



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

A qualitative study of the duty to care in communicable disease outbreaks

Cécile M. Bensimon^{a,d,*}, C. Shawn Tracy^{a,d}, Mark Bernstein^{a,b},
Randi Zlotnik Shaul^{a,c}, Ross E.G. Upshur^{a,d,e}

^aJoint Centre for Bioethics, University of Toronto, Toronto, Canada

^bDivision of Neurosurgery, Toronto Western Hospital, Canada

^cBioethics Department, The Hospital for Sick Children, Toronto, Canada

^dPrimary Care Research Unit, Sunnybrook Health Sciences Centre, Toronto, Canada

^eCanada Research Chair in Primary Care Research, Canada

Available online 31 August 2007

Abstract

Health care providers' (HCPs') duty to care during communicable disease outbreaks has resurfaced as an important and contentious topic. This renewed interest follows the re-emergence of communicable diseases, largely thought to have disappeared and therefore irrelevant to modern day practitioners. The 2003 SARS outbreak particularly presented propitious circumstances for reconsidering this issue. This study seeks to characterize the views of individuals on the nature and limits of this duty.

The authors employed qualitative methods to gather lay and expert perspectives. Individual interviews were conducted with 67 participants consisting of HCPs, spiritual leaders, regulators, and members of the public from the greater Toronto area. Participants' views were analyzed and organized according to three main themes, constituting a framework that combines micro-, meso-, and macro-level structures and processes: the scope of obligations of HCPs, the roles of health care institutions, and the broader social context, respectively. Our data suggest that the duty to care must be placed in a wider context to include considerations that transcend individual provider obligations. It thus follows, based on our data, that the duty to care cannot be left to personal choice or an appeal to morality based on an ethic derived entirely from individual obligations.

The micro-meso-macro analytical framework that we have developed can guide the articulation of accepted norms of duty to care during epidemics and the development of policy for public health crises. It can also enhance the focus of our current expectations of HCPs' duty during epidemics. This can be achieved by informing regulatory bodies, collaborating with policy makers and engaging the public.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Duty to care; Health care providers; Epidemics; Communicable diseases; Empirical; Qualitative; Canada

*Corresponding author. Tel.: +1 416 480 5048.

E-mail addresses: cecile.bensimon@utoronto.ca

(C.M. Bensimon), shawn.tracy@sunnybrook.ca (C.S. Tracy),
Mark.Bernstein@uhn.on.ca (M. Bernstein), randi.zlotnik-shaul@sickkids.ca (R.Z. Shaul), ross.upshur@sunnybrook.ca
(R.E.G. Upshur).

Introduction

In recent years, the duty to care of health care providers (HCPs) during communicable disease outbreaks has resurfaced as an important and

contentious topic. The re-emergence of communicable diseases, which were largely thought to have become extinct (at least in North America) and therefore irrelevant to the modern day practitioner (Arras, 1988; Clark, 2005; Huber & Wynia, 2004; Lederberg, 1996; Morse, 2004; Patlak, 1996) has led to renewed discourse on duty to care. In particular, the 2003 outbreak of severe acute respiratory syndrome (SARS) presented circumstances that were propitious for reconsidering this issue, namely the reluctance of some HCPs to care for patients suspected of infection by this unknown pathogen. While some simply refused to work, others seriously questioned the nature of their duty in light of unknown and unquantifiable risk to themselves and their families.

Drawing on the SARS experience in Toronto, Singer et al. (2003) re-emphasized that the nature of the duty to care is greatly contested. Some believe that under dire circumstances professionals should have minimal self-regard and pursue their duties at potential cost to their own lives, whereas others claim that it is unreasonable to demand extreme heroism as the norm, and even more unreasonable to demand that the lives of children and families should be endangered by professional duties. In turn, SARS fundamentally changed our assumptions about duty and risk—assumptions that had informed the debate on the duty to care in the early years of HIV/AIDS (Reid, 2005). Ruderman and colleagues called for an honest and critical examination of the role of HCPs during outbreaks in order to provide guidelines regarding professional rights and responsibilities as well as ethical duties and obligations (Ruderman et al., 2006). A social dialogue to advance the public debate on this increasingly urgent issue was needed.

More recently, the Joint Center for Bioethics (JCB) at the University of Toronto produced a report applying the ethical framework it developed in the context of SARS to planning for pandemic influenza (University of Toronto Joint Centre for Bioethics Pandemic Influenza Working Group, 2005). This report specifically addressed the challenges around the duty to care in pandemic planning, arguing that this issue ought to be one of the pillars of pandemic planning. The WHO also sought to address ethical issues in pandemic influenza planning, devoting one of its four reports to the roles and obligations of HCPs during a pandemic influenza outbreak (Upshur & Working Group Three, 14 September 2006).

