Implementing a Policy for Practitioners Infected with Blood-Borne Pathogens

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Abstract

Healthcare practitioners infected with blood-borne pathogens may pose a risk to patients. There is disagreement about how to best protect the health of patients without unjustifiably restricting the autonomy of infected practitioners. There are no accepted national standards to guide Canadian hospitals in policy development. We implemented a policy for practitioners infected with blood-borne pathogens based on available scientific evidence and review of current practices. The policy was well-received by our physicians and dentists, and serves as a template for other organizations and hospitals tackling this issue.

Background

Healthcare practitioners (including physicians, dentists, residents and medical students) are at risk for occupationally acquired hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV). Infected practitioners, in turn, pose a risk to patients during invasive procedures. Hospitals have a duty ensure that patients are not subject to unacceptable risks. However, there is passionate debate around how to protect patients without unjustifiably restricting the autonomy of the infected practitioner.

Practices vary widely between countries. In the UK, testing is mandatory following a potential exposure (e.g., needlestick injury or unprotected sexual contact), and failure to be tested may be considered a breach of duty (UK Health Departments 1993; Communicable Disease Report 2000; UK Health Departments 2002). Infected healthcare workers are not permitted to perform exposure-prone procedures. In the US, infected healthcare workers who continue to perform exposure-prone procedures are required to inform patients of their serologic status (CDC 1991). Compliance is poor, and it is argued that the requirement to disclose does not improve patient safety and is discriminatory to infected healthcare workers (Gostin 2000). US professional organizations have since recommended rescinding the disclosure requirement and allowing infected healthcare workers to practise without restriction (SHEA 1997).

Many Canadian hospitals have no policy for practitioners infected with a blood-borne pathogen. This situation likely reflects the complex emotional, legal and human rights issues involved. Hospital administrators are often uncertain of their authority to request such testing, their ability to recruit and retain physicians if testing is mandated and the liability risk of allowing an infected practitioner to continue practising. Practitioners, in turn, are concerned about discrimination, loss of livelihood and tarnished reputations. The Canadian Medical Protective Association (CMPA) requires physicians to follow hospital policy on blood-borne pathogens, but does not offer specific guidance to support hospital policy development (CMPA 2002).

Objectives

Our objectives were to review the risk of blood-borne pathogen transmission, develop a policy for testing and vaccination of practitioners, and provide an acceptable framework in which infected practitioners can practice in a manner that will safeguard their rights and protect the patient.

Setting

The Ottawa Hospital is a 1,000-bed tertiary care centre with 1,225 physicians, 570 residents, 250 medical students and 22 dentists. Over 60,000 surgical procedures are performed annually.

Table 1: Estimated Risk of Blood Borne Pathogen Transmission by an Infected Practitioner

	Number of transmissions per 1,000,000 procedures	Estimated life-time risk of infecting at least one patient
Hepatitis B (if e-Antigen positive)	240 – 2,400	57 – 100%
Hepatitis C (if detectable viral load)	50 – 500	88%
HIV (risk is higher if transmission to a patient has occurred in the past)	2.4 – 24*	0.8 – 8.1%*

*From: Bell 1991; Bell 1992; Ross 2000

Sequence of Events

In 1996, Health Canada developed national guidelines on infected healthcare workers. However, these guidelines were not adopted as standard practice owing to rebuttals by the Canadian Medical Association and Canadian Dental Association (Health Canada 1998). In particular, these organizations expressed concern that the guidelines imposed unwarranted intrusion on the rights of privacy, confidentiality and autonomy of the infected practitioner.

Given the lack of consensus, several provincial Colleges of Physicians and Surgeons developed policies, but these lacked uniformity (CMA 1999). In 1998, the College of Physicians and Surgeons of Ontario undertook to establish a regulatory mechanism for infected physicians (CPSO 1998). However, this process is ongoing and several issues remain unresolved, including an expert panel process to assess the infected physician's ability to practise.

In 2002, the CMPA issued a statement requiring each hospital board to pass by-laws establishing protocols for healthcare workers infected with communicable diseases (CMPA 2002). The CMPA clearly stated that physicians must comply with these protocols and that failure to do so would be considered a breach of duty and possibly criminal negligence. However, this statement fell short of offering guidance to support local hospital protocol development or to promote consistency between hospitals. In light of the impetus placed by the CMPA on hospitals to address the risk of disease transmission from infected practitioners, and the potential liability of inaction, we developed a policy to address these issues.

Methods

We surveyed other Ontario tertiary care hospitals in 2002 and found a lack of hospital-specific policies addressing infected practitioners. A literature review was undertaken to assess the risk of blood-borne pathogen transmission (**Table 1**) and current practices in other jurisdictions. We received legal advice that hospitals do not have the authority to violate the individual's right to privacy or protection from discrimination by mandating testing for blood-borne pathogens. The onus rests on the hospital to demonstrate that it has reasonable grounds for suspecting that the individual is a danger to himself or others, or is unfit to perform his duties, before requiring such testing.

A policy was developed based on these findings (**Table 2**) and approved by the Medical Advisory Committee. It emphasizes preventative measures including immunization, adherence to universal precautions and medical treatment of infected practitioners to reduce the risk of transmission to others. Pre-appointment testing for blood-borne pathogen infection is not required, but the hospital may request testing of practitioners implicated in a case or cluster of patient infections. In compliance with current provincial regulations, practitioners who perform exposure-prone procedures are expected to know their own serologic status. Practitioners infected with a blood-borne pathogen must notify their regulatory body and Medical Affairs who will keep this information strictly confidential. Medical Affairs is responsible for arranging an independent expert panel review to determine under what circumstances the infected practitioner may perform exposure-prone procedures. There is no scientific evidence to restrict the medical practice of infected practitioners who do not perform exposure-prone procedures unless they fail to follow universal precautions or transmission to a patient is documented.

