

Harm reduction: A canadian perspective

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The term "harm reduction" conjures up many reactions, including many political and emotional responses. What exactly is harm reduction? What is it not? Are pharmacists involved in harm reduction practices? Do they embrace the principles of harm reduction? What should the role of the pharmacist be? How far along the continuum are you as a pharmacist willing to go?

Harm reduction is a concept that can be applied to areas other than drug use, but for the purposes of this discussion it "refers to policies, programs and practices that aim to reduce the negative health, social and economic consequences that may ensue from the use of legal and illegal psychoactive drugs, without necessarily reducing drug use".¹ If viewed in the proper context, it can be seen as a form of health promotion² and includes programs that increase access to accurate information, improve social determinants of health, decrease stigma, increase availability of proper housing, prevent the spread of HIV and Hepatitis C, increase safer sex practices, prevent overdose, encourage working with peers and address the impact of trauma on individuals and society. Simply put, harm reduction is anything that seeks to reduce the harms associated with illicit drug use.

The spectrum of harm reduction activities varies from those generally accepted, such as smoking cessation pharmacotherapies and methadone maintenance treatment, to those both innovative and controversial, such as supervised injection facilities and heroin assisted therapy. Contrary to some popular belief, the full harm reduction continuum does not hold abstinence in disdain, but rather sees it as a valid choice. While critics may feel that harm reduction is 'enabling' drug users, proponents feel it merely takes a pragmatic approach and realizes that one type of treatment is not suitable for everyone.

So where do pharmacists fit in? At this point most would see our role as dispensers of methadone and buprenorphine, smoking cessation counselors, and possibly as providers of clean needles and syringes and sharps disposal.³ The reality is far more complicated. For example, one study of pharmacists providing Methadone

Maintenance Therapy (MMT) found that they not only dispensed, but "almost half (48%) provided information on drug interactions with OST [Opioid Substitution Therapy] medication; side effects of medication (38%); accessing support services (30%); smoking cessation (30%); blood-borne virus exposure risks (10%); vein care (8%); and other services or information (12%), including dental hygiene, general health, practical parenting advice, internet-based resources and counselling."⁴

In 1988 I wrote a paper for my pharmacy ethics class looking at the issue of pharmacist involvement in needle exchange programs, a relatively controversial topic at the time. Since then needle exchange programs have become a mainstay in harm reduction practices. A literature search of "pharmacist" and "harm reduction" was dominated by this topic.⁵⁻¹² Services still vary greatly from country to country and even city to city. Some efforts are hampered by strict regulations, while pharmacists and pharmacy staff attitudes can also affect these services. The next step in supply provision pharmacists may need to consider is full clean injection kits with supplies such as cookers and Vitamin C powder, and safer crack kits. Already there are studies looking at the feasibility of pharmacies providing naloxone kits to aid in the treatment of opioid overdoses.¹³

The logical extension of the supervised injection site in Vancouver (Insite), perhaps one of the most controversial harm reduction initiatives, is heroin assisted therapy (HAT). While HAT has been used as a treatment in Europe since 1926, the first North American clinical trial faced numerous obstacles getting off the ground. A fascinating paper by Gartry et al traces the history of NAOMI, the North American Opiate Medication Initiative, from the Canadian Government Commission on Inquiry into the Non-Medical Use of Drugs in 1972 to the launch of the Phase III randomized, controlled trial comparing injectable opioid agonist maintenance (primarily with heroin but also with hydromorphone) to oral methadone. HAT is not legal nor being studied currently in the United States.¹⁴

The NAOMI trial treatment retention rate was 87.8% in the heroin group (compared to 54.1% in the methadone group), and there was a 67% reduction in illicit-drug use or other illegal activity in the same group (compared to 47.7% in the methadone group).¹⁵ Sadly, "even those who were responding to HAT had to stop this treatment and go back to the same options that had not worked for them in the past because the study team could not legally continue to prescribe [heroin] outside of the clinical trial treatment period."¹⁴

So what does HAT have to do with pharmacists? The Director of Pharmacy for the NAOMI and SALOME trials, Amin Janmohamed, BSc Pharm, MSci, RPh, explains that pharmacists play a key role in navigating the complex regulatory and clinical trials documentation requirements. For the SALOME trial, beyond preparing the medications, the pharmacy staff are responsible for accountability for the medications, inventory control, forecasting medication needs far in advance, complex regulatory and clinical trials reporting, maintenance of participant and investigator blinding, and medication destruction. Because the pharmacists are not blinded to the randomization, they cannot have direct patient contact. Still, Amin Janmohamed enjoys the problem solving, complex scenarios and implementation of the project. He finds it rewarding to work with "incredible researchers who have dedicated their careers to helping marginalized, vulnerable people" (personal communication, September 12, 2013).