A necessary next step to addressing these difficult issues is to understand the views of those most affected by the duty to care. Some have called for an investigation of this issue through empirical inquiry (Sokol, 2006), but to our knowledge, there has been no systematic analysis characterizing both lay and expert views regarding the duty to care of HCPs during outbreaks. The purpose of this study is to describe the views of members of the public, HCPs, regulators of professional colleges, public health officials, and spiritual leaders. We hope this analysis will serve to ground future discussion in the genuine beliefs and expectations of the lay public and experts, thereby lending an inherent authenticity.

Methods

Participants and setting

This study was undertaken in the Greater Toronto Area, a large, multi-cultural urban center that was significantly impacted by the SARS outbreak. In order to gather multiple perspectives, participants were drawn from the following five groups: HCPs, members of the public, public health officials, regulators of provider colleges, and spiritual leaders, including participants who were directly or indirectly impacted by the SARS experience in Toronto. We sought the views of some public health officials outside of Toronto as they deal with the question of duty to care in other public health contexts and thus have an informed perspective on the matter.

Lay participants and HCPs were recruited using newspaper advertisements. Spiritual leaders and regulators were invited to participate by letter. Participants were further recruited by way of snowball sampling. A total of 67 participants were interviewed, consisting of 25 HCPs (1 paramedic, 1 respiratory therapist, 3 social workers, 7 physicians, 13 nurses), 14 spiritual leaders (8 Christian, 2 Buddhist, 2 Jewish, 1 Muslim, 1 Sikh), 12 members of regulatory Colleges, 10 members of the public, and 6 public health officials. The large majority of HCPs and five spiritual leaders worked in a SARS-designated hospital. All participants provided informed consent (either in writing or verbally). The study received ethics approval from the University of Toronto and the Hospital for Sick Children.

Data collection

Data were collected through in-depth, semi-structured interviews using an interview guide (Appendix A) that was first developed by identifying domains of inquiry from a literature review and from discussions among the research team. Participants were asked to share their views on HCPs' duty to care during outbreaks. The lead author (C.M.B.) conducted all of the interviews, either in person or over the telephone. All interviews were audio-recorded and transcribed verbatim.

Data analysis

Data analysis proceeded simultaneously with data collection; data analysis began after the first interview, allowing identification of emerging themes from the onset. Consistent with the constant comparative method, emerging themes from the early interviews were explored in subsequent interviews (Glaser & Strauss, 1967). The analysis was organized into three phases: open, axial, and selective coding (Yin, 1994). In open coding, transcripts were read multiple times and then fractured by identifying units of text relating to a concept or idea. In axial coding, ideas were compared for consistency both within and between transcripts with the intention of organizing similar ideas into overarching themes or conceptual categories which are then further developed by iteration in order to eliminate redundancy and ensure that categories are comprehensive. In selective coding, core concepts were identified as central themes of the study and conceptual categories were organized in relation to these concepts.

The credibility of our findings was assessed using three methods. First, we triangulated data based on documentation and the interviews in order to maximize comprehensiveness and diversity (Strauss & Corbin, 1998). Second, every author participated in the data analysis, enhancing the "reflexivity" of the analysis and the reasonableness of the coding scheme. The role of prior assumptions and experience, which can influence any inquiry, was acknowledged and, when possible, eliminated. Third, all research activities were rigorously documented to permit a critical appraisal of the methods (Lee, 1999).

Results

Participants' views were organized according to three main themes that emerged from the data,

constituting a framework that combines micro-, meso-, and macro-level structures and processes: the scope of obligations of HCPs, the roles of health care institutions, and, finally, the broader social context.

Scope of obligations

Participants were asked what they thought of the idea of duty to care. Here responses varied widely, covering a wide spectrum of views ranging from those who posited an absolute unlimited duty to care to those who maintained that there should be clearly defined limits. Few participants, however, were so categorical. The large majority wavered and vacillated between (often contradictory and conflicting) views, revealing a deep-seated sense of ambivalence, which was expressed upon further reflection.

Unlimited duty

A member of the public stated, "[HCPs] have to report to work. Even during an infectious disease outbreak. Because it's part of their job," leaving no room, as most members of the public did, for the possibility that the duty to care is anything other than an unlimited and absolute duty.

Arguing that providing care during epidemics is inherent to the nature of the medical profession, a spiritual leader reinforced the view that it is in fact an unlimited duty: "I think that's a decision that each individual makes as they undertake a particular calling—whether it's in medicine or leading a faith community or as a soldier or whatever they feel called to undertake. Once you step into the kitchen, you're obligated to work within that framework... There is a responsibility on behalf of healthcare workers who have chosen that as a vocation."

Referring to SARS, a public health official expressed bewilderment that the duty to care was put in question. He recalled, "I think this refusal or reluctance of health professionals to care for SARS patients was perhaps one of the most troubling things that emerged from the epidemic...I was vexed, troubled, dismayed...." Referring to the changing nature of the health profession, he continued, "These are becoming union issues. The union wants this or that kind of protective equipment or whatever have you...." He concluded that "you take on certain obligations when you commit to a career as a health professional."

