

Practice Spotlight: Natalie Dayneka

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Sexual assault affects all aspects of health. In 1994, the Children's Hospital of Eastern Ontario (CHEO) instituted a specialized sexual assault care program involving a multidisciplinary team. In 1996, when CHEO decided to develop complex drug protocols for this program, Dr Natalie Dayneka was invited to join the sexual assault care program. The current team is composed of sexual assault nurse examiners, Emergency Department physicians, social workers, and infectious disease nurses, physicians, and pharmacist.

When a high-risk sexual assault has occurred, the sexual assault care team, in consultation with infectious disease physicians, immediately initiates HIV postexposure prophylaxis. The prepackaged prophylaxis starter kit contains a sufficient supply of oral solid dosage forms of zidovudine, lamivudine, and nelfinavir for the first 5 days of the 28-day regimen. Pediatric dosing guidelines and patient drug information pamphlets (in French and English) are included in the kit. Oral liquid formulations are also available in the Emergency Department for younger children.

Within 72 hours of the initial Emergency Department visit, either an infectious disease nurse or Dr Dayneka contacts any patient who has been given postexposure prophylaxis (or a parent or caregiver, depending on the patient's age and preferences) by telephone for follow-up. If it is Dr Dayneka who makes the call, she also initiates medication reconciliation to ascertain if the patient is taking any other medications that were not disclosed during the Emergency Department visit. When contacted, most patients or their parents have questions about the postexposure prophylaxis medications, and the health care provider attempts to address all of these concerns.

After the initial telephone follow-up, arrangements are made to have the patient, accompanied by the parent or caregiver, return to CHEO to receive additional supplies of the prophylactic medications and for additional counselling related to any unresolved drug-related problems. A maximum 2 weeks' supply of medications is dispensed at one time because of the high reported rate of nonadherence associated with postexposure prophylaxis.¹

Two weeks after postexposure prophylaxis is initiated, the patient again returns to CHEO for medical and pharmacy consultations. Laboratory tests are performed to assess potential adverse effects of the drug regimen, and medication administration is reviewed along with potential medication adverse effects. Once the 28-day prophylactic regimen has been completed, adolescents are referred to the institution's adolescent medical team for continuing medical and psychosocial care in addition to the continuing care provided through the sexual assault care program.

Each year, approximately 30 HIV postexposure prophylaxis kits are issued for children who have been sexually assaulted. In 2004, 75% of patients returned to CHEO for follow-up counselling, and 55% of patients completed the prescribed HIV postexposure prophylaxis. Although these rates may appear low, they greatly exceed the published percentages for completion of the 4-week regimen.^{1,2} In a survey of the adolescents who have been seen in CHEO's sexual assault care program, gastrointestinal adverse effects were a frequently cited reason for nonadherence. To minimize or avoid gastrointestinal adverse effects, CHEO has created a child- and youth-friendly pamphlet listing suggestions for preventing or managing these adverse effects.

The hospital receives financial support from the Ontario Ministry of Health and Long-Term Care for a pharmacist to be a member of the pediatric HIV multidisciplinary team, and this pharmacist's responsibilities extend to the sexual assault care program. In this role, Dr Dayneka spends most of her time counselling patients, ruling out drug interactions, and developing dispensing and dosing protocols. Because the postexposure prophylaxis medications are associated with

numerous adverse effects and drug interactions, pharmacists considering a position with a sexual assault team should have pediatric training as well as a background in the field of HIV. Dr Dayneka suggests that any pharmacist wishing to establish a similar practice should contact the Canadian HIV/AIDS Pharmacists Network to benefit from the protocols developed by other centres and from the experience of other pharmacists. Pharmacists should also consult the Web sites of provincial HIV postexposure prophylaxis programs such as those of British Columbia and Manitoba.

The most significant benefits of the sexual assault care program are realized through the recognition and treatment of the psychosocial issues associated with sexual assault, as well as the minimization of the potential for HIV infection after high-risk sexual assault. A pharmacist has an important role on this team since children and youths who have experienced sexual assault are at risk of nonadherence, debilitating gastrointestinal symptoms, and drug interactions associated with the HIV postexposure prophylaxis drug regimen. Professional interaction with children and youth who have been sexually assaulted can be emotionally challenging. It is important to maintain open lines of communication with other pharmacists and health care professionals involved in the care of sexual assault patients in order to provide optimal pharmaceutical care in these patients' time of need.

References

1. Smith DK, Grohskopf LA, Black RJ, Auerbach JD, Veronese F, Struble KA, et al. Antiretroviral postexposure prophylaxis after sexual, injection-drug use, or other nonoccupational exposure to HIV in the United States: recommendations from the U.S. Department of Health and Human Services. *MMWR Recomm Rep* 2005;54 (RR-2):1-20.
2. Wiebe ER, Comay SE, McGregor M, Ducceschi S. Offering HIV prophylaxis to people who have been sexually assaulted: 16 months' experience in a sexual assault service. *CMAJ* 2000;162:641-5.

This article is the first in our Practice Spotlight series. These profiles will publicize the accomplishments of Canadian pharmacists with unique practices in hospitals and related health care settings. If you have a unique or innovative practice, or you know someone else who should be profiled, please submit your contact information to Mary Ensom, Editor of CJHP (ensom@interchange.ubc.ca), and one of our Associate Editors will be in touch with you.