Patient Safety and Physiotherapy: What Does it Mean for Your Clinical Practice?

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Physiotherapists working in clinical settings must be aware of patient safety on a daily basis, but they may not understand the scope of the issue. For example, suppose that a physiotherapist is treating the patient of a colleague who has called in sick, and the treatment plan includes the use of ultrasound (US). Does the physiotherapist know all the patient safety concerns that are important for this clinical situation?

These concerns include the safety of the US machine: Has it been maintained and calibrated regularly according to the manufacturer's guidelines? What about the US gel used? Does the clinic have a policy that follows Health Canada's December 2004 recommendations in order to minimize the health risks associated with the use of US gel?¹ What are the infection control procedures? Are there hand-washing facilities or equipment within the clinical areas to facilitate frequent hand hygiene for staff and patients? Has the work area been cleaned appropriately? Does the patient need to be screened according to Ministry of Health guidelines for influenza-like illness?² Have complete treatment records been maintained, including the correct dosage used for this patient?³ What is the practice for treating patients who have been treated by other physiotherapists? Are there policies in place for this type of handover? These are some of the many aspects of patient safety that a physiotherapist must be aware of in order to ensure the safety of patients.

Patient safety has been defined as "the reduction and mitigation of unsafe acts within the health-care system, as well as through the use of best practices shown to lead to optimal patient outcomes."^{4(p.12)} This editorial focuses on increasing awareness and providing a better understanding of the principles of patient safety and of the role of physiotherapists in patient safety. As well, it introduces the Canadian inter-professional patient safety competencies,⁵ which can be integrated into practice, whether in clinical or academic settings, to improve physiotherapists' knowledge, skills, and attitudes about patient safety.

BACKGROUND

Although patient safety has always been a foundation of health care practice, its importance and its wide-ranging scope have lagged behind those of other fields. For example, the aviation industry has for years used standardized checklists to ensure that a plane is safe before it leaves the ground; only relatively recently has the use of checklists prior to surgical procedures been implemented on a consistent basis.⁶ The increased importance of patient safety in Canada is directly related to a foundational study conducted by Baker and Norton,⁷ which found that 1 in 10 adults contract an infection while in hospital, 1 in 10 receive the wrong medication, and between 9,000 and 24,000 deaths from preventable adverse events occurred in Canada in 2000. An *adverse event* is defined as "an unexpected and undesired incident directly associated with the care or services provided to the patient";^{4(p.40)} an important strategy in reducing adverse events is to raise awareness of the problem and thus improve patient safety.^{8(p.24)} Although one of the goals in health care is to reduce adverse events, "accidents are inevitable in any complex system."^{8(p.6)} A good means of illustrating how easily adverse events can occur in health care is the "Swiss cheese" model (originated by psychologist James T. Reason⁹), which is used in the safety field to demonstrate that an adverse event is rarely due to one error by one person but, rather, is a systemic problem. The model (see Figure 1) uses the visual representation of multiple slices of Swiss cheese to indicate that although there may be policies and procedures in place to prevent adverse events, the "holes" in the cheese, representing separate errors, can often align themselves, resulting in an adverse event. An example can be seen in infection control, where facilities have policies in place but what really happens at the bedside may be different from what the policy makers envisioned. For example, how do you put on your personal protective equipment (PPE)? Where are the gowns and gloves? Have you been fitted for your N95 mask as a precaution against airborne

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Figure 1 Reason's "Swiss cheese" model. Reproduced from Reason J, Human error: models and management. Brit. Med J. 2000;320:768–70, with permission from BMJ Publishing Group Ltd.

infections? Can you locate which model you need quickly?

"Patient safety depends on the system's ability to learn from experience and mistakes";^{8(p.24)} thus, all members of the health care team—including physiotherapists—must be aware of patient safety and of their role in promoting it.

PATIENT SAFETY AND PHYSIOTHERAPISTS

The Canadian Physiotherapy Association's Patient Safety Position Statement recognized that

physiotherapists play an essential role in promoting a safer healthcare system for Canadians. CPA affirms that physiotherapists have an ethical, professional and regulatory responsibility for safety in all aspects of patient care. Their responsibility goes beyond direct interaction with the patient to the health setting and systems level within which care is provided. CPA supports physiotherapists in contributing to a culture of safety for users and providers of the Canadian healthcare system.¹⁰

Many physiotherapists consider physiotherapy interventions to have little or no potential for harm to patients. Unfortunately, however, "all of the best training and good intentions in the world cannot make a therapist immune to error. To err is human."^{11(p.309)} Often, issues of patient safety for physiotherapists are not adverse events but a "no-harm event" (a near miss or close call)—"an event that reaches the patient but does not result in harm."^{5(p.41)} For example, a patient's almost falling when transferring from bed to chair is categorized a no-harm event. As human beings, we will make mistakes; we must be honest and identify these errors and near misses as patient safety issues so that we can learn from them.

