developing world
bioethics

Developing World Bioethics ISSN 1471-8731 (print); 1471-8847 (online)
Volume 9 Number 3 2009 pp 161–166

doi:10.1111/j.1471-8847.2008.00240.x

PANDEMIC MANAGEMENT AND DEVELOPING WORLD BIOETHICS: BIRD FLU IN WEST BENGAL

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Keywords
pandemic management,
pandemic preparedness,
special obligations,
bioethics,
India,
bird flu,
public health

ABSTRACT
This paper examines the case of a recent H5N1virus (avian influenza) outbreak in West Bengal, an eastern state of India, and argues that poorly executed pandemic management may be viewed as a moral lapse. It further argues that pandemic management initiatives are intimately related to the concept of health as a social 'good' and to the moral responsibility of protection from foreseeable social harm from an infectious disease. The initiatives, therefore, have to be guided by special moral obligations towards biorisk reduction, obligations which remain unfulfilled when a public body entrusted with the responsibility fails to manage satisfactorily the prevention and control of the infection. The overall conclusion is that pandemic management has a moral dimension. The gravity of the threat that fatal infectious diseases pose for public health creates special moral obligations for public bodies in pandemic situations. However, the paper views the West Bengal case as a learning opportunity, and considers the lapses cited as challenges that better, more effectively conducted pandemic management can prepare for. It is hoped that this paper will provoke constructive bioethical deliberations, particularly pertinent to the developing world, on how to ensure that the obligations towards health are fulfilled ethically and more effectively.

INTRODUCTION

The gravity of the threat that fatal infectious diseases pose to public health gives public initiatives towards pandemic management a moral dimension. This paper examines the case of a recent H5N1virus (avian influenza) outbreak in 15 out of 19 districts of the state of West Bengal, India as a case in point. There were no reported cases of bird-to-human transmission; however, H5N1virus is known to be a high-consequence pathogen. The public health risk was significant enough, with potential for huge loss of life and adverse socioeconomic effects. Described as one of the worst outbreaks in India,[1] and confirmed as so by the World Health Organization (WHO), in which the infection spread at an alarming rate, the case may be viewed as an opportunity to learn

[1] Agence France-Presse (AFP). 2008. *India Worst Bird Flu Outbreak Spreads*. Online: AFP: 25 January. Available at: http://afp.google.com/article/ALeqM5gPMEHPcB5xRu5R0XyEUXUqa9xJZA [Accessed 24 May 2008]; P. Lloyd. 2008. India Suffers Its Worst Bird Flu Outbreak. *The World Today* 29 January (Online transcript). Available at: http://www.abc.net.au/worldtoday/content/2008/s2148884.htm [Accessed 24 May 2008].

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how *not* to handle a potential pandemic. The aim of this paper is to use this case to argue that pandemic management initiatives are intimately related to health as a social 'good' and to the moral responsibility of protection from foreseeable harm from an infectious disease. Therefore, they invoke special moral obligations towards biorisk reduction, obligations that remain unfulfilled when a public body entrusted with the responsibility fails to manage satisfactorily the prevention and control of the infection.

THE SITUATION

The news of the bird flu outbreak was first reported in the media during the period 8–13 January 2008, when close to 20,000 chickens died in just two blocks of Rampurhat district, West Bengal. However, the official confirmation from the State Government of West Bengal of the presence of the lethal avian influenza H5N1virus among the backyard and commercial poultry came at least 2–4 days later. A reason for this delay could be the fact that to date there are no labs in the state of West Bengal fully equipped to test samples from deceased birds. The samples had to be sent to the High Security Animal Disease Laboratory (HSADL) in Bhopal, Madhya Pradesh and the National Institute of Virology (NIV) in Pune, Maharashtra, both of which are located in other, distant states. By the first week of February 2008, the bird flu had spread at a frightening rate to 13 districts within West Bengal; it had also found its way to the vicinity of Kolkata, the capital city of West Bengal, which has an extended urban population of more than 15 million.

