Mandatory Disclosure of Infection With Blood-Borne Pathogens: Implications for Nursing

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Abstract

In this paper we trace the development of blood-borne pathogen guidelines for health care workers (HCWs). We are particularly interested in questions of risk, public safety, and the relationship to stigma. We emphasize this as we consider the mandatory disclosure requirements by provincial licensing bodies for Canadian nurses, and the need for evidence-informed policies.

Keywords

blood-borne pathogens; disclosure; guidelines; health care workers; stigma

Development of Blood-Borne Pathogen Guidelines

The first guidelines on the provision of health care by workers infected with blood-borne pathogens, *Isolation Techniques for Use in Hospitals*, were published by the Centers for Disease Control and Prevention (CDC) in 1970, giving rise to what are now known as *universal precautions* (Siegel, Rhinehart, Jackson, & Chiarello, 2007). With the onset of the HIV epidemic, the Association for Practitioners in Infection Control and the Society for Healthcare Epidemiology of America (SHEA) created a joint AIDS task force in 1987 to provide expertise on HIV-related issues. In 1989, the Laboratory Centre for Disease Control in Ottawa, Canada, convened a meeting to review and modify the CDC's recommendations in the Canadian context (Laboratory Centre for Disease Control, 1989). The first guidelines regarding health care workers (HCWs) infected with blood-borne pathogens were developed in 1990, after the transmission of HIV from a Floridian dentist to his patients (Henderson et al., 2010).

In 1997, SHEA stated that HCWs infected with hepatitis C virus (HCV) and/or HIV should not be prohibited from providing patient care solely on the basis of their blood-borne

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pathogens (SHEA, 1997). SHEA (1997) stressed the need for the consistent use of universal precautions, stating that all blood and other hazardous bodily fluids be considered infectious, irrespective of a patient's disclosure or diagnosis. Based on new knowledge and progress in both the prevention and treatment of infection with blood-borne pathogens, SHEA published an updated guideline in 2010 (SHEA, 2010). This guideline provided clearly defined *exposure-prone procedures* (procedures during which an HCW may encounter or transmit blood-borne pathogens) and individual recommendations for HBV, HCV, and HIV based on the viral load of each infectious syndrome, while continuing to emphasize appropriate use of infection-control practices and procedures to minimize the risk for exposure (Henderson et al., 2010).

The Canadian Landscape

To date, there have been no documented cases of either HIV or HCV transmission from a Canadian physician to a patient, and one case of a physician who transmitted HBV to two patients “prior to the implementation of universal precautions and the availability of modern antiviral therapy” (Canadian Medical Protective Association, 2010, p. 3). To guide the development of policies on the management of HCWs infected with blood-borne pathogens, the Canadian Medical Protective Association convened an independent review panel of six Canadian specialists from four relevant specialties to conduct a comprehensive review of current literature and make recommendations. In 2010, the Canadian Medical Protective Association published the 11 recommendations made by this panel in the report *Physicians with Blood Borne Viral Infections: Understanding and Managing the Risks*. The authors summarized their report in the following statement: “The risk of a physician transmitting a blood-borne viral (BBV) infection to a patient is exceptionally low and will continue to fall as more effective methods of prevention and treatment are developed” (Shafran, Angel, Coffin, Grant, Jaeschke, & Wong, 2010, p. 1). These experts questioned why some licensing changes for physicians and nurses had occurred since the onset of the HIV pandemic. The primary licensing changes were centered around collecting information on the diagnoses of HIV, HCV, and HBV without evidence to support the need to collect this information.

We are particularly interested in the licensing changes for registered nurses in Canada. Looking across jurisdictional policies of professional nursing associations, we identified that the College and Association of Registered Nurses of Alberta (CARNA) is the only nursing association that collects information regarding their members' diagnoses of HIV, HCV, and/or HBV. In 2007, following a periodic document review to ensure best practice, CARNA reaffirmed its position towards reporting by members who have been infected with a blood-borne pathogen and approved revisions to the CARNA document *Disclosure and Reporting of Infection with Blood-Borne Pathogens: Guidelines for Registered Nurses*: “Registered nurses (RNs) who have been infected with blood-borne pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV) are not required to report blood-borne status to CARNA” (CARNA, 2007, p. 16).

