

# Filling a greener prescription: A movement towards environmentally sustainable pharmacy practice

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ENVIRONMENTAL HEALTH AND PHARMACY PRACTICE may appear to be 2 fields that lack an obvious connection. However, as terms such as *climate change*, *resource depletion*, *environmental degradation*, and *contamination* appear in newspaper headlines, we should begin to question how our profession is associated with such topics and events. Traditional pharmacy practice is not known to be very “green.” In some cases, urban myths that health care providers cannot be environmentally friendly in order to provide safe and effective care for our patients seem to justify our lack of concern for the environment. For instance, although reusing is a sustainable concept that is encouraged, it is often not an option in pharmacies due to safety regulations. However, a fine balance may exist between providing safe and effective care for patients and being environmentally conscious. There are numerous avenues through which we can minimize our environmental impact without jeopardizing the care we provide to our patients.

The most obvious key to achieving sustainability is through reduction. Waste generation, particularly of plastics, is a major environmental concern. The plastics we send to landfills can remain there for centuries since they do not degrade easily, posing a serious environmental hazard. Plastic packaging alone makes up the bulk of the waste on a typical day at a community pharmacy. Although such packaging is sometimes necessary, more often than not the amount of packaging used is excessive. Pharmacists can make a difference by being environmentally conscious when ordering stock. For example, the simple decision to order 1 bottle of 500 tablets instead of 5 bottles of 100 tablets can reduce unnecessary plastic waste. Furthermore, pharmacy owners can seek out recycling depots that accept empty pill bottles, used blister packs, and

other mixed plastics. If pharmacies across the country took the initiative to recycle their plastic waste, the amount of plastic we could divert from the landfills would have an unimaginable impact.

The fact that pharmaceutical drugs are a major source of contamination to our environment should surprise no one. Their presence has been detected in water supplies through sources such as human excretion and improper disposal of drugs. They affect natural ecosystems and pose a threat to living organisms.<sup>1</sup> Although pharmacists may feel that we have no control over what happens to the drugs after they leave the pharmacy, we are actually in the perfect position to help determine their fate. Educating patients on safe and effective medication practices not only optimizes drug therapy outcomes but can also have strong environmental implications as well.<sup>2</sup> We can counsel our patients to use certain pharmaceutical products responsibly by taking only what is necessary, to limit the amount that enters the environment via physiological excretion. Another important counselling point is to remind patients to return unused or expired medication to pharmacies for proper disposal. British Columbia was one of the first provinces to regulate pharmaceutical wastes through the Recycling Regulation under the Environmental Management Act as an extended producer responsibility mandate.<sup>3,4</sup> We should emphasize this convenient service (and others) to patients and encourage them to be diligent when managing their pharmaceutical wastes.

Finally, communication with pharmaceutical manufacturers plays an integral role in a movement towards more sustainable practice. Many manufacturers have gone to great lengths to

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decrease their environmental impact. However, they ought to continually strive for more sustainable options such as developing eco-friendly packaging. Working on the front lines, we can provide valuable insight on what is necessary and what is not. We can also advocate for the health of our environment by urging drug companies to conduct more extensive research on the risks of their drugs to ecological systems and the environment, which remain largely uncertain.<sup>2</sup> Environmental concern will only continue to grow, resulting in an increasing number of patients who will request such information. As drug experts, we need to be prepared to provide these patients with answers.

The environment is the air that we breathe, the water that we drink, and the beauty that surrounds

us. As inhabitants of our planet, we have an obligation to leave it in better shape than we found it and to preserve what we have for future generations. In Al Gore's wise words, "We can believe in the future and work to achieve it and preserve it, or we can whirl blindly on, behaving as if one day there will be no children to inherit our legacy. The choice is ours; the earth is in balance."<sup>5</sup> As numerous other professions are changing their practices to become more sustainable, our profession must not lag behind. We always have an option to be environmentally conscious. Environmental sustainability is everyone's responsibility, and we are no exception. Together, we can transition towards a greener profession by integrating simple environmental initiatives into our everyday practice. ■

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## References

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