In hindsight, the available data indicates that much of this spread was avoidable. If measures had been taken in time and with the right attitude, that is, had there been some preparedness, a lot of the losses (both economic and animal resources) and public anxiety over the threat of further spread of infection could certainly have been avoided. The reasons for the lack of preparedness are not very clear. The outbreak occurred in January 2008, but Government of India documents show that in December 2007, a high alert message concerning avian influenza from the Government of India,[2] Department of Animal Husbandry, Dairying, and Fisheries (DADF) was sent to the chief secretaries of all the border states (including West Bengal) adjoining Bangladesh, Myanmar, Pakistan and China. Moreover, potentially dangerous infectious diseases are not a rare phenomenon in this part of the world. A WHO report shows that since 2003, the H5N1virus has made its presence felt repeatedly in South-East Asian countries such as Thailand, Malaysia, Indonesia, Vietnam and Hong Kong.[3] In recent times, India has seen two earlier outbreaks (2006, 2007) of the same bird flu virus among backyard poultry in two different regions; and Bangladesh, a geographical neighbor, has experienced a bird flu epidemic as recently as March 2007. The West Bengal region has also seen occasional cases of cattle deaths caused by anthrax, not to mention the endemic presence of infectious diseases such as tuberculosis and malaria. It is a miracle that the avian flu has not infected any humans so far;[4] but the fact remains, that had it done so, the lack of preparedness could have turned the outbreak of the disease into a public health disaster. That frightening possibility and the real public anxiety over whether the situation was being handled properly could and should have been avoided altogether.

THE MISMANAGEMENT

The interesting point about this outbreak was that there was no dearth of available guidelines for intervention. Following the severe acute respiratory syndrome (SARS) experience, and considering the recommendations made by the WHO,[5] there were enough national and international guidelines available for alert and response to high-consequence pandemics such as the avian influenza. The Government of India, DADF also has specific action plans with respect to bird flu. As a result of these directives, the initial preventive and control decisions that were taken at state level were all good starters; however, it is their implementation which went completely amiss.

For example, the State Government prohibited the trading of chickens and eggs, but *only in and from the infected and surrounding areas*. This not only undermined

[2] P. Kumar. 2007. Letter to all border states for preparedness for avian influenza. Online: Government of India: 24 December. Available at: http://dahd.nic.in/flu/preparedness24Dec,2007.pdf [Accessed 8 May 2008].

[3] World Health Organization (WHO). 2008. *H5N1 Avian Influenza; Timeline of Major Events*. Geneva: WHO. Available at: http://www.who.int/csr/disease/avian_influenza/ai_timeline/en/index.html [Accessed 20 May 2008].

[4] As regards human casualties, none have been reported so far. Over 25 people involved in the culling operations reportedly fell sick and were tested, but *none* were found to be infected by bird flu. R. Hossain. 2008. Finally a Blanket Ban on Chicken. *Hindustan Times* 6 February: 1. However, as this article was being written, Bangladesh announced its first human bird flu case. J.A. Manik. 2008. Bangladesh: Bird Flu Found in Child. *New York Times* 23 May. Available at: http://www.nytimes.com/2008/05/23/world/asia/23briefs-BIRDFLUFOUND_BRF.html?ref=world [Accessed 24 May 2008].

[5] World Health Organization (WHO). *Epidemic and Pandemic Alert and Response (EPR)*. Geneva: WHO. Available at: http://www.who.int/csr/en/ [Accessed 20 May 2008].

the purpose of the ban, but may also have unwittingly abetted the infection's spread, by encouraging illegal poultry movement from infected areas to other zones. The complete blanket ban on sale, purchase and movement of chicken, eggs, and ducks across the entire state of West Bengal was finally put in place as late as 5 February 2008,[6] when the state ministries of Animal Resource Development (ARD) and Health both finally conceded that the State Government was finding it difficult to monitor the movement of poultry and admitted that 'there is a possibility of human infection.'[7] Even at the time of implementing the total ban, the ARD Minister mentioned that it would be reviewed after a week. So, just after a week, on 12 February, following review, the blanket ban was withdrawn. The timing of the implementation of the ban, and its withdrawal, were decisions taken by government officials without any visible effort to include all stakeholders in the decision making. The healthcare community in general, along with the other people, were left out of the decision-making process.