Limited duty

In contrast, numerous participants felt that the duty to care is limited. Encapsulating this view, an HCP authoritatively asserted that it is a limited duty, further suggesting that HCPs should not have to put themselves at risk or be put in situations where they feel uncomfortable. She explained, “By no means should you be going into a workplace and expect to be having a fifty-fifty chance of catching some horrible disease. I think that a job is still a job.”

Likewise, a regulator felt that “on an individual level,” HCPs “should retain the right to refuse.” He supported this view, however, with a caveat: “they have to justify it. I mean, it’s not that they can just say I don’t feel like doing it. There has to be some form of justification.” In this way, he opened up the possibility that there can be legitimate limits that could justify one’s decision to opt out of providing care. While he shared the view with many participants that there is a limited duty to care, he cautioned that: “Part of the social contract [HCPs] enter into is that they may face elevated risks that we do not expect lay people to face. But they also get...privileges for doing so. If, in an emergency, no HCP came forward to voluntarily provide the care, then I think society would have every right to renegotiate the contract.”

Legitimate limits

While numerous participants first posited an unlimited and absolute duty to care, most began contemplating—upon further reflection—the idea that there could be legitimate limits; and eventually began articulating what could constitute legitimate limits. Three limits were discussed: exclusionary criteria, competing obligations, and personal choice.

Legitimate exclusion. A public health official asserted, “I think you make a commitment. You accept certain responsibilities and privileges when you attain your RN or your MD or what have you.” He pondered, “unless there are incredibly extenuating circumstances that I can’t even think of at the moment....” After some thought, he gave the example of someone who is “severely immunocompromised by some disease; it would not be reasonable for those individuals, perhaps, to care for certain diseases. But ...if you’re otherwise a healthy person going about your daily activities, I don’t think there should be an opt-out. This is part

of the responsibilities you accept when you take on that mantle.”

Many other participants gave examples of what they deemed to be legitimate exclusionary criteria, such as a member of the public’s view that “someone who is pregnant or thinking about pregnancy should have special dispensation from care.”

Competing obligations. Many participants who felt that there are legitimate limits to the duty to care pointed to the competing obligations that HCPs face. A regulator accepted that, “There may be ... some very personal reasons why ... physicians who have other responsibilities [cannot] provide care.” Another regulator wondered, “How can you oblige someone to report to work when their duty first and foremost is to their family?” A nurse captured an overall sentiment among HCPs when she said, with some intensity, “I am very conflicted ...I have a duty to care, but I also have a duty to my family and I have a duty to myself.”

Personal choice. Some participants, many of whom were regulators, felt that HCPs should be free to make decisions about their own safety as well as whether and when they are willing to provide care. Employing a contractual approach to the patient–physician relationship, a clinician argued, “HCPs should be able to opt out to respect their autonomy—in the same way that we respect patient autonomy.” A regulator further bolstered this view, arguing that “if the risk is very, very high to the health care worker, I understand it is their decision not to report to work. It is their decision alone. It is their life.” Similarly, another regulator was categorical about the need to allow HCPs to make their own decisions, saying “you should not be pushed as an individual (...) into a situation where you’re going beyond the reasonable limits in providing care. You then have a duty to say no and [say] I will not provide care.”

Roles of health care institutions

The majority of participants felt that it is important to take into account the institutional setting in which care is provided. Participants who held this view argued that there is a need to take into consideration institutional factors because they exert an important influence on—and in some cases, are inextricably linked to the duty to care—HCPs’ ability to deliver care. Participants identified four

key institutional roles as necessary conditions for HCPs to fulfill their duty to care: reciprocity, distribution of risk, coercion, and managing tension among providers.

Reciprocity

A great number of participants articulated that a HCP's duty to care and adequate protection go hand in hand, a relationship that necessarily entails an institutional duty to protect. That is, the duty to care cannot be fully realized without a firm institutional commitment to provide the necessary resources and support for HCPs. Many participants felt that institutions have a "*reciprocal obligation...* to ensure that working conditions permit carrying out one's duty to care—that there is proper garb available, masks, clothing, vaccines when available, anti-viral when available—to protect these health care workers so that they don't suffer consequences when they're on the call of duty."

Many participants further suggested that there should be various institutional and financial mechanisms put in place to support HCPs. A regulator explained, "There should be some standard benefits or reasonable fair treatments of healthcare workers to compensate for extraordinary, very difficult circumstances... Set up a support system involving safety provision, ... pay scale for overtime, ... life and disability insurance, transportation allowances, day-care. He continued, stating that on the whole, institutions have a responsibility to provide resources and set up mechanisms with respect to "*anything* that would impact on potentially impairing healthcare workers from carrying out their duties."

