

Influenza Pandemic, Mental Illnesses, Addictions

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ABSTRACT

While public health ethics typically deals with issues wherein individual well-being competes with the population's well-being, it also deals with competing groups' well-being. Public health responses to the Chicago heat wave and Hurricane Katrina were strongly criticized, in part, because certain groups of people experienced far greater and longer-lasting losses compared to others. Differences in experience were largely due to socio-economic-political disadvantages or vulnerabilities. This article is written in light of the recent first and second "waves" of the H1N1 pandemic in Canada. Its focus is on people living in the community with a mental health or addiction problem during the pandemic and, more specifically, in the context of supplies of anti-viral medications and vaccines being limited. The article explores how certain social justice concerns may increase the risks of serious illness or death for these people and the kinds of compensatory responses that might be implemented.

Key words: influenza; mental illness; addictions.

Since mid-2008, healthcare organizations, governmental offices and the media have directed more and more attention to public health and public health ethics in the guise of responding to the possible global spread of the avian flu virus and then an actual pandemic of swine flu. Ethics related questions have included individuals' right to be free of others' demands, individuals' duty to protect the public, healthcare workers' duty to place themselves at risk in caring for the ill, healthcare organizations' duty to keep workers as safe as possible, governments' duty to purchase and distribute sufficient effective anti-viral medications and vaccines, and developed countries' duty to help developing countries combat the virus' spread.

In a post-Katrina article, communications PhD candidate Brabham notes that

discussions about Hurricane Katrina's aftermath have expanded to include design failure in the spheres of economics, federal and local governance, policing and public safety, recovery logistics, and even race relations, at long last connecting the current problems diachronically with events long past.¹

Instead of "planning and preparedness," he suggests "design and recalibration" to help emphasize the necessity of explicitly establishing foundational considerations and of testing these foundations as events unfold and new knowledge emerges. Calhoun also notes that a rhetoric of preparedness can distract attention away from needed work on systemic problems.²

It appears that Canada's second wave of swine flu has ended. This is therefore an opportune time to examine what has been done and debated thus far because serious infectious diseases are ever present. Influenced by Brabham's suggestion, this paper examines "foundations" relevant to access to anti-viral medications and vaccines and seeks a possible recalibration of distributive priorities vis-à-vis people living with a serious mental health or addiction problem.

Vulnerability:

What constitutes vulnerability? *Vulnus* is a Latin noun for "wound."³ As an adjective, it can mean the potential to be harmed or to suffer a loss. Vaughan and Tinker explain vulnerability as "increased potential loss in a hazardous situation, including reduced capacity to respond effectively."⁴ Zion et al say that people are vulnerable when they "lack basic rights and liberties that make them particularly open to exploitation."⁵ The WHO's Council for the International Organization of Medical Science's Guidelines describe vulnerable people as "those who are relatively or (absolutely) incapable of protecting their own interests. More formally, they may have insufficient power, intelligence, education, resources, strength or other needed attributes."⁶ Reviewing recently published books about the sociology of disasters, Tierney characterizes decades of research as a growing "vulnerability science" wherein a disaster should no longer be considered as simply the outcome of a physical or natural event.⁷ Instead, it is the outcome of factors about the person experiencing it, his physical and environmental surroundings, the general population, government, and societal organization.

Yet some people question the concept's salience. Luna identifies various negative consequences from its use: to be vulnerable or belong to a vulnerable group can mean that a person is perpetually, inescapably, and definitively deemed vulnerable.⁸ This can result in other people labeling and pitying her, which is demeaning. "Don't think that 'someone is vulnerable,'" says

Luna, “but look at the ‘particular situation that *makes* or *renders* someone vulnerable.”⁹ She is made vulnerable because of other people’s actions, organizations’ actions, or her circumstances. For instance, Kipnis identifies seven types of vulnerability of children who are being considered as potential subjects of research.¹⁰ Luna recommends characterizing the concept of vulnerability in terms of layers in order to metaphorically reinforce its multiplicity, co-occurrence, inessential-ness, and disparate causes.

Levine et al hold that despite its frequent use, vulnerability as a concept has escaped adequate critique in terms of its meaning and validity in ensuring that appropriate protections are in place for research subjects.¹¹ The term now is applied to most groups of research subjects, is applied equally to all subjects within a group, and tends to focus on only one attribute. The authors suggest that researchers and Research Ethics Boards consider instead which protocols require “special scrutiny” because of the ethical challenges involved.

