply was limited, apparently because of production issues; this, in turn, forced officials to draw up priority lists and raised the spectre of vaccine rationing. (Interestingly, while all of this was going on the sceptics were spreading anti-vaccine messages and loudly announcing their refusal to be vaccinated.) In response to the delays, many panicked and many expressed anger at the authorities. There were reports of community leaders and celebrities receiving the vaccine by “jumping the queue.” Ironically, by the end of the crisis millions of doses of vaccine sat unused, while the pharmaceutical companies involved in their manufacture marked record profits. Vaccines turned out to be the only resource in short supply during the crisis. But early on, hospitals and physician groups raised the possibility that, should the pandemic widen, there might be a need to limit access to ventilator support for those who developed respiratory failure. Fortunately, that point was never reached. But should our health-care system ever be confronted with a true catastrophic pandemic, resource-allocation decisions will be numerous — and very tough.

For the moment, at least, the lasting impact of H1N1 is surely its object lesson with respect to the new age of health information. With the instantaneous flow of information on the Internet (not only “good,” verifiable information but also false rumours) and the reluctance of politicians and bureaucrats to make “bad calls,” mixed messages flooded the airwaves and the bandwidth. Word of suspicious deaths, limited vaccine availability, adverse effects of vaccines, and government proclamations spread like wildfire, and public officials struggled to stay informed, let alone reach policy decisions and articulate them in the media. In many communities across the country, the public and health professionals alike were confused, and often very angry.

By December, the public had reached media saturation. Many commentators opined that the national and international public health response likely represented “overkill” and that public education efforts verged on panic-mongering. However, these comments were made squarely in hindsight — and about an apparently benign pandemic. The impact of H1N1 was nowhere near what had been feared. Again, perhaps

this is partly because many health-care workers and leaders worked tirelessly and infection control efforts were successful, but luck was on our side on many fronts (this was not “the one,” the killer pandemic flu that some public health experts say we’re due for). In the end, was H1N1 a pandemic or a “panic-emic”? Did the sharing of information through the media genuinely help with prevention efforts?

Some caution is in order before we conclude that public health officials and the authorities “cried wolf.” The H1N1 crisis was fraught with many of the same uncertainties and challenges that have always marked public health policy, but with a new element: near instantaneous reporting (and critique) of every judgement call. When reviewing the choices of public health officials, we should bear in mind that public health departments in many communities in Canada and around the world have faced funding cuts and understaffing for years. In many Canadian communities, the response to H1N1 and the attempt to staff vaccination clinics virtually shut down all other public health activities. In Toronto, for instance, a municipal workers’ strike grounded planning efforts at the public health unit in the months leading up to the crisis. Other communities had equally limited methods for coordinating access to information and delivery of supplies. Despite progress in many areas of health care, the management of public health crises is becoming more complex and challenging, and it is clear that we are ill-equipped to deal with the worst of infectious disease pandemics.

The SARS and H1N1 episodes highlight both the best and the worst in our health-care system. It is incumbent on health professionals, leaders, and researchers to take lessons from these experiences. While we learned much from SARS, the “test” was not a full one. We must continue to invest in human resource capacity, as well as in education and research, to deal with the health crises — infectious and otherwise — that are surely coming.

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