A nurse echoed this view, stating his expectation that, "if I'm going to be involved in dealing with patients with some type of infectious disease, I want to know that my employer has instituted policies and procedures that are protecting my rights." Many other participants agreed that "HCPs have the right to adequate protection," and if such is not the case, "they should have the right to opt out, legally and ethically."

While many participants shared this view, several participants added the qualifier that "in a situation where the institution fulfills its obligation to protect these individuals, ... at that point [they] can no longer respect [providers'] voluntary decision to withdraw from work and stay home." A nurse stated that if someone is protected with proper equipment, "I don't think you should be given a

choice of saying no," thus suggesting, as many others did, that HCPs ought not be able to refuse to provide care if supports are in place.

Distribution of risk

Issues related to the question of risk-taking by HCPs during outbreaks were raised by virtually all the participants. Many participants felt that institutions can and should play a significant role in distributing risk fairly among providers. This was discussed in two respects: first, within the context of what was perceived as the unfair distribution of responsibilities during SARS and second, in the context of the role of non-essential HCPs.

Unfair distribution/justice. Many participants recounted experiences during which HCPs balked at their responsibility to care for patients during SARS. In discussing the role of institutions to better distribute responsibilities among HCPs, especially front-line workers, a nurse echoed the experience of many participants during SARS when she described the impact of not sharing responsibility equitably: "There was real division created amongst staff. We'd all be working in the ICU and there was a long list of people who said they're not going in because of so and so. Or pregnant women didn't go in. And this created resentment, hostility because there were a core group of us who went in there more often than we would have had to otherwise had all of us been sharing that responsibility We carried a burden that wasn't equally shared." Suggesting that this situation stemmed from deep-seated discord regarding the rights and roles of different HCPs, she continued: "there were all sorts of issues around justice as to who went in the room, who has greater rights than somebody else. And it seemed that if you're a single person, you don't have the same rights because you can afford the chance to expose yourself. That just doesn't go over very well...." Finally, she encapsulated the view of many participants when she concluded: "either we're all on the same team or we're not on the same team."

The unfair distribution of risk caused a lot of tension among colleagues who, for example, questioned whether it was fair that some HCPs received more pay while everyone had to wear masks (and thus face the same risks). A nurse recalled that while "those kinds of remarks were really difficult to take, it was sad and hard to be hearing most of these

things from your own colleagues and to see how their perception of you changed.”

Role of other (non-essential) HCPs. Some participants felt that the difficulties surrounding the unfair distribution of responsibilities and risk during SARS could be attributed to the ineffective use of non-essential HCPs. A social worker wondered whether “other staff were used appropriately. As social workers, we could have provided more support for families, more education about what was going on...,” concluding that “if there was some sort of procedure set up from now on, it would be to allow other professions to help out and do more.” In like manner, a regulator wondered whether “we can expect HCPs to do some of the front line duties and be in contact directly with the sick,” adding that “if SARS had been prolonged, it would have been unfair to expect those same people to be on the go all the time...we’d have massive burnouts.” Another participant suggested that issues surrounding the unfair distribution of responsibilities could be mitigated by outlining “a contingency plan that considers” involving HCPs traditionally deemed to be non-essential during outbreaks.

Coercion

In many instances, participants also reflected on the appropriateness of using coercive measures to ensure that HCPs share responsibilities.

Many HCPs rejected the idea that they should or could be coerced to work. A nurse recalled “A lot of nurses at my hospital refused to work—but eventually, the administration were forcing them to work. Some of them resigned because they simply didn’t want to work in a SARS hospital.” Recalling his experience during SARS, during which he felt that “there was an undercurrent of coercion in certain institutions, of threats for people to volunteer,” a nurse asserted that “people should not be coerced into volunteering.” Another nurse reinforced this view, stating “it is important to have the option of opting out without having negative repercussions.”

While the majority of participants were skeptical that a system of volunteerism would be infallible, there was a general consensus that it was more desirable to use a carrot rather than a stick approach. A participant explained, “The issue of ‘should you mandate someone to work’ is a key one during an emergency, because you are short of

people. But that’s actually a very difficult thing to do; if you have an unhappy profession that would potentially jeopardize your response to the outbreak itself rather than helping it. I think the alternative is to provide as much protection as you can for the healthcare worker and allow them to work to the degree that they are comfortable with what they are doing,” thus reinforcing the view that HCPs should be free to make their own decision and not be coerced into providing care.

In contrast, a member of the public, who recognized “the very, very difficult situation” in which “the patient needs treatment” while the HCP may not necessarily and legitimately be “willing to risk him- or herself,” concluded that “there may be instances when there has to be some sort of friendly coercion.”