Turning to influenza pandemics and the question of antivirals and vaccine access for people with mental health concerns, the discussion that follows will refer to risk, not vulnerability, for three reasons. First, “the current healthcare system has placed the source of vulnerability [to be] *within* the individual,” says Saunders in reference to hurricane Katrina’s impact.¹² Similarly, Calhoun worries about trends of making individuals fully responsible for preventing certain harms from occurring, and thereby fully liable, when in fact systemic factors contribute significantly to these harms.² Just as autonomy should be considered a relational, rather than independent capacity, so too should vulnerability.^{2,6} Second, to me, “risk” seems a less paternalistic word. Third, current pandemic planning already attends to biophysical risks of becoming seriously ill or dying from the H1N1 virus. I will argue that factors relevant to mental health and addictions should be considered on par with these biophysical risks when setting priorities for accessing scarce or limited preventive and treatment measures. Accordingly some risks will reflect biophysical realities. Others will reflect economic, political, and sociological realities. As Schrecker notes, acknowledging “true” reality means including “competing everyday survival needs” too.¹³

Social justice exists when the burdens and benefits of communal life are shared equitably and when each person counts equally in terms of recognition, voice, and well being.^{14,15} Conducting a “social autopsy” on the 1995 Chicago heat wave, Klinenberg pointed out that “the processes through which [almost 70016] Chicagoans lost their lives followed the entrenched logic of social and spatial divisions that govern the metropolis.”¹³ Social justice worries arose again after Katrina devastated the U.S. Gulf Coast and New Orleans in 2005.^{1,7,12,17-20} Because “policies that fail to take account of the realities of individuals’ lives and the social contexts in which they live cannot hope to succeed”²¹, governments, social service organizations, clinicians, and academics have become more concerned about the predicted impact on at-risk groups when an emergency or disaster occurs.

In a 2007 study by Uscher-Pines et al, most of the 37 national influenza pandemic plans studied linked vulnerability to biophysical factors that increase the likelihood of acquiring or transmitting the virus.¹⁵ Only ten plans referred to groups with special needs or socially disadvantage. Just two plans discussed

barriers to accessing vaccines or anti-viral medications. Laurence Gostin, a law professor at Georgetown University who has written extensively on global and public health, law and ethics, states that,

swine flu is largely innocuous for otherwise healthy people but potentially deadly for those with the compounding health problems likely in poor, minority, and indigenous populations. The response to swine flu is quintessentially a problem of social justice.²²

Fortunately, demands to address social justice concerns have increased, as evidenced by the *American Journal of Public Health* recently publishing a series of articles on swine flu and the specific needs of different at-risk groups, including people who are Aboriginal or other ethnicities, publicly housed, single parents, low income workers, incarcerated, refugees/immigrants, farm workers, or living with a disability.^{4,20,23-28}

“Redesigning” Serious Illness and Death:

The Public Health Agency of Canada’s “Canada Pandemic Influenza Plan for the Health Sector,” which guided provincial plans, has three overarching goals: to try to reduce the (1) number of deaths, (2) occurrences of serious illness, and (3) economic and social disruption.²⁹ What counts as “serious illness”? An influenza virus can make breathing very difficult (due to pneumonia) or cause protracted nausea/vomiting or a high fever. Such reactions can, in turn, cause substantial physiological damage and increase the likelihood of death. These are serious reactions and so people at high risk of experiencing them warrant early access to preventive and treatment measures. I want to suggest that in the context of an influenza pandemic, harms should not be limited to the physical. Psychologically-related harms should count, too. Moreover death should not be presumed to be due only to cardiovascular complications. Death due to suicide should count as well. In the next section, five hypothetical though realistic scenarios are presented to help illustrate how mental illnesses and addictions involve added risks that fair priority setting should take into account explicitly.

“Recalibrating” Access to Anti-Viral Medications and Vaccines:

Schrecker states that “only after resource scarcities have been identified as the consequence of either specific policy choices or more general social arrangements can appropriate ethical arguments be constructed.”³⁰ Fair prioritization may be needed even if there is no absolute scarcity. The public’s response to their provincial public health offices’ and ministries’ decisions about who could get the H1N1 vaccine in what order attests to the importance of fairness even if resources are limited only temporarily. Our federal and provincial governments committed to purchasing enough anti-viral medications and vaccines for H1N1 for every Canadian who wanted them. Yet the realities of manufacturer production and transportation schedules, governmental distribution schedules, and clinic/hospital schedules still necessitated prioritizing access for different groups of people.