The reasons given for delaying and lifting the total ban within a week turned out to be the same: to contain the economic loss to the poultry industry, reported at an estimated INR 500 m per day.[8] The poultry industry in West Bengal is supposedly worth INR 5 bn. Government officials openly admitted that they had tried all along to mitigate the bird flu risks *without affecting the poultry business*.[9] The economic loss to the poultry business can certainly be seen as a priority concern of ARD; however, whether in a potential pandemic situation that *should* constitute a weightier and decisive consideration than the concern for the overall wellbeing of the entire society is certainly a contentious issue.

Similarly, the culling was also botched badly. The State Government immediately ordered the usual preventive measure: the culling of the infected birds within five kilometers of the infected area. However, although the risk to society was palpable, the Health department was not as much in the foreground as the ARD ministry. The implementation of the culling order was entrusted to the ARD ministry, which, having neither the infrastructure nor the manpower and expertise to handle a situation of such magnitude, did it rather poorly.[10] To meet the demands of the massive culling operation, unskilled and untrained local people were recruited, many of whom reportedly flouted simple precautionary measures; for example, not wearing protective gear, trying to grab and kill the chickens by hand, or not paying heed to the warning to take Tamiflu tablets during and after the operation.[11] Official sources also acknowledged that many culling workers left without intimation long before the 10 days observation period. In addition, the pace of culling did not always reflect the urgency required by the operation. Although it is true that unseasonal heavy rains held up the culling operations in many areas for a couple of days; it is also true that in the middle of the epidemic, culling had to be halted to observe the holiday of Muharram, as reported by the media.[12] There were also gross miscalculations in the official statistics of the birds to be culled.[13] The culling operations fell into further disarray as it gradually became evident that the number of the birds to be culled was much higher than expected.[14] Consequently, culling went on long after the desirable deadlines,[15] and the leanly supported ARD ministry was pushed beyond its limits in the remote and rural districts. As a result, as has been pointed out by media and central government observer teams, *not all birds in every infected area were culled*.[16]

THE COMUNICATION

In the case of a pandemic, public communication about the hazard to health and the measures adopted by the

[6] Hossain, *op. cit.* note 3. However, during the February–March 2006 bird flu outbreak in the state of Maharastra, a complete *statewide* ban was implemented immediately after the outbreak was officially acknowledged.

[7] Ibid: 5.

[8] Ibid.

[9] Indo-Asian News Service. 2008. Bird Flu Wrecks West Bengal's Rs 5 Billion Poultry Industry. *Hindustan Times* 24 January. Available at: http://www.hindustantimes.com/StoryPage/StoryPage.aspx?id=577a7bfe-0bf0-43a7-8e8e-dde03c27d101 [Accessed 15 Apr 2008]. The present ARD Minister commented to the press: 'We sympathize with the poultry owners, but the ban is necessary to prevent human infection.'

[10] S. Mukhopadhyay. 2008. *Nidhane eto Galad keno, Prashna Tuley Bratya Holen Ora* [Ostracized by Asking the Question Why There are So Many Defects in the Culling Operation. My translation]. *Anandabazar Patrika* 16 January: 10. The report mentions that the veterinary team from another state found unskilled local residents have been temporarily recruited to do what was supposed to be done by the trained workers of the Department of Animal Resource Development; and these temporary workers were mostly found to flout the simple precautionary measures. The team also reported that the same transport carrier used for carrying the culled birds was being used *without being cleaned and disinfected* for transporting people.

[11] Hossain, *op. cit.* note 3; S. Ganguly. 2008. Bizarre Blunders. *Hindustan Times* 14 February: 5.

[12] Ganguly, ibid. The initial deadline for the culling process was 1 February 2008. However, the number of birds to be culled was grossly underestimated. The news reports indicate that within the first couple of weeks of February the figure of birds actually slaughtered was over 3.7 million.

[13] Ibid.

[14] Ibid.

[15] Anandabazar Patrika. 2008. *Somoy Shima par, Murgi Nidhan tobu Anek Baki* [The Time Limit is Over, Culling is Still Far from Over. My translation]. *Anandabazar Patrika* 3 February: 1.