Social Context

The large majority of participants, with the exception of regulators, felt that the duty to care is situated in a larger social context that (like institutional factors) influences and determines HCPs’ ability to deliver care. In doing so, participants placed care in a broader societal context so as to identify a series of considerations which are associated with providing for it. These are: the need for dialogue, education, and compensation.

Need for dialogue

Understanding that duty to care entails risk. A nurse pointed to the need to talk about questions surrounding the duty to care right from the onset and recommended “[nurses] really need to think more carefully about what we are choosing and ask, ‘am I willing to put myself at risk? Do I want this?’ In spite of the fact that she felt “it’s a very hard choice” that must be taken into consideration, she attributed the problem to the fact that it is not “well explored within our profession,” explaining that “when you go to nursing school, you don’t talk about duty to care, you don’t talk about exposure to infectious diseases.” While a regulator wondered whether “in today’s education, it’s made clear to [HCPs] that, under certain circumstances, they may be expected to place themselves at an elevated risk,” a member of the public argued that it should be impressed upon HCPs “when they undertake such a profession,” that “they are more at risk” than some other professions.

Legitimate expectations. Other participants felt that, even though there may be a lack of understanding of the nature of duty to care among health care professions, it is legitimate to expect HCPs to care during epidemics because “infectious diseases have been around for years.” A member of the public thought that “HCPs have a duty to care, even during a serious infectious disease outbreak,” because they should know that “at some point they [will] be dealing with an infectious disease.” A regulator reinforced this view, stating “there is a risk to that profession that people know going in, or if they don’t know going in, they learn it early on.”

Education/engagement

Many people felt that education is an important pillar of the broader social context. One participant said: “I think education is a big must. Education is not just an article in the newspaper, it’s actually organizing forums with HCPs to get their input and ask them: how would you like to see a hospital run during a pandemic, or a private clinic or an emergency ward? In so doing, we’d be helping society and we’d be helping HCPs provide better care because they’re so much more knowledgeable about what’s going on.”

Compensation/appreciation

The majority of participants thought that HCPs “who were working in risky circumstances should have been better appreciated,” and felt that “not enough appreciation was shown. Certainly not at the time,” although “it’s very very important.”

Discussion

The most important finding of this study is that the duty to care was viewed as a relevant concept at the micro-, meso-, and macro-levels; and thus, the major challenges are not only located at the individual (micro-) level but are also embedded within a broader contextual environment. This goes against popular and published discourse that advocates that limits to the duty to care is a personal choice and thus decisions about whether or not to provide care should be relegated to the private realm. However, most participants placed great value on the set of institutional and societal conditions that should be in place for HCPs to fulfill their duty to care. The strength of our study derives from the recognition of the need to incorporate contextual considerations into parameters defining

duties and obligations. Our framework incorporating micro- (scope of obligations of HCPs), meso- (institutional), and macro- (societal) considerations flows directly from our findings that institutional and societal considerations formed a fundamental part of participants’ understanding of HCPs’ duty to care during outbreaks.

While at the micro-level, participants often vacillated when they expressed their views, in effect reflecting an ambivalence inherent in historical understandings of duty to care, there was greater certainty when it came to meso- (institutional) and macro- (societal) considerations. For example, many participants posited that HCPs have a duty to demand protection from their respective institution and further established a reciprocal relationship between this duty and the duty of institutions to protect HCPs as well as distribute risk and mitigate tension among providers. Participants paid a great deal of attention to the broader social context, with societal considerations playing a crucial role in promoting dialogue and education as well as providing compensation. Many participants stressed the importance of the broader societal context as a source of support to remedy what was deemed to be an unsupportive social environment for HCPs.

Our data are consistent with recent research suggesting that there is indeed a lack of clarity and consensus of what is expected of HCPs in epidemics (Emanuel, 2003; Sokol, 2006; Upshur & Working Group Three, 14 September 2006) and whether the degree of risk ought to limit the duty to care (Bevan & Upshur, 2003; Masur, Emanuel, & Lane, 2003; Reid, 2005). We discovered that some participants felt that HCPs have an unlimited duty to care; others felt that they do not; while others positioned themselves somewhere in between by arguing that HCPs have *some* obligations, while these are neither absolute nor unlimited. At least one participant was categorical, arguing that HCPs have a “duty to say no”; in other words, they do *not* have an ethical duty to care during epidemics.

Likewise, our findings are in accordance with a recent study of family physicians who felt that their duty and ability to care is contingent upon an implicit duty of government to provide appropriate education, training and supply of equipment (Shaw, Chilcot, Hansen, & Winzenberg, 2006). In another study of HCPs who were quarantined as a result of exposure to SARS, there was a consensus that HCPs have a duty to care during outbreaks but,

concordant with our findings, they feel conflicted owing to deep-seated competing obligations (Robertson, Hershenfield, Grace, & Stewart, 2004).