But 1 year later, CARNA became the first and only regulatory organization of nurses in Canada to mandate the disclosure of infection with blood-borne pathogens upon registration and yearly license renewal, stating: “All registered nurses who have tested positive for the

blood-borne virus infections HBV, HCV or HIV must notify the Registrar, regardless of whether or not their practice involves exposure-prone procedures” (CARNA, 2008, p. 2). CARNA (2010) defended this position by stating that mandatory disclosure ensured a higher standard of public safety when delivering health care to patients. We note that the argument was based on public interest rather than actual risk.

We wonder: How would mandatory disclosure support CARNA’s mandate to protect the public? In fact, it could be argued that the only reported case of possible HIV transmission from a nurse to a patient weakens CARNA’s position of mandatory disclosure. A report by Goujon et al. (2000) provided irrefutable scientific evidence from phylogenetic analyses that, in one case, a nurse and a patient shared the same strain of HIV-1. When we critically looked at the article, we found that there were two HIV-infected nurses who had had contact with the patient—one who knew herself to be HIV infected and one who did not. Yet, the nurse implicated as the source of transmission did not know she was HIV infected and therefore could not have reported her serostatus to the licensing body. This fact called us to question the value of mandatory reporting and raised another question: How could a registered nurse report a serostatus if s/he was unaware of it? Defending its revised position, CARNA (2010) stated that the mandatory reporting process supports CARNA’s mandate to act in the interest of public safety and helps to address the following issues in health care: the need for a standardized, evidence-informed approach to assess the risks of regulated HCWs infected with blood-borne viral infections; the government’s increased expectation of regulatory colleges to implement policies and procedures that reduce the risk for infection; and the reduced tolerance of the public for lapses in infection-prevention and -control practices by HCWs (p. 1).

Based on a fear of contracting HIV and possible ignorance about factors affecting transmission, members of the public might argue that the identification of nurses who know their serostatus would help to minimize risk. CARNA validated this concern by mandating disclosure instead of addressing the underlying issues of misinformation and stigma. This raised the question: Would a member of the public not assume his or her fears were rational when a regulatory body requests disclosure from its members? The attempt to appease and reassure the public wrongly sends a message that the public needs to be protected from a small (based on empirically informed evidence) risk. Drawing parallels between O’Byrne’s (2012) argument of the connection between forced disclosure of HIV serostatus in Canada under the Criminal Code and public health measures, we wonder whether professional associations’ mandates of disclosure have the potential to prevent nurses from accessing testing. These mandates directly conflict with the removal of all barriers to HIV testing as called for by the World Health Organization (2007), the Public Health Agency of Canada (2006), and the CDC (2009).

What Are the Real Risks?

There is consensus that the risks for transmitting blood-borne pathogens from HCWs to patients and vice versa are minimal (Bednarsh & Klein, 2003; Shafran et al., 2010). The estimated risks for transmission per needlestick injury from an infected, untreated source patient to a susceptible HCW are 30% for HBV, 1.8% for HCV, and 0.3% for HIV (Shafran

et al., 2010, p. 4). Mathematical models of risk suggest that with every 1 million procedures performed by an infected HCW, the following may occur: 240 to 2,400 transmissions of HBV, 50 to 500 transmissions of HCV, and 2.4 to 24 transmissions of HIV (Health Canada, 1998). The risks can be minimized through vaccination (in the case of HBV), treatment with antiretroviral medications, strict adherence to standard precautions, use of personal protective equipment and other safety devices, and modification of techniques such as hands-free transfer of sharps (Bednarsh & Klein, 2003; Shafran et al., 2010). Although this consensus is supported, the decision of professional associations to mandate disclosure may not solely rely on objective data but rather may be influenced by fear and other emotions, as well as stigma, associated with HIV (Bednarsh & Klein, 2003).

