



Knowledge and Training Needs of Health Professionals Working with People with HIV: With Consideration for Mixed Urban/Rural Care Settings



Question

What are the attitudes and beliefs held by health care professionals with regards to treating patients with HIV/AIDS?

In general, what are the learning needs of health care professionals to facilitate their work with people with HIV/AIDS?

What specific knowledge and training do health care professionals in a mixed rural/urban area require?

Key Take-Home Messages

- Despite the availability of improved knowledge and training of healthcare providers, some continue to have negative attitudes and beliefs towards PHAs (6-9), which could adversely impact PHA health and quality of life (8, 10-12).
- The transition from emergency/palliative to complex/chronic care in HIV has created a knowledge gap with respect to appropriate care (i.e., what is appropriate care and who is qualified to deliver it) (3, 13-16), and attending to issues of diversity amongst PHAs (17-20).
- In particular need of investigation are the unique needs of rural PHAs, who may have different healthcare and access needs (21-25), and for whom practitioners may need special training (20, 26).
- In general, a number of clinical guidelines exist that outline core competencies for HIV healthcare providers (27, 28), but which could be improved by the addition of interpersonal, communication, and diversity training (5, 19).

EVIDENCE INTO ACTION

The OHTN Rapid Response Service offers HIV/AIDS programs and services in Ontario quick access to research evidence to help inform decision making, service delivery and advocacy.

In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a brief fact sheet summarizing the current evidence and its implications for policy and practice.

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The Issue and Why It's Important

Improvements to HIV medications have dramatically increased longevity and quality of life for persons living with HIV (PHAs) in the post HAART (highly active antiretroviral therapy) era (1). This shift has been accompanied by changing demographic characteristics of PHAs to include higher proportions of women, indigenous peoples, young people, injection drug users, and increasing rates of HIV in rural communities (2). These changes have necessitated a shift from “short-term, crisis-oriented, and palliative care to include preventive, acute, and long-term services” (1) and complex chronic disease management (3, 4), and a need for greater cultural sensitivity and understandings of diversity in the care and treatment of PHAs (4, 5).

Despite these dramatic changes, much of the practice literature for health professionals working with PHAs was produced pre HAART and does not adequately address these emerging risk groups and practice needs. This review explores recent (post HAART) literature on the state of health practitioners attitudes and beliefs towards PHAs as well as their learning needs. In addition, we highlight the emerging literature on the unique needs of rural PHAs for consideration in mixed urban/rural care settings.

What We Found

While health practitioner is defined broadly in this review to include clinical personnel (physicians, nurses), allied health professionals (occupational therapists, dieticians, pharmacists), and mental health professionals (social workers and psychologist), this review reports primarily on recommendations for clinical health professionals. There are few current articles reporting on allied healthcare providers with respect to HIV attitudes, beliefs, and educational needs.

Attitudes, Beliefs & Professional Ethics

In their recent thematic literature review of nursing student's attitudes towards caring for PHAs, David, Lindy, and Ingrid (2009) identified ongoing negative attitudes among some nursing students resulting from continued fear of contracting HIV/AIDS (often based on naïve and outdated understandings), homophobia, reluctance to care for people with HIV/AIDS and stigma associated with HIV/AIDS (6).

Implications for Nursing practice and/or policy (6)

- Nursing educators need to develop strategies to assist nursing students to overcome their fear of contagion while caring for people with HIV/AIDS.
- Nurse educators need to evaluate the effectiveness of their HIV/AIDS education programmes.
- Further research is needed to explore the underlying determinants of nursing students' attitudes towards people with HIV/AIDS.

Rondahl et al. (2003) [cited in (6)] suggested there is a need for nursing students not only to have biomedical knowledge of HIV/AIDS, “but also that education should include broader cultural and ethical issues surrounding HIV/AIDS”. However, a recent study of ethical standards found 0% of a sample of 198 nursing students in the US had beliefs that were fully supportive of the nursing standards of ethical practice regarding caring for HIV-positive persons (9). The study recommended:

to “facilitate support for the ethical principles of nursing in the context of HIV and AIDS, nursing students need guided experiences to assess personal attitudes and beliefs about HIV and AIDS and direct care opportunities to destigmatize the epidemic in order to meet the ethical standards of nursing practice (9).

In an older but oft cited study of Canadian dentists, “1 in 6 dentists reported refusal to treat HIV-infected patients, which was associated primarily with respondents' lack of belief in an ethical responsibility to treat patients with HIV and fears related to cross-infection”(29). A more recent US study reports ongoing problems with laboratory technicians, emergency medical technicians, and dentists, who should have received adequate training in HIV by now (8).

For health practitioners who might otherwise be interested in the HIV sector, the increasing complexity and demands of the work are pushing them to other practice areas. Whereas the first wave of the HIV epidemic was characterized by practitioner burn-out as a consequence of grief, more recently, the “complex, time-consuming, cognitive services” required in HIV care are overwhelming some clinical staff and dissuading them from entering the sector (30).

While the attitudes and beliefs of healthcare practitioners are important, understanding how attitudes and beliefs translate into care is an under researched topic. Rondahl, Innala, and Carlsson (2003) suggested negative attitudes expressed by nursing students towards “HIV-infected homosexual patients...may result in neglect and suffering among patients” (10). This is further taken up by Steward, Koester, Myers, and Morin (2006), who found patients in clinics where providers and administrators made fatalistic comments were less likely to report having received prevention counselling than patients in low fatalism clinics (11). Myers et al (2007) recommend that “providers training should address attitudinal barriers and facilitators to counselling and the importance of addressing risk routinely” (12). Finally, the risk of attitudes influencing behaviours is most clearly evident in a study by Rintamaki, Scott, Kosenko and Jensen (2007), which found stigmatizing beliefs are enacted in behaviours performed by health care personnel ranging from ambiguous nonverbal cues to blatant discrimination and “included events in which health care personnel openly mocked or blamed them for their HIV status, unfairly labelled them or maligned them to other health care personnel, and even physically abused HIV-positive patients” (8).

Who delivers care and with what effect?

As the life expectancy of HIV-infected patients has increased, the management of comorbid conditions have become an important concern (13). Within the literature there is debate over the types of physicians who should treat patients with complex chronic medical conditions such as (HIV) infection. For instance, Bruce et al, 2002 suggest that generalist physicians can develop specialized knowledge in HIV care through clinical experience and self-education (31), and

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Landon et al (2005) similarly conclude that “generalists with appropriate experience and expertise in HIV care can provide high-quality care to patients with this complex chronic illness” (14). Overall, primary care delivery by physicians with greater HIV experience has been found to contribute to improved patient outcomes (15), with generalists having more comfort in managing the care and treatment of comorbid conditions over HIV specialists (3). However, a recent study by Arshad et al. (2009) of non- HIV specialist physicians found they “had uniformly poor knowledge of common antiretroviral medication regimens” (16).

In Canada - Responses to questions about how family physicians provide HIV and AIDS care were asked by the National Family Physician Workforce Survey (Janus Project) in 2001 (32)

- At that time, 28% of family physicians reported having HIV patients in their care, and 2.2% said they provided ongoing advanced care, including treatment of complications. Providing advanced care was more common among physicians with higher case loads of HIV patients.
- Family physicians appear to have a substantial role in caring for HIV and AIDS patients in Canada, but whether patients' access to care is adequate or whether family physicians do not provide care because they lack knowledge or support is unknown.

While the ability of generalist physicians to treat PHAs (with appropriate knowledge and experience) bodes well for primary care, patients visiting clinics that offered a range of services were 3.1 times more likely to achieve viral suppression than patients visiting clinics which offered only HIV primary care (13). Towards promoting holistic, care Gerbert et al (2004) argue “educational programmes and HIV organizations should ensure the development of providers' psychosocial skills as well as scientific knowledge and/or augment patient care with appropriate support staff, including social workers, peer advocates and highly trained nursing staff” (5).

Training/Education Standards

The American Academy of Family Physicians has developed “Recommended Curriculum Guidelines for Family Practice Residents: HIV Infection/AIDS”, which “provides a useful strategy to help residency programs form their curricula for educating family physicians” and lists required competencies, attitudes, knowledge, and skills [see full document at (27)]. Below are additional observations and recommendations found in the literature:

The HIV Medicine Association propose that any credentialing process to identify HIV- qualified physicians be based on a combination of patient experience and the demonstration of ongoing education and training in HIV care, especially in the area of antiretroviral therapy. To be an HIV-qualified physician, an individual should be able to show continuous professional development by meeting the following qualifications (28):

- In the immediately preceding 24 months has provided continuous and direct medical care to a minimum of 20 patients who are infected with HIV; **and**
- In the immediately preceding 24 months has successfully completed a minimum of 30 hours of Category 1 continuing medical education in the diagnosis and treatment of HIV-infected patients; **or**
- Recertification in the subspecialty of infectious diseases or initial board certification in infectious diseases in the preceding 12 months.

Gerbert et al (2004) also recommends that “HIV providers must be able to communicate about sensitive topics, listen and create rapport with patients, demonstrate cultural competence and negotiate complicated psychosocial situations (e.g. dealing with mental health problems and the socially disenfranchised, doing transmission prevention counselling)”(5). Drainoni et al (2009) found that despite high levels of comfort, “providers still experienced structural, skills and knowledge-based and personal barriers to providing HIV prevention education” and “all providers expressed a desire to learn more about different patient populations, and although they are relatively comfortable dealing with diverse populations, they want to learn more” (19).

Opportunities for Additional Training and Issues of Diversity

Relational Aspects of Care:

Although the focus in HIV care is often medications (especially dosing, complications, and adherence) the relational aspects of PHA care can be equally important, with clinicians benefiting from seeing their role as guiding the process of care by opening constructive paths for (33). Effective clinical training should include attention to the following issues of power sharing and communication:

- “power and status are key features in the early stages of the development of the treatment relationship between healthcare provider and patient”(34).
- “the mutable dimensions of the physician-patient relationship were associated with medication adherence in persons with HIV infection, suggesting that physician-patient relationship quality is a potentially important point of intervention to improve patients’ medication adherence” (35).
- “overall satisfaction of quality of care for HIV/AIDS patients is affected mainly by the patient’s perception of his/her health status, level of support, and perceived level of involvement in treatment decisions” (33).
- “healthcare providers and healthcare organizations need to make special efforts to communicate treatment options, and the risks and benefits of those options, in terms that patients can understand” (34).

Overall, the primary HIV medical provider has a pivotal role of either a facilitator or barrier to successful engagement in care, and “providers who hone their skills in communication may be better equipped to assess how to best partner with individual clients to optimize the HIV care experience” (36).

Although PHAs are becoming increasingly diverse, standards of care may not be keeping pace with their changing needs. Uphold and Mkanta (2005) explain that clinicians’ decisions “are heavily influenced by consensus panel clinical guidelines which recommend how often patients should visit their providers based on symptomatology, medication regimens, and the results of diagnostic tests” (1). However, there exist health disparities for sub-populations of PHAs. For example, despite their status as one of the fastest emerging risk groups in North America, women continue to “have poorer HIV outcomes than men, which is likely due to gender disparities in optimal utilization of HIV primary care services” (17), and there is a need to improve competency in addressing their primary care needs (18). As well, there remain challenges and inconsistencies in respect to care for co-infected and dual diagnosed PHAs (37-40).

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Positive Prevention Messaging (Connecting Care and Prevention)

Despite recommendations for physicians to incorporate ongoing prevention messages into care visits for PHAs, few clinicians provide prevention messages past initial diagnosis consultation (41). Gardner et al. (2008) argue “infrequent discussion with patients with HIV represents a missed opportunity, and physicians should be encouraged to include discussion of prevention as a standard of care” (42)

- routine health visits provide opportunities to target secondary prevention with the advantages of repeated contacts over time, establishment of trusted relationships, and using health care providers as expert sources of health information (41).
- there is a need for targeted physician training on the importance of HIV transmission prevention counselling, increasing the duration of patient visits, and improving strategies for generalist-specialist co-management of HIV-infected patients (43).

Currently, HIV providers may lack the training needed to broach emerging and sensitive topics. For example, in a study of HIV care providers by Drainoni, Dekker, Lee-Hood et al (2009) participants indicated “they felt more comfortable in discussing sexual risk behaviours than drug use risk behaviours, and less comfortable discussing the relationship between sexual risks and substance use” (19).

The Unique Needs of Rural PHAs—What Health Professionals Need to Know