Recently published data from three surveys suggesting that many may not feel bound by any sense of duty during a communicable disease outbreak are also consistent with our findings (Alexander & Wynia, 2003; Balicer, Omer, Barnett, & Everly, 2006; Toronto Public Health, 2006). We found that the majority of HCPs do not necessarily accept the notion that they have an unconditional duty to care for patients during outbreaks. A recent study of family physicians found a willingness to provide care in the context of a pandemic and risk to self; however, there is a lack of certainty as to where legitimate limits are drawn (Morin, Higginson, & Goldrich, 2006). Arguments in favour of a limited duty to care do not provide specific guidance as to what constitutes risk, what and how much risk is acceptable or is expected to be undertaken.

Overall, the findings of this study parallel the historical lack of consensus with regards to beliefs about the professional and moral duty to care for infectious and potentially infectious patients (Huber & Wynia, 2004), reflecting a sense of ambivalence and conflicting views. Numerous scholars have examined the historical basis of how HCPs had responded throughout historic plagues to explore how responses to past epidemics could be applied to present circumstances (Angoff, 1991; Emanuel, 2003; Fox, 1988, 1989; Friedlander, 1990; Geraghty & Wynia, 2000; Ha & Cohen, 1991; Huber & Wynia, 2004; Loewy, 1988; Sharp, 1988; Sheldon, 1990; Zuger & Miles, 1987). However, most concluded that it is difficult to employ history as a basis for the claim that physicians have a duty to care because historical traditions of the profession in this regard are not consistent, rendering it impossible to make generalizations and thus providing little, if any, guidance on what HCPs ought to do today.

Many other scholars have sought to explore the basis for the claim that HCPs do in fact have a duty to care. Arguments invoked to ground the claim that HCPs have a duty to care emerge from: the social contract (Clark, 2002, 2003; Loewy, 1988; Sharp, 1988); views of community, justice, and professionalism (Freedman, 1988; Loewy, 1988; Sharp, 1988; Wynia, Kurlander, & Green, 2006) the dependent nature of the patient (Sharp, 1988); concepts of duty and courage in the medical setting

(Loewy, 1986); codes of ethics (Baker & Emanuel, 2000; Sharp, 1988; Sohl & Bassford, 1986); public trust (Clark, 2002, 2003; Wynia et al., 2006); the healing role of the provider (Angoff, 1991); common humanity (Sheldon, 1990); the understanding of medicine as a moral enterprise (Zuger & Miles, 1987); the virtues of the health professions (Arras, 1988; Zuger & Miles, 1987); the ideal of self-sacrifice (Arras, 1988); the view that it is a core obligation of professionalism that is both intrinsic (Sharp, 1988) and/or necessary (Wynia & Gostin, 2004) and that necessarily overrides physician's autonomy rights (Clark, 2005).

There has thus been a diversity of claims that have been made on the nature of the duty to care of HCPs. However, the breadth of grounds upon which such claims have been made is not as wide as the diversity of claims would suggest. In general, all of these arguments treat the question of the duty to care within a single paradigm usually defined within the confines of an *individualized* duty to care—and thus neglect contextual and extrinsic considerations relevant to and necessary for satisfying this duty, especially during outbreaks. While most scholars who have explored the nature of the duty to care offer compelling arguments to justify the ethical duty to care, many of them ground it in an “irreducibly individual obligation” (Tomlinson, 2004). This might be explained by the fact that the deontological nature of the notion of *duty* naturally leads to an exploration of the duty to care in such deontological, i.e. inherently individualist, terms. It can also be explained by the fact that discussions on the duty to care have been explored in the context of a biomedical framework focusing on the patient—physician relationship.

As previously suggested by Benatar (1997, 1998), however, the duty to care must be placed in a wider context to include considerations that transcend individual obligations. As our study illustrates, the broader institutional and societal context must be taken into account. It thus follows based on our findings that the limits to the duty to care cannot be left simply to personal choice or an appeal to morality that emerges from an individualized notion of caring. Moreover, the relevance of these considerations does not lie in the distinction between the micro-, meso-, and macro-levels of analysis but in the interplay and the linkages between them; HCPs cannot adequately fulfill their duty to care without institutional and societal support. The nature of the duty to care ought to be weaved

within the fabric of society in order to provide HCPs with the conditions and resources necessary to satisfy their duty, rather than based on an ethic derived entirely from individual obligations.

We believe that the micro–meso–macro analytical framework that emerged from our data can enhance the focus and clarity of current understandings, and our expectations of HCPs' duty to care during epidemics. This can be done in three important ways: by informing regulatory bodies, by engaging and planning with policy makers, and by shaping public expectations and foster debate.