Constraints

The most important limitation with our policy is that the expert panel process remains untested, as we have not yet had occasion

Table 2: The Ottawa Hospital Policy for Practitioners Infected with a Blood-Borne Pathogen

All practitioners (regardless of serostatus) must:

- Adhere to universal precautions.
- Provide evidence of HBV immunity at the time of appointment or initiation of training. Pre-appointment screening for HIV, HBV or HCV infection is unwarranted.
- Undergo HBV vaccination if unable to provide evidence of immunity.
- Undergo post-immunization testing to establish need for re-immunization.
- Seek post-exposure follow-up if exposed to a patient's blood.
- Report events of patient exposure to a practitioner's blood so both practitioner and patient can be tested. The source of exposure will not be revealed to the patient.
- Undergo testing for blood borne pathogens as requested by the hospital, if implicated in patient infections.

Practitioners who perform exposure-prone procedures* must:

- Know their HIV, HBV and HCV status.
- Undergo annual testing for HBV infection if vaccine nonresponders or unimmunized.
- Procure disability insurance to provide coverage for blood borne pathogen infection.

Practitioners infected with a blood borne pathogen must:

- Notify their regulatory body and Medical Affairs. Medical Affairs will:
  - Keep this information strictly confidential.
  - Assist the practitioner to obtain medical care to maximize their health and reduce transmissibility.
  - Assist the practitioner to obtain advice from an expert review panel regarding under what circumstances, if any, they may perform exposure-prone procedures.
  - Ensure the expert panel's recommendations are followed.
  - Ensure the practitioner understands and can adhere to universal precautions. The medical practice of practitioners who do not perform exposure-prone procedures and can comply with universal precautions will not be restricted unless patient transmission is documented.
- Report any break in universal precautions to allow for anonymous notification and follow-up testing of the exposed patient.
- Stop performing exposure-prone procedures until the expert panel advises otherwise.

*Exposure-prone procedures are procedures where there is a risk that injury may result in the exposure of a patient's open tissues to the blood of the practitioner as defined by Health Canada (1998).

to use it. To ensure an arms-length approach, assistance will be requested from the provincial College of Physicians and Surgeons in the event that an expert panel is required. An expert panel review is generally considered preferable to a global prohibition on performing exposure-prone procedures. However, it should be recognized that inconsistency in panel decisions from one situation to the next may arise owing to differing opinions of panel members.

The second unresolved issue is the responsibility of the hospital to accommodate a physician or surgeon who becomes infected with a blood-borne pathogen and can no longer perform exposure-prone procedures. This is particularly relevant if the infection was occupationally acquired while providing services to the hospital. Some physicians have inadequate disability insurance coverage against income loss due to blood-borne pathogen infection.

Finally, our policy reflects statements from Canadian medical and regulatory bodies that healthcare providers who perform invasive procedures have an ethical duty to know their serologic status (CPSO 1998; OMA 1999; OHA 2000; CMA 2001). However, we allow practitioners to self-determine the frequency of testing since guidelines are unavailable, and there is a lack of scientific evidence on which to base recommendations. Furthermore, we are unable to monitor compliance with self-testing, since requiring test results or proof of testing could be considered unwarranted invasion of personal privacy.

Options and Alternatives

In an effort to control liability risk, hospitals may opt for mandatory testing and practice-restriction of infected practitioners. However, such intrusion on the rights of the practitioner may be unwarranted in the absence of evidence that widespread testing improves patient safety. Furthermore, there are circumstances where practice-restriction could be considered unjustifiable (e.g., an infected surgeon with excellent technique and an undetectable viral load).

An alternative approach is to avoid testing but emphasize good infection control technique and prevention of percutaneous injuries (Gostin 2000). Such measures protect both patients and healthcare workers from blood-borne pathogens and should be the standard of care in all hospitals. However, compliance with standard precautions and hand hygiene is often below acceptable levels and is not well enforced. Furthermore, in an era of heightened public concern, this approach is likely to be viewed as insufficiently proactive to protect patient interests. Although the probability of transmission of blood-borne pathogens from an infected practitioner is extremely low, public opinion continues to support disclosure and restriction of practice (Tuboku-Metzger 2005).

Solutions

Given the wide range of approaches across jurisdictions, our policy strikes a reasonable balance between protecting the autonomy and privacy of the practitioner and promoting patient safety. This policy provides a proactive approach in the absence of provincial or national guidelines, and has been well received locally. It also provides a starting point for discussion for others grappling with this issue.

Discussion

Transmission of blood-borne pathogens from infected practitioners to patients is extremely rare, but is of great public concern. Practitioner testing, patient disclosure and restriction of medical practice are complex issues that pit the hospital's responsibility to protect the health of the patient against the practitioner's right to privacy and protection from discrimination. The lack of comprehensive and consistent direction from regulatory bodies and the absence of a national standard have left hospitals struggling to deal with this problem in isolation. Our policy provides one solution to this dilemma, but a national approach is needed to ensure consistent practice among Canadian hospitals.

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