[16] Ibid.

government and health offices to address this hazard are important in order to make the ethical grounds underpinning these measures transparent to the public. Research shows that people are more likely to cooperate and offer support if the decision-making processes are made open, transparent, reasonable, inclusive and accountable.[17] In this case, communication was not managed properly either. Although Tamiflu was identified through public advertisements as the cure, it was not clear to people whether the government would distribute the drug in the case of an epidemic, or whether people themselves would have to get it. Similarly, the need for culling and the methods to be adopted were supposedly not communicated to the poultry owners in the affected villages very well. News reports point out the failure of communication in a case where a group of villagers demanded that roads and bridges should be built and that electricity should be provided in exchange of surrendering the chickens.[18] As a result, a lot of mistrust and conspiracy theories were born, the brunt of which had to be borne in the form of public resistance by the workers who were in the frontline of culling and mopping operations.

THE ATTITUDE

Government officials exhibited a noticeably ambivalent attitude throughout the avian influenza outbreak. While imposing local bans on one hand, the ARD Minister and other State Government officials continued to urge the public to keep consuming eggs and chickens in the hitherto uninfected areas. The messages about the possibility of a serious public health threat and the simultaneous messages about including poultry products in the daily menu created confusion. So, in spite of assurances from government officials that eggs and chickens were safe to eat, people took their own decisions. For instance, most urban residents of Kolkata immediately stopped eating chicken, and refrained from doing so even after the State Government had declared the bird flu situation over. As for the villages, in many cases the communication about the bird flu may not have reached in time. Initially, some pamphlets were supposedly distributed among the villagers of some affected districts by the government, and public advertisements on radio and television were transmitted subsequently to raise awareness. However, the villagers, who had no access to either of these, continued to consume poultry as they had received no information to cause them to worry.

THE COMPENSATION

The poor crisis management skills were particularly glaring in the case of fixing the 'compensation' rate paid for the birds that had to be culled. The State Government had decided to pay the owners of chickens in the infected areas some 'compensation' for the chickens to be slaughtered. It was a well-intended move; for, in West Bengal, trading of chickens and eggs is heavily relied upon by many for a livelihood, men and women alike, and particularly by those living below the poverty line. Also, as a part of empowerment initiatives for women through self-employment programs, in rural areas the State Government has given a woman member of each family 10 hens for free. However, as was pointed out by the Union Minister of Agriculture,[19] the compensation amount that was decided upon at the state level was not only low but also was found 'unacceptable' by some poultry owners, being below the then market rate: initially, the owner received only INR 40 for every country chicken to be culled, INR 30 for a 'broiler', and INR 10 for a chick.[20] This 'unfair' rate had reportedly caused many villagers to 'refuse' to surrender their chickens, resulting in various plots to keep the birds in hiding, or to resort to the dangerous practice of sending the birds out illegally for sale in uninfected areas, both inside and outside the state. However, with more money disbursed both from the state and the central government, from 27 January 2008 the 'compensation' rate was hiked significantly to INR 500 as *immediate* compensation to each affected family. Reportedly, the increased and 'immediate' compensation worked as a much better incentive to surrender the chickens. However, by then the outbreak had reached 13 out of the 19 districts of West Bengal, and there were reports of new infections in new areas everyday. So far, to the best of my knowledge, no explanation has been given for how and why the initial low compensation rate was chosen, particularly when this measure was crucial for controlling the infection, and on what grounds the rate was raised subsequently by more than 10 times.

At the time of writing,[21] the State Government considers the bird flu in West Bengal to be completely under control.

[17] University of Toronto, Joint Center of Bioethics. 2005. *Stand on Guard for Thee: Ethical Considerations in Preparedness Planning for Pandemic Influenza*. Toronto, ON: University of Toronto.

[18] Ganguly, *op. cit.* note 11.

[19] J. Sengupta. 2008. *Bengal Grapples with Bird Flu.* Online: NDTV.com: 21 January. Available at: http://www.ndtv.com/convergence/ndtv/story.aspx?id=NEWEN20080039076&ch=1/21/2008%208:53:00%20AM [Accessed 8 May 2008].