We recognize that the views expressed by study participants may or may not be generalizable. However, the purpose of qualitative inquiry is to describe the range of views of study participants. While this project was born out of the SARS experience in Toronto, discussions with participants revolved around communicable diseases outbreaks in general and were not limited to mainly SARS-impacted institutions. As well, we conducted our research against the backdrop of the threat of a pandemic influenza; this prospect, and the wide media coverage it has received, informed participants' views. Moreover, many participants drew on their past experiences during outbreaks of polio, tuberculosis, and malaria. As such, we believe that the findings of our research are directly applicable to the current debate on pandemic influenza preparedness and other newly emerging communicable diseases, such as extreme drug-resistant tuberculosis (XDR-TB), a newly identified TB threat which leaves patients (including many people living with HIV) virtually untreatable using currently available anti-TB drugs.

Conclusion

The circumstances surrounding the SARS crisis made it both possible and desirable to explicitly address the question of duty to care. We sought to describe lay and expert views and perspectives on the duty to care of HCPs during outbreaks. Our analysis can inform the development of an empirically based conceptual framework to guide both the articulation of acceptable norms of duty to care during outbreaks and the development of public policy regarding the management of future outbreaks. Our findings raise a host of issues that remain unresolved; it will be important to address these in the context of emerging outbreaks such as pandemic influenza and XDR-TB.

Acknowledgments

The authors would like to thank Shari Gruman of the Primary Care Research Unit for her expert assistance in editing and formatting the manuscript. This project was financially supported by the Canadian Institutes of Health Research and City of Toronto Public Health. Dr. Upshur is the Canada Research Chair in Primary Care Research; his work on this paper was financially supported by the Canadian Institutes of Health Research.

Appendix A. Interview guide

- What do you think of the idea of duty to care?
- How do you view health care providers' duty to care during communicable disease outbreaks?
- Are there limits to the duty to care? How are these limits determined?
- What factors influence HCPs in arriving at these limits? Should HCPs be able to opt out?
- How can society assist health care providers fulfill their duty to care?

References

- Alexander, G. C., & Wynia, M. K. (2003). Ready and willing? Physicians' sense of preparedness for bioterrorism. *Health Affairs (Project Hope)*, 22(5), 189–197.
- Angoff, N. R. (1991). Do physicians have an ethical obligation to care for patients with AIDS? *The Yale Journal of Biology and Medicine*, 64(3), 207–246.
- Arras, J. D. (1988). The fragile web of responsibility: AIDS and the duty to treat. *The Hastings Center Report*, 18(2), S10–S20.
- Baker, R., & Emanuel, L. (2000). The efficacy of professional ethics: The AMA Code of Ethics in historical and current perspective. *The Hastings Center Report*, 30(Suppl. 4), S13–S17.
- Balicer, R. D., Omer, S. B., Barnett, D. J., & Everly, G. S., Jr. (2006). Local public health workers' perceptions toward responding to an influenza pandemic. *BMC Public Health*, 6, 99.
- Benatar, S. R. (1997). Just healthcare beyond individualism: Challenges for North American bioethics. *Cambridge Quarterly of Healthcare*, 6(4), 397–415.
- Benatar, S. R. (1998). Millennial challenges for medicine and modernity. *Journal of the Royal College of Physicians of London*, 32(2), 160–165.
- Bevan, J. C., & Upshur, R. E. (2003). Anesthesia, ethics, and severe acute respiratory syndrome. *Canadian Journal of Anaesthesia*, 50(10), 977–982.
- Clark, C. C. (2002). Trust in medicine. *The Journal of Medicine and Philosophy*, 27(1), 11–29.
- Clark, C. C. (2003). In harm's way: Service in the face of SARS. *The Hastings Center Report*, 33(4).