In this context of supplies being limited for several weeks to a few months, the first scenario involves “Joe” who recently resumed living in the community after spending three months in a psychiatric hospital. He had been re-hospitalized, initially on an involuntary basis, because he repeatedly walked into busy roads and intersections in response to the voices he heard. His discharge is conditional in the sense that Joe is “on” a community treatment order as a new measure to help transition him *and* the healthcare/social systems towards a more sustainable and enjoyable life for him. Community resources committed to help him include a bi-weekly hour long appointment with a community general practitioner who also does psychotherapy, an emergency number for a local crisis center, connection with a local pharmacy that has his prescriptions for a psychotropic medication and an anxiety medication, and enrollment in a community program for its social connections.

Imagine that the H1N1 pandemic looms large with a predicted infection rate of 20% of the general population. It is foreseeable that many commercial businesses and non-commercial programs will curtail their services or temporarily close for the pandemic’s duration. While Campbell et al’s article²⁶ focuses on congenital and developmental disabilities and injuries, we need to consider how someone living with a mental illness might be impacted. If Joe’s GP switches her practice to focus only the physical effects of H1N1, psychotherapy appointments will be discontinued. The pharmacy may reduce its hours or close temporarily. Because H1N1 is a community-based virus, agencies will suspend social gatherings. Supports meant to help Joe live with schizophrenia in the community will vanish. If a CTO’s conditions are not fulfilled, however, this can constitute adequate grounds to re-hospitalize Joe against his wishes and despite him fulfilling his CTO responsibilities. Here, the pivotal risk factor for becoming seriously ill is a legally binding dependence on others.

Shouldn’t involuntary hospitalization mean someone is becoming or is seriously ill? If the answer is “yes,” pandemic priority setting efforts should include people “with” CTOs among those at-high-risk of serious illness, especially if a pandemic could last for months. Interventions to help avoid such risks from materializing would therefore include: GPs would still provide counseling to this group of patients. Community pharmacies would dispense enough medications to last for the “wave’s” duration. Phone-in lines should be set up by community agencies to help keep these people connected.

In terms of anti-viral medications and vaccines, they should be offered early to the GP and community agency staff providing phone support. The community pharmacist would be offered access later because needed psychiatric medications should have been proactively dispensed to Joe and other CTO people. Joe would be offered early access only if he has physical risk conditions (e.g., COPD), otherwise he would wait along with others who are not at high risk. In keeping with Campbell et al’s suggestions to compensate for socially constructed difficulties experienced by disabled groups, what if Joe suffers from severe paranoia or depression such that going somewhere unfamiliar for anti-viral medications or vaccinations is virtually out of the question? If he is also at high risk of serious illness or dying if he acquires H1N1, these therapies should be provided to him at home or at other familiar settings.

The next scenario focuses on people with mental health concerns who are assisted by assertive community treatment teams. This seems quite similar to the situation of people living in the community whose discharge is conditional on a CTO. Like CTOs, ACT teams are meant to offer less restrictive supports and interventions compared to hospitalization. ACT teams typically see people each day or every few days, help with daily activities, accompany them to important appointments, verify and encourage them to follow the prescribed treatment regimen, and generally help them gain knowledge and develop habits needed for living in the community. For some people living with a mental illness, an absent ACT team because team members are ill with the influenza virus could mean that their psychiatric illness worsens to the point of involuntary hospitalization. In some instances, involuntary hospitalization qualifies as an ethically proportional response because the person is at high risk of attempting suicide (i.e., death due to causes other than cardiovascular or pulmonary failure). Consequently ACT team members should be among those who can access anti-virals and vaccines relatively early because their work helps prevent “serious illness or death due to H1N1.”

What if Joe lives with his mother and 26-year-old sister who provide ongoing support and monitoring to help him control the negative symptoms of his schizophrenia? Absent such support, it might be quite predictable that he will become confused and disorganized and at risk of harm to himself or others which, in turn, could justify involuntary hospitalization. If Joe’s mother or sister is at high risk of becoming ill or dying if infected with H1N1, the criticality of their support strengthens the case for them to access anti-virals and the vaccine early. Among the criteria to access ICU ventilators developed by a group at Hamilton Health Sciences is the criterion of dependent relationships.³¹ I think their criterion sets too low a standard. So why is it acceptable in terms of Joe’s family? Part of the unfortunate reality of living with a mental illness is discrimination and stigma, risk factors absent in most other illnesses. Because of misinformation, fear, ignorance, or bias, other people probably would be unwilling to fill in on behalf of ill family members to support Joe.