[20] Indo-Asia News Service, *op. cit.* note 9.

[21] This article was originally written between 4–21 February 2008; it was revised in April 2008. In between, the bird flu had yet another

Only time will tell if this outbreak, the worst in India, was merely a public health scare or will become a full-blown public health nightmare; or even worse, whether it will remain a public health hazard which, although officially declared as 'under control', will never be eradicated completely from the area and will lie masked under layers of obfuscations and denials. However, the fact remains that even as the West Bengal government has declared the state free of bird flu, Dhaka, the capital of Bangladesh, with whom West Bengal shares a porous border, has confirmed a fresh infestation of the bird flu.[22]

INFECTIOUS DISEASES, PUBLIC HEALTH AND DEVELOPING WORLD BIOETHICS

The situation discussed above hopefully brings out at least two points clearly: (1) although there may be global action plans and guidelines, the response to an epidemic, to mitigate potential health risks, may fail miserably if the local practices in pandemic management are poor; and (2) although the critical decisions and the action plans may be well intended, their implementation may remain shallow, blind, haphazard, unfair, and ultimately ineffective if the moral dimension of the responsibility is not understood properly.

In any given society, the level of preparedness for infectious diseases and the level of commitment towards epidemic and pandemic management represent a certain body of beliefs and values upheld by that society. They reflect the perception that the society has about health as a pursuable social 'good'. This social perception, together with an identifiable ethical framework, is supposed to be the source of publicly avowed policies and guidelines relating to health and health care. Recently, Daniels has argued that health has a moral importance in the social context:[23] health, when understood as 'normal functioning', becomes a necessary *enabling condition* for enjoying the range of opportunities available in a society. If health is understood in this way, Daniels argues, meeting the health needs of its members fairly becomes a social obligation for a *just* society.

If we allow this argument to link health with the norms of social justice in this way, then diseases and disabilities may be viewed as *socially controllable disabling conditions*, the presence of which is not morally justifiable as they deter the members of that society from enjoying rightful opportunities. From this, it is possible to construct an argument showing how prevention and control of diseases, and the aiding and managing of disabilities, constitute a special set of moral obligations that public policies regarding health ought to reflect.

High-consequence epidemics and pandemics, however, bring an added dimension to the issue. Possible or actual spread of pathogens, such as the H5N1virus, is not merely a disabling condition: it epitomizes a potential social *harm* of great magnitude. It has the potency to affect not only a given society or a community, but also humankind globally. Pathogens do not honor any geographical or social boundaries; and unlike social determinants they do not remain contained in the structures of a specific society or country. If prevention and control of diseases and disabilities constitute a special set of moral obligations, then the prevention and control of fatal infectious diseases should be a primary obligation for any society. Epidemics and pandemics underscore the need for public policies and public bodies across the globe to recognize that in addition to their positive duty of ensuring attainability of health in a society, there is also the additional negative duty, as may be derived from the principle of nonmaleficence, to not allow a society to be exposed to unreasonable, foreseeable, and socially controllable health risks. The positive duty of ensuring health as an enabling condition is not enough: the far more pertinent negative duty of effective prevention and control of deadly infectious diseases should also be taken as a primary social objective. To achieve this, explicit mention of this duty in public policies concerning health and moral sensitivity training for proper execution of the duty might be recommended by developing world bioethics.

Often, in developing countries, resource-poor set-ups and inadequate and substandard infrastructural support are cited as the reasons for not being able to deliver what is required to meet public health challenges. However, these reasons, although they are very real,

outbreak, in Malda, West Bengal. The Union Government of India had repeatedly expressed its discontent with the way the preventive measures had been taken in West Bengal. In April 2008 the neighboring state of Tripura also reported an Avian influenza outbreak; and in May 2008, bird flu had been detected once more in the mountain foothill areas of Darjeeling district in northern West Bengal. Press Trust of India. 2008. Bird Flu in Darjeeling: Culling Begins. *Business Standard* 10 May. Available at: http://www.business-standard.com/common/storypage_c_online.php?leftnm=10&bKeyFlag=IN&autono=37212 [Accessed 24 May 2008].

[22] During the early weeks of January, when the state of West Bengal first experienced the outbreak of bird flu, there was speculation that the infection had come from the bordering country of Bangladesh, although Bangladesh denied any occurrence of an outbreak. The official confirmation of an avian influenza outbreak in Bangladesh finally came in March 2007.

[23] N. Daniels. 2008. *Just Health*. New York, NY: Cambridge University Press.

may not be the only reasons why action plans in developing world countries often fail. The bird flu case in West Bengal may be used to point out that in spite of the resource-poor systems and adverse factors evident in developing countries, a difference can still be made, *provided* the decisions and actions taken at the time of the crisis are well conceived and morally informed. This requires extensive exercises in crisis management, such as pandemic preparedness. The example discussed here hopefully shows, among other things, that developing world bioethics needs to be more active in ensuring that pandemic planning and preparedness are integrated at all levels of public health administration as a moral responsibility towards public health. However, responsibility towards health has to be shared equitably. Neither the healthcare providers nor the health administration should carry the entire burden: the community, or, more specifically, the people in the community, have to bear that responsibility equally. In this context, it may be worth remembering that in the West Bengal case the workers involved in the culling who did not use protective gear properly in the abovementioned case, or did not comply with the instruction to take Tamiflu regularly, exhibited a certain kind of irresponsibility that developing world bioethics needs to look into more closely, and address seriously.

Bioethics and public health policies are considered to be closely connected; in developed countries, bioethics has been particularly relevant for formation or revision of social policies, and in engendering legislative and other changes. For example, bioethics committees and commissions in different countries have stood between the introduction of new biomedical technology, such as organ transplantation, and the public anxieties about its wide application in the society. Generally speaking, for a number of reasons, the role of bioethics has perhaps not been as active or effective in policy formulation in many developing countries. If that is the case, developing world bioethics needs to muster arguments to address this issue. Moral reasoning is required to demand not only a 'situated' approach, that is, a geopolitically aware approach, but also to insist upon openness, inclusiveness and responsibility at crucial levels of decision making and implementation.

CONCLUSION

If health is to be considered as of special moral importance in society, then pandemic planning and preparedness should be treated as primary among the special moral obligations required to protect it. Poor management in crisis situations, such as the bird flu situation in West Bengal, may be viewed as a gross moral lapse in the performance of that negative duty.

However, as learning opportunities, failures are equally important as successes for better future planning. They provide us the rare chance to evaluate how far and how fairly these obligations have been fulfilled and enable us to make recommendations for a better future. The bird flu experience, for example, has helped us to identify a few challenges: (1) The challenge to fairly balance the overall wellbeing of society with the welfare of a segment of that society (for instance the economic welfare and livelihood of the poultry farmers in the bird flu case); (2) During a pandemic threat, the challenge of proper allocation of human and other resources in crucial functioning areas could also be an intricate balancing act. In the case of West Bengal, the ARD ministry had neither enough resources nor the infrastructure to carry out the massive culling operation in the state; (3) The challenge of educating and communicating with the public in the hours of crisis. This too is a fine balancing act between arousing unnecessary panic and giving too little information; (4) The challenge of building public trust on legitimate grounds. This is a key element in any disaster management, and perhaps the most crucial element in the case of pandemic management. Without it, public cooperation and effective containment of an infection cannot be guaranteed; (5) The challenge of developing a 'fair' compensation policy as part of the preparedness exercise for pandemic management. In the West Bengal case, the unplanned initial compensation rate exacerbated the situation considerably.

Once identified, these challenges provide us with the opportunity to address them both in a general and country-specific manner. It is hoped that this paper on the West Bengal experience will provoke constructive bioethical deliberations, which are particularly pertinent for the developing world, on how to ensure that these special challenges can be met so that obligations towards health are fulfilled ethically and more effectively.

Acknowledgements

The author would like to thank Prof Leslie P. Francis, University of Utah for her encouraging comments on the first draft of this paper, and the anonymous referee for the helpful comments and suggestions.

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