The Canadian Patient Safety Institute (CPSI) was created in 2003 to help raise awareness and to provide

education and leadership in patient safety. The CPSI works in partnership with health care professionals, health care organizations, and patients and their families "to create a culture that is open to disclosure and committed to change that will improve care."¹² One of its most recent initiatives was to establish an inter-professional competencies framework titled "The Safety Competencies: Enhancing Patient Safety Across the Health Professions."⁵

This framework, developed by an inter-professional group of patient safety experts in Canada, including physiotherapists, categorizes key knowledge, skills, and attitudes related to patient safety across six domains:

1. Contribute to a culture of patient safety
2. Work in teams for patient safety
3. Communicate effectively for patient safety
4. Manage safety risk
5. Optimize human and environmental factors
6. Recognize, respond to and disclose adverse events

The first domain, *contribute to a culture of patient safety*, is all about health care providers' commitment to incorporating knowledge, skills, and attitudes about patient safety into their daily practice. Physiotherapists must consider safety not just in the obvious areas—Is the patient safe using a mobility aid?—but also in those that are less obvious: Was the mobility aid cleaned properly before you provided it to the patient? Who do you need to call to repair the elevator that does not stop level with the floor surface and thus is a fall hazard for patients using the elevator? Have you documented the patient's change in gait-aid use in an accurate and timely fashion? Are other members of the team caring for the patient aware of the patient's mobility needs and what assistance is required? Have you continued to update your knowledge to ensure that you are fostering practices that optimize safety? In any health care setting, "safety culture influences patient safety by motivating healthcare professionals to choose behaviours that enhance, rather than reduce, patient safety."^{13(p.15)}

An integral part of working successfully in health care today is working in inter-professional teams. This is the key feature of the second competency, *work in teams for patient safety*. To ensure safety, the patient should be central to the team's work, and there should be an interdependent decision-making process. For example, when a patient becomes progressively more confused and aggressive, your role is to work with the team to develop a plan to ensure the safety of both patient and staff (e.g., restraints, constant care). Unfortunately, what may happen, as a result of heavy caseloads, is that you discuss the situation briefly with a nurse but do not document it in the chart or work with the team to develop strategies to help the patient. When this happens, the other members of the team may not be

aware of the patient's confusion, which may lead to safety issues.

Clear, accurate communication is vital to ensuring the provision of safe treatment to patients in our care. Effective communication is essential not only among members of the "circle of care" but also with the patient. This communication may be written, oral, or nonverbal. Components of this third domain—*communicate effectively for patient safety*—include supporting written or oral instructions with educational materials, such as clear, concise exercise sheets that are free of jargon and that the patient is able to follow, and providing appropriately detailed and clear information for patient transfer to another programme or centre.

The competency in the fourth domain, *manage safety risk*, demonstrates that physiotherapists must be able to anticipate, recognize, and manage situations that place patients at risk. Thus, we must constantly consider what issues or factors may result in harm, and this constant surveillance needs to be integrated into our daily practice. A review of malpractice cases for physiotherapists in the United States from 1991 through 2004 found that approximately 75% of cases were treatment related, while 10% were related to patient monitoring, 5% to equipment or product problems, and less than 2% to diagnosis.¹⁴ Thus, it is likely that the majority of the safety issues we see will be in the provision of patient treatment. "Walk-about patient safety rounds" in your area of patient care and reviewing treatment procedures and practices on a regular basis are examples of strategies that can be incorporated into our practice, whether in acute care, rehabilitation, home care, or clinic settings.

Patient safety is a complex concept that requires managing both individual and environmental factors effectively. This fifth domain, captured as the competency *optimize human and environmental factors*, requires knowledge of human as well as systemic factors and how these influence or affect our decisions. A very important area of safety is infection control. At the individual physiotherapist level, this involves ensuring frequent hand hygiene, which is key to preventing the spread of infection. At the system level, the physiotherapist needs to consider such issues as whether there are hand-hygiene stations at the point of care; if the hand-hygiene station is not adjacent to the area where care is provided, there is a much greater risk that this safety routine will be missed.¹⁵

The last competency—*recognize, respond to and disclose adverse events*—has moved to the forefront of health care in the last decade. "Patient safety depends on the system's ability to learn from experience and mistakes"^{8(p.24)}; we must identify any errors we make as physiotherapists, be transparent about them, document and analyse the causes of the errors, and move forward with the new knowledge we have gained. Further, we

must feel comfortable approaching other team members if they are doing something that is unsafe.

CONCLUSION

Patient safety is a complex issue involving all members of the health care team. Because "raising awareness of the problem is fundamental to improving patient safety,"^{8(p.24)} physiotherapists need to be aware of all of the elements of patient safety on a daily basis, regardless of their role and work environment. The profession must understand that error is inevitable if we are to facilitate a culture of identifying and reporting error rather than casting blame. Further research is needed to identify the present level of awareness of patient safety issues on the part of physiotherapists in Canada, including their perceptions of the role of physiotherapists in patient safety. In addition, we must collect data and identify sources of error and root causes in order to understand the nature and outcome of error and make appropriate practice changes to mitigate error and improve patient safety.

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