The fourth scenario involves “Jane” who is recovering from six years of heroin use. This addiction qualifies as a serious illness because it significantly impairs a person’s abilities to live well, causes physical damage, and increases the likelihood of death due to the dangerous quality of street drugs. At a nearby methadone maintenance program, Jane receives injections daily. Subsisting on panhandling proceeds and occasional gifts of money from her older brother, she shares a cheap apartment in an impoverished, violent area where drug dealing is routine. The wait time for a rent subsidized apartment in a safer area is years. Even if she stayed in a shelter, drugs may still be available. If Jane misses a couple of days of the methadone, she is at risk of resuming heroin use because her living situation triggers and yet can easily fulfill her cravings. Consequently she is at high risk of serious illness if the methadone program closes during the pandemic. Since permission to administer methadone requires special training, alternative sources may be few. Pandemic planners should therefore slate program staff for early access to anti-viral medications and the vaccine to help ensure clients have reliable access to methadone. Since many people with mental health or addictions problems live in congested or substandard settings and have low incomes, concerns identified by Bouye et al²⁰ are also relevant.

In the last scenario, it is easy access to technology that constitutes the risk factor. Early access to anti-viral prophylaxis and vaccines for staff of a problem gambling program would be ethically justified, I believe, just as it is for methadone program staff. Why? First, I contend that problem gambling qualifies as a serious illness because of the significant harms suffered. Second, in an influenza pandemic, casinos likely will close because they are social gathering places and communal association increases the virus' spread. Alternative modes of gambling, however, are readily available electronically today. If a problem gambling program is discontinued for the duration of the pandemic, "Bob" has no counseling and monitoring support. If he has a computer at home, it would be easy to turn to or resume gambling online, an activity that is available 24/7. In a short period of time, Bob's untreated or unsupported illness could cause him serious harm in terms of losing large amounts of money.

Conclusion:

This article's purpose is to help provide more detailed consideration of mental illnesses and addictions in the context of an influenza pandemic. Characterized as a "redesign," including these health problems along with the currently accepted physical health concerns (e.g., cardiovascular disease, COPD, diabetes, pregnancy) contributes to discussions as to what counts as serious illness and which types of death are to be prevented. Characterized as a "recalibration," the above scenarios contribute to discussions about defensible proactive measures to institute when supplies of anti-viral medications and vaccines are limited, given the added risks associated with having a mental health or addiction problem (or as some would prefer to say, given the increased vulnerabilities of people living with a mental illness or addiction).

In September 2009, the *Globe and Mail* published an article by a member of the aforementioned Hamilton Health Sciences team that developed added priority setting criteria should the H1N1 pandemic result in demand for limited ICU resources exceeding supply.³² The *Globe* article and coincident healthcare journal article³¹ were valuable contributions to efforts to respond fairly to the pandemic. Valuable in terms of sharing the team's justification of more criteria to help ensure tragic decisions were, at a minimum, fair. The articles' authors hoped that publicizing their efforts would fuel more public discussion and collaboration on such an important issue. This article is written with the same hope.

References:

1. Brabham DC. (2006) Noticing Design/Recognizing Failure in the Wake of Hurricane Katrina. *Space and Culture* 9 (1): 28.
2. Calhoun C. (2006) The Privatization of Risk. *Public Culture* 18 (2): 257-63.
3. Levine C, Faden R, Grady C, Hammerschmidt D, Eckenwiler L & Sugarman J. (2004) The Limitations of "Vulnerability" as a Protection for Human Research Participants. *American Journal of Bioethics* 4 (3): 47.
4. Vaughan E & Tinker T. (2009) Effective Health Risk Communication about Pandemic Influenza for Vulnerable Populations. *American Journal of Public Health* 99 (S2): S324.
5. Levine et al, see note 3, 45.
6. Luna F. (2009) Elucidating the Concept of Vulnerability: layers not labels. *International Journal of Feminist Approaches to Bioethics* 2 (1): 124.
7. Tierney K. (2006) Foreshadowing Katrina: recent sociological contributions to vulnerability science. *Contemporary Sociology* 35 (3): 207-12.
8. Luna et al, see note 6, 121-39.
9. Ibid, 129.
10. Kipnis K. (2003) Seven Vulnerabilities in the Pediatric Research Subject. *Theoretical Medicine* 24 (2): 107-20.
11. Levine et al, see note 3, 44-9.
12. Saunders JM. (2007) Vulnerable Populations in an American Red Cross Shelter after Hurricane Katrina. *Perspectives in Psychiatric Care* 43 (1): 30; italics added.
13. Schrecker T. (2008) Denaturalizing Scarcity: a strategy of enquiry for public-health ethics. *Bulletin of the World Health Organization* 86 (8): 600.
14. Kayman H & Ablorh-Odjidja A. (2006) Revisiting Public Health Preparedness: incorporating social justice principles into pandemic preparedness planning for influenza. *Journal of Public Health Management and Practice* 12 (4): 373-80.
15. Uscher-Pines L, Duggan PS, Garoon JP, Karron RA & Faden RR. (2007) Planning for an Influenza Pandemic: social justice and disadvantaged groups. *Hastings Center Report* 37 (4): 32-9.
16. Kaiser R, Le Tertre A, Schwartz J, Gotway CA, Daley WR & Rubin CH. (2007) The Effect of the 1995 Heat Wave in Chicago on All-Cause and Cause-Specific Mortality. *American Journal of Public Health* 97 (S1): S158-62.
17. Mills N. (2006) John Steinbeck's Hurricane Katrina Lesson. *Dissent* 53 (4): 97-8.
18. Colten CE. (2006) Vulnerability and Place: flat land and uneven risk in New Orleans. *American Anthropologist* 108 (4): 731-4.
19. Elliott JR & Pais J. (2006) Race, class, and Hurricane Katrina: social differences in human responses to disaster. *Social Science Research* 35 (2): 295-321.
20. Bouye E, Truman BI, Hutchins S, Richard R, Brown C, Guillory JA & Rashid J. (2009) Pandemic Influenza Preparedness and Response Among Public-Housing Residents, Single-Parent Families, and Low-Income Populations. *American Journal of Public Health* 99 (S2): S288.
21. Mastroianni AC. (2009) Slipping through the Net: social vulnerability in pandemic planning. *Hastings Center Report* 39 (5): 11.
22. Gostin LO. (2009) Swine Flu Vaccine: what is fair? *Hastings Center Report* 39 (5): 10.
23. Hutchins SS, Fiscella K, Levine RS, Ompad DC & McDonald M. (2009) Protection of Racial/Ethnic Minority Populations During an Influenza Pandemic. *American Journal of Public Health* 99 (S2): 261-70.
24. Groom AV, Cheyenne J, LaRoque M, Mason C, McLaughlin J, Neel L, Powell T, Weiser T & Bryan RT. (2009) Pandemic Influenza Preparedness and Vulnerable Populations in Tribal Communities. *American Journal of Public Health*. 99 (S2): S271-7.
25. Truman BI, Tinker T, Vaugh E, Kapella BK, Brenden M,

- Woznica V, Rios E & Lichtveld M. (2009) Pandemic Influenza Preparedness and Response Among Immigrants and Refugees. *American Journal of Public Health* 99 (S2): S278-83.
26. Campbell VA, Gilyard JA, Sinclair L, Sternberg T & Kailes JL. (2009) Preparing for and Responding to Pandemic Influenza: implications for people with disabilities. *American Journal of Public Health* 99 (S2): S294-300.
 27. Steege AL, Baron S, Davis S, Torres-Kilgore J & Sweeney MH. (2009) Pandemic Influenza and Farmworkers: the effects of employment, social, and economic factors. *American Journal of Public Health* 99 (S2): S308-15.
 28. Maruschak LM, Sabol WJ, Potter RH, Reid LC & Cramer EW. (2009) Pandemic Influenza and Jail Facilities and Populations. *American Journal of Public Health* 99 (S2): S339-44.
 29. Public Health Agency of Canada. (2005) The Canadian Pandemic Influenza Plan for the Health Sector. www.phac-aspc.gc.ca/cpip-pclcpi. Accessed December 6, 2009.
 30. Schrecker, see note 13, 601.
 31. Frolic A, Kata A & Kraus P. (2009) Development of a Critical Care Triage Protocol for Pandemic Influenza: integrating ethics, evidence and effectiveness. *Healthcare Quarterly*: 12 (4): 54-62.
 32. Frolic A. H1N1 Triage: hope for the best, plan for the worst. *The Globe and Mail* September 18, 2009.

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