The investigators and pharmacists from NAOMI are now undertaking a new project, the Study to Assess Long-term Opioid Maintenance Effectiveness (SALOME). The aim of this trial is to compare the benefits of hydromorphone to heroin in refractory opioid-dependent patients. If hydromorphone is found to be as efficacious as heroin, this may lead to a legal alternative for supervised injection. More details of the trial can be found on its [website](#).

Another interesting area of recent study in harm reduction is in the sale and use of over-the-counter (OTC) medications. As with all products with potential for abuse, in general, pharmacists seem to be expected to take a 'policing role' and merely refuse to sell to someone who may be misusing. Back in 1998, when I was a locum pharmacist in Saskatchewan, the province put a maximum on OTC codeine products; a person could not buy more than 50 tablets or equivalent in a one month period. There was no public awareness campaign to announce the change, pharmacists were not given any way to track this, and most importantly, were not given

any strategies to help those who had been misusing the codeine. Because of my unique position as a locum pharmacist for 26 stores, I was able to 'catch' several misusers, but it usually ended up as a confrontation rather than a productive chance to get the person to try alternatives and/or seek help.

Researchers of an intriguing study from Northern Ireland decided to try a 'harm minimisation' approach to OTC misuse and abuse. Pharmacists had a two day communications skills workshop, "particularly motivational interviewing and strategies to promote change in health behaviours."¹⁶ They managed to get "some clients [to agree] to stop using the product of abuse/misuse, [use] an alternative, or [switch] to a maintenance prescription under general practitioner (GP) supervision."¹⁶

There are still obviously a number of barriers to accepting and providing harm reduction services. Harm reduction facilities are often inadequate, and many health providers felt they had a lack of time and staff to help.¹⁷ Pharmacist attitudes are key, and have become more open over the years.^{3,9,18} In my experience, the more that one is involved with users, the more open and accepting one becomes of harm reduction as a philosophy and practice. Most papers on harm reduction recommend further education and training for pharmacists and pharmacy staff as well.^{7,8,11,12,16,19}

My journey to being an advocate for harm reduction took time. I supported MMT and needle exchange programs as far back as my university training and the research I did for my needle exchange paper. I still did not see myself as becoming directly involved, however, until I worked at a pharmacy in Saskatoon that dispensed methadone. Getting to know the patients/clients through daily meetings, I developed a great deal of empathy towards them. Later, when I worked at the Centre for Addiction and Mental Health (CAMH), I started my work in psychiatry, but eventually picked up some shifts at the Methadone Clinic. Again, I found the methadone and buprenorphine patients to be friendly, funny, wonderful people who had experienced more than I could ever imagine. They taught me many invaluable lessons, including the role of empathy from health care providers. Often the pharmacist can be the provider that makes the patient feel a greater sense of self-worth, a great motivator to seek further help.

Through my work as a speaker and media spokesperson at CAMH, I got involved with the Toronto Harm Reduction Task Force. I gave presentations on drug

interactions and overdose prevention to current and former drug users. I presented a poster of my experiences at a CPNP conference.²⁰ I was prepared for questions about mixing medications and dosing, but I was not prepared for questions such as "is it true that it is better to be a heroin addict than a crack addict?" or "what should I do about this infected abscess on my arm?" or "what is proper vein care?" These questions and others definitely challenged and then expanded my comfort level with what full harm reduction training really can be.

Pharmacists can be involved in harm reduction strategies from the traditional MMT and needle exchanges through to providing overdose prevention and vein care information to intravenous drug users. Each pharmacist needs to explore his or her current comfort level, and ideally to look for reasons to challenge and expand it. Patients who use/misuse/abuse substances have complicated histories and journeys, and deserve full access to a range of health care options, many of which fall under the large umbrella of harm reduction.

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