Stigma and Its Consequences

Many HCWs state that they do not discriminate against patients living with HIV. However, Mill et al. (2009) identified HCWs as a noteworthy source of stigma and discrimination against those who are infected with HIV. Stigma and discrimination were also evidenced in a recent survey of medical students, some of whom stated that it was important for patients to disclose their HIV status to an HCW “to protect the health care professional and to seek and adhere to treatment” (Aultman & Borges, 2011b, p. e54). Yet when asked whether HCWs should disclose their HIV status to patients, the same students responded that because the risk for transmission was slim, disclosure was not warranted. Within this context, Aultman and Borgess (2011a) also reported that “medical students are inconsistently trained in universal precautions by their clinical role models, which may lead to patient discrimination and the perpetuation of stigma” (p. e49). The greatest consequence of stigma may result from mandatory disclosure. When medical students were asked whether it should be mandatory for HCWs to disclose their HIV status, they expressed a fear of the potential negative implications of disclosing such a highly stigmatized disease (Aultman & Borges, 2011b). HCWs who continue to work after a diagnosis of HIV face the same fears, stigma, and hopelessness as do the patients they serve.

Concerns about stigma and discrimination of HCWs with blood-borne infections have been reported in several countries. When HIV testing and counseling and antiretroviral services became available in Malawi, some HCWs avoided them due to fears of the stigma and discrimination they might encounter if they used these services (Bemelmans et al., 2011). In an article that addressed the urgent need for the development of care and treatment for HIV-infected HCWs in South Africa and Botswana, Uebel et al. (2007) reported that “[t]he external stigma is obvious; there is a risk of gossip, discrimination, and hostility from others if health care workers are known to be HIV-infected” (p. S503). In Canada, given recent, highly publicized criminal charges against persons for the actual and potential transmission of HIV, HCWs, like the general public, may be reluctant to even test for HIV (Claivaz-Loranger, Adam, Ryan, Mykhalovskiy, Betteridge, & Power, 2010).

Evidence-Informed Guidelines

In an attempt to guide evidence-informed decision making, the CDC (1991) published the first comprehensive guideline for HIV- and HBV-infected HCWs, *Recommendations for*

Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures. With an emphasis on exposure-prone procedures in its Consensus Conference on Infected Health Care Worker Risk for Transmission of Blood-borne Pathogens, Health Canada (1998) defined *exposure-prone procedures* as: (a) digital palpation of a needle tip in a body cavity (a hollow space within the body or one of its organs) or the simultaneous presence of the HCW's fingers and a needle or other sharp instrument or object in a blind or highly confined anatomic site (e.g., during major abdominal, cardiothoracic, vaginal and/or orthopedic operations), (b) repair of major traumatic injuries, or (c) manipulation, cutting, or removal of any oral or perioral tissue, including tooth structures, during which blood from an HCW has the potential to expose a patient's open tissue to a blood-borne pathogen (Exposure-Prone Procedures section, para. 2).

Participants in the Consensus Conference (Health Canada, 1998) agreed that it was important to consider the perceived risk to the public together with the actual risk for transmission. Although the rights of the public must be protected, responsibilities also must be understood—particularly, responsibilities such as considering reliable evidence and information, as well as considering the rights of infected HCWs.

Professional associations and regulatory bodies have an obligation to their members as well as to the general public. Recently, the International Labour Organization (2010) noted that freedom from compulsory testing for, and disclosure of, HIV status may be viewed as a fundamental right. We agree that over the past 10 years, the discourse has been to more carefully consider this right in the decision of whether to mandate HCWs' disclosure of blood-borne viral infections. While this is the case in the public debates, we are left to wonder whether we as nurses should develop policies and guidelines based on fear and discrimination or by carefully perusing the current evidence? Today's guidelines are supported by more than 40 years of data on HBV transmission and more than 30 years of data on HIV transmission. Isn't it time to develop policies and guidelines based on the real risks? To develop policies and practices that are empirically informed? And to respect the human rights of all?

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