Ethical issues in pandemic planning

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Scenario 1

A plane arrived at Sydney Airport with several passengers reporting flu-like symptoms. They are part of a group of 10 from a charitable organisation, returning from a rural inspection tour of a South-East Asian country. The group stayed with local villagers who had sick chickens. The group was aware that 6 months earlier, three villagers had become ill with flu-like symptoms and tested positive for the influenza A/H5N1 virus. Local authorities had assured the group that the area was now safe.

On the plane returning to Australia, three members of the group began to feel unwell. During the flight, the three passengers reported their symptoms to the cabin crew. This was then reported to Sydney Airport and the relevant authorities. On arrival, the three passengers were immediately transferred to a local hospital, where they were placed in isolation facilities and treated with antivirals. Health care workers were required to take full infection control precautions when managing these patients (including taking them for investigations such as x-rays). All other passengers and crew from the plane were placed in quarantine at a hotel near the airport. They were not allowed to return to their families or their jobs.

ABSTRACT

- In the event of an influenza pandemic, many ethical issues will arise in terms of health risks, resource allocation, and management decisions.
- Planning decisions may be controversial, such as rationing of antivirals, resource allocation (including hospital beds and vaccinations), occupational risk, rostering of staff, responsibilities of health care workers, quarantine measures, and governance issues.
- A clear ethical framework is needed to enable understanding of the decision-making process and optimise acceptance of decisions by health care workers and other members of an affected community.
- Planning decisions need to start being examined now, and will require input from a broad group of experts: health care providers, infrastructure managers, lawyers, ethicists, public health physicians, and community members. The process will need to be open, honest and dynamic.

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Scenario 1 presents a possible starting point for an outbreak of pandemic influenza in Australia. Ethical issues arise from measures such as quarantining all passengers and crew, isolating the patients in particular wards within the hospital, shifting other patients, designating appropriate medical staff to manage and diagnose the illness in the three unwell passengers, and procuring and using antivirals for treatment of the patients and possibly for prophylactic administration to others who have been exposed. Specific issues raised by this scenario include the need for measures to protect the public, such as restriction of movement of individuals, resource reallocation, duties of health care workers to care for these patients, and use of restricted resources.

Experience with previous epidemic health emergencies, such as the severe acute respiratory syndrome (SARS), has shown that, without a clear ethical framework and an understanding of the decision-making process, decisions may not be readily accepted either by health care workers or by other members of an affected community,[1] and may result in long-term psychological repercussions such as anxiety, post-traumatic stress disorder, and depression. Fear, uncertainty of infection and stigmatisation were also problems experienced by health care workers.[2,3] In formulating plans to deal with epidemic crises, most countries have acknowledged that many aspects of the response are value-laden.[4] Certain core values of our community, such as equality, liberty and privacy, may be challenged or re-prioritised by pandemic planning. The overall approach of the plan will aim to protect the greatest number of people in society from becoming unwell, and keep society functioning as optimally as possible (but even this aim has been challenged[5]). Individual liberties may be sacrificed for the health of the public overall. This may involve measures such as home quarantine, banning public meetings, or even significant disruption to normal life. If a pandemic did occur, many aspects of the management plan, such as rationing of antivirals and vaccines, occupational risks to health care workers and their families, compulsory vaccinations of certain workers, cessation of many normal health services, and quarantine measures, would also raise major ethical issues.[6]

Following the SARS experience, a working group of bioethicists in Canada identified core values that are important to consider in relation to pandemic planning (Box 1).[7]

Exploration of ethical values

Individual liberty and protection of the public

In our society, most people value individual freedom and consider it a "right". This includes freedom of movement, work, religion and leisure activities. During a pandemic, this "right" would need to be balanced against what is best for society as a whole. Examples of how individual liberties may become secondary to the needs of the broader public include:

- Home quarantine (exposed people may be forced into isolated quarantine to prevent the spread of influenza);
- Restriction of mass gatherings such as religious or social celebrations;
- Restriction of travel within and outside of Australia; and
- Closure of child care and educational institutions.

Proportionality and equity

Depending on the severity of a pandemic, there will be a range of public health interventions to be implemented. These include the measures above, and such things as surveillance, deployment of antiviral medications, mass vaccinations, and changed infection control practices. Decisions will be needed regarding distribution of other health services (such as elective hospital admissions),

1 Values relevant to pandemic planning

Descriptor	Meaning
Individual liberty	The rights of the individual are upheld as much as possible.
Protection of the public	How best to protect society as a whole.
Proportionality	Measures to protect the public should not overly restrict the liberty of individuals and these measures should be proportional to the threat.
Privacy and confidentiality	Privacy of individuals is paramount, but may be overridden if necessary to protect others.
Duty of care	Codes of ethics of health care workers to provide care become complicated when other responsibilities and duties have to be balanced against professional duties.
Reciprocity	Society should recognise the burden on health workers and others involved in protecting the public during a pandemic, and support them appropriately.
Equity	Care should be provided in as equitable a manner as possible. Fairness and justice are also important considerations.
Trust	Trust by the public and within a health system will be essential in allowing processes to be successful, and will be enhanced by ensuring transparency of decision making.
Solidarity	Solidarity is needed among individuals, health care institutions, governments and nations. This will require understanding and acceptance of processes.
Stewardship	Those in leadership roles should be guided by the ideas of trust, ethical behaviour, and good decision making. ◆

teaching of health care students, cessation of medical research, assessment of which workers and subpopulation groups are at high risk (and should receive prophylaxis), and allocation of antivirals if supplies are limited.

In Australia, this may also highlight problems associated with groups disadvantaged by other medical problems, cultural differences, or distance.

Privacy and confidentiality

One of the underpinnings of the Australian health system is that individuals are assured of their privacy and that personal information is treated confidentially. Privacy legislation safeguards the correct management of health care information. During a pandemic, this requirement for privacy may be overridden by public health concerns. Especially in the early stages, contact tracing may be conducted quite vigorously, so that attempts can be made to stamp out an outbreak as soon as possible. This may mean that individual identifying information is, by necessity, passed on to third parties. The scale of this contact tracing may also be much larger than for other notifiable diseases.

2 Principles to guide decision making in pandemic planning

- Act on the best available evidence.
- Ensure transparency of decision making.
- Maintain open and regular communication.
- Protect workers involved in providing care.
- Be sensitive to cultural requirements, and practise inclusive decision making.
- Be accountable and responsible.
- Embed consultation, review and responsiveness in the decision-making process. ◆

Duty of care and reciprocity

Health professions have codes of conduct or ethics which guide the conduct of workers. Generally, these codes identify, either explicitly or implicitly, the concept of "duty of care",[8-10] but they are moderately silent on the issue of duty of care in the face of significant personal risk.[11] There are many definitions of duty of care, but the concept generally refers to the duty of a health worker to provide care for and protect patients from harm. In these codes, duty of care is considered in isolation, and does not take into account other duties an individual may have.

The notion of duty of care is important, as it potentially raises many questions during a pandemic. Health care workers were disproportionately infected during the SARS outbreak,[12] even once infection control precautions were instituted. In view of the personal risk, health professionals will have to balance the duties and demands of their work against their duties to protect (or even care for) their family, their other patients, other health professionals, and their own health. Some still consider the duty of health care workers to patients to be imperative;[12] others feel it to be modified by other duties.[13] There is also increasing discussion about the tension caused by conflicting duties of health care workers, particularly now that the concept of work–life flexibility in medicine also appears in many of these codes and oaths.[11-14] Choices made during a pandemic may not necessarily comply with traditional definitions of duty of care. Health care workers may decide that the personal risk from caring for infective patients is too great and refuse to do so. This then raises concerns about personal liability and possible negligence. Most of the evidence from the SARS pandemic has shown that the most effective approach to management of health care workers required strong leadership, with leading by example, open discussion with workers, adequate information, protection, and voluntariness in terms of allowing health care workers to decide the level of risk that is acceptable to them and reallocating workers as necessary.[15]

This issue links directly with the concept of reciprocity. During a pandemic, health workers and others will face a heavy burden in terms of workload, in providing care and protecting the public. There may be many other effects ranging from anxiety, domestic discord and concern, through to loss of income and discrimination.[15] Society, government bodies and health care institutions will need to be aware of these issues and develop appropriate ways of providing optimal support (financial, physical and emotional) to workers "at the coalface", and their families.

Stewardship, trust and solidarity

Stewardship, trust and solidarity are closely interwoven. Stewardship refers to the notion that decisionmakers need to act ethically and in the interests of the individual and the population. This requires good, informed decision making and high levels of trust from both those involved in providing care and the public.

Inherent in this is the need for open and clear communication. Acting ethically requires that decisions are made against clear and open criteria.

This is closely allied with the idea of trust. Before, during and after a pandemic, high levels of trust between health workers, their patients and decisionmakers are needed. This requires transparency and openness.

Within Australia, solidarity refers to unity and collaboration between institutions, governments and professional organisations. Communities at every level need to show both solidarity and resilience to minimise the impact of an epidemic.

More broadly, solidarity refers to developing a sense of global collaboration. Again, this is already occurring, but will need to continue to be enhanced.

Discussion

Cognisant of these values, the pandemic plan broadly aims to minimise loss of life and minimise social disruption. Achieving these aims will not be easy, and will largely depend on striking a balance between the needs of the individual and the public as a whole, often dependent on the stage of the pandemic and the measures that need to be enacted. To plan perfectly for such an unknown situation is impossible, despite the resources being put into this. A rapidly changing social and medical situation combined with a possible lack of resources (in the form of antivirals, vaccines, and health workers), combined with widespread fear, will be difficult for all members of the community. A pandemic would bring with it shocks, surprises, unplanned situations and, quite possibly, distress.

Clarity and transparency of decision making will be vital, as will thorough and efficient communication to the public. During a pandemic, many unknown factors will result in decisions being made on scant information, and perhaps changing frequently. The principles outlined in Box 2 are already being incorporated into the ongoing work and decision making of the National Influenza Planning Committee.

In a case like Scenario 2, few people's lives would be unchanged. Measures to increase social distancing and limit mass gatherings would be considered and possibly enacted. Mass vaccination would be performed as soon as possible. Antivirals would be used according to particular prioritisation guidelines. Many doctors and nurses may refuse to care for infected patients because of the personal and family risk. Long hours, stringent infection control procedures, and isolation may take their toll on volunteering health care workers, who will need to be replaced. Policies, protocols and public health measures may need revision almost daily. Meanwhile, information needs to be disseminated as rapidly as possible both to those in the health industry and to the general public.

One can see how Scenario 2 contrasts with Scenario 1, in terms of pushing the balance towards the need for enforcement of fairly radical public health measures. Major resource reallocation and redistribution of limited resources (manpower and antivirals) would be necessary.

Although Scenario 2 may seem unlikely, it is possible. For this reason, the ethical issues that could arise all need to be anticipated and discussed by a group of informed and interested parties who understand the problems, recognise the ethical issues, and can discuss them in relation to the possible scenarios that may be faced in the event of a pandemic.

Scenario 2

The influenza pandemic is now well established overseas and in Australia, with multiple areas of sustained transmission in the general population in Australia in multiple regions of the country. In the cities affected, some hospitals have been designated as the major "influenza" hospitals and other patients have been moved out. Antivirals are being used to treat patients and for prophylaxis of health care workers with direct contact, while awaiting the imminent arrival of an effective vaccine. Health care workers from the designated influenza hospitals are still being allowed to "elect" to move to a different hospital if they wish, but the staff who have remained are exhausted, and soon this policy will need to be re-examined. Elective surgery has been temporarily cancelled, as has clinical training of health care students. General practitioners are being told to send all "possible" cases straight to fever clinics at the designated hospitals. Many GPs have signs asking patients with typical symptoms of influenza not to enter their clinic, because of the potential risks to staff and other patients. In fact, some GPs are refusing to see patients suspected of influenza because of the risks to themselves, to their staff, and to their other patients. Many people are not going to school or work.

Conclusion

In the event of an influenza pandemic, many of the values we take for granted will be challenged. In trying to maximise preparedness for such an event, attempts have been made to identify some of the ethical issues that will arise and the relevant core values to allow discussion of the challenges. These issues need to be discussed by groups of medical practitioners, ethicists, lawyers, infrastructure managers, and members of the community now, to try to assist decision making during a pandemic, even if the decision making is still difficult. This should allow transparency and understanding of the process of pandemic planning, and ensure room for accountability, consultation and review as information and events unfold in a pandemic.

Competing interests

None identified.

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