- Clark, C. C. (2005). In harm's way: AMA physicians and the duty to treat. *The Journal of Medicine and Philosophy*, 30(1), 65–87.
- Emanuel, E. J. (2003). The lessons of SARS. *Annals of Internal Medicine*, 139(7), 589–591.
- Fox, D. M. (1988). The politics of physicians' responsibility in epidemics: A note on history. *The Hastings Center Report*, 18(2), S5–S10.
- Fox, D. M. (1989). The history of responses to epidemic disease in the United States since the 18th century. *The Mount Sinai Journal of Medicine, New York*, 56(3), 223–229.
- Freedman, B. (1988). Health professions, codes, and the right to refuse HIV-infectious patients. *The Hastings Center Report*, 18(2), S20–S25.
- Friedlander, W. J. (1990). On the obligation of physicians to treat AIDS: Is there a historical basis? *Reviews of Infectious Diseases*, 12(2), 191–203.
- Geraghty, K.E. & Wynia, M. (2000). Advocacy and community: The social roles of physicians in the last 1000 years. Part III. *MedGenMed: Medscape General Medicine*, E27
- Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine de Gruyter.
- Ha, K. G., & Cohen, D. J. (1991). From plague and tuberculosis to AIDS: A reflection on the medical profession. *Texas Medicine*, 87(3), 76–80.
- Huber, S. J., & Wynia, M. K. (2004). When pestilence prevails. Physician responsibilities in epidemics. *The American Journal of Bioethics*, 4(1), W5–W11.
- Lederberg, J. (1996). Infection emergent. *The Journal of the American Medical Association*, 275(3), 243–245.
- Lee, T. (1999). *Using qualitative methods in organizational research*. Thousand Oaks, CA: Sage.
- Loewy, E. H. (1986). Duties, fears and physicians. *Social Science & Medicine*, 22(12), 1363–1366.
- Loewy, E. H. (1988). Risk and obligation: Health professionals and the risk of AIDS. *Death Studies*, 12(5-6), 531–545.
- Masur, H., Emanuel, E., & Lane, H. C. (2003). Severe acute respiratory syndrome: Providing care in the face of uncertainty. *The Journal of the American Medical Association*, 289(21), 2861–2863.
- Morin, K., Higginson, D., & Goldrich, M. (2006). Physician obligation in disaster preparedness and response. *Cambridge Quarterly of Healthcare Ethics*, 15(4), 417–421.
- Morse, S. (2004). Emerging and reemerging infectious diseases: A global problem. <<http://www.actionbioscience.org/newfrontiers/morse.html#primer>> Accessed 01-05-07.
- Patlak, M. (1996). Book reopened on infectious diseases. *FDA Consumer Magazine*.
- Reid, L. (2005). Diminishing returns? Risk and the duty to care in the SARS epidemic. *Bioethics*, 19(4), 348–361.
- Robertson, E., Hershenfield, K., Grace, S. L., & Stewart, D. E. (2004). The psychosocial effects of being quarantined following exposure to SARS: A qualitative study of Toronto health care workers. *Canadian Journal of Psychiatry*, 49(6), 403–407.
- Ruderman, C., Tracy, C. S., Bensimon, C. M., Bernstein, M., Hawryluck, L., & Shaul, R. Z. et al. (2006). On pandemics and the duty to care: Whose duty? Who cares? *BMC Medical Ethics*, 7(1), E5.
- Sharp, S. C. (1988). The physician's obligation to treat AIDS patients. *Southern Medical Journal*, 81(10), 1282–1285.
- Shaw, K. A., Chilcott, A., Hansen, E., & Winzenberg, T. (2006). The GP's response to pandemic influenza: A qualitative study. *Family Practitioner*, 23(3), 265–266.
- Sheldon, M. (1990). HIV and the obligation to treat. *Theoretical Medicine*, 11(3), 201–212.
- Singer, P. A., Benatar, S. R., Bernstein, M., Daar, A. S., Dickens, B. M., MacRae, S. K., et al. (2003). Ethics and SARS: Lessons from Toronto. *British Medical Journal*, 327(7427), 1342–1344.
- Sohl, P., & Bassford, H. A. (1986). Codes of medical ethics: Traditional foundations and contemporary practice. *Social Science & Medicine*, 22(11), 1175–1179.
- Sokol, D. K. (2006). Virulent epidemics and scope of healthcare workers' duty of care. *Emerging Infectious Diseases*, 12(8), 1238–1241.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and technique*. Newbury Park, CA: Sage.
- Tomlinson, T. (2004). SARS and the duty to treat: Remember AIDS? *The Hastings Center report*, 34(1), 4.
- Toronto Public Health (2006). *Survey of Toronto physicians*. Toronto.
- University of Toronto Joint Centre for Bioethics Pandemic Influenza Working Group (November 2005). Stand on Guard for Thee. Ethical considerations in preparedness planning for pandemic influenza. <<http://www.utoronto.ca/jcb/home/documents/pandemic.pdf>>. Accessed 15-12-06.
- Upshur, R. & Working Group Three (14 September 2006). Project on addressing ethical issues in pandemic influenza planning. The role and obligations of health-care workers during an outbreak of pandemic influenza: World Health Organization. <http://www.who.int/ethics/PI_Ethics_draft_paper_WG3_14Sept06.pdf>. Accessed 14-08-07.
- Wynia, M., Kurlander, J., & Green, S. (2006). Physician professionalism and preparing for epidemics: Challenges and opportunities. In J. Balint, R. Baker, M. Strosberg, & S. Philpott (Eds.), *Advances in Bioethics. Ethics and Epidemics*, Vol. 9 (pp. 135–161). Amsterdam: Elsevier.
- Wynia, M. K., & Gostin, L. O. (2004). Ethical challenges in preparing for bioterrorism: Barriers within the health care system. *American Journal of Public Health*, 94(7), 1096–1102.
- Yin, R. (1994). *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage.
- Zuger, A., & Miles, S. H. (1987). Physicians, AIDS, and occupational risk. Historic traditions and ethical obligations. *The Journal of the American Medical Association*, 258(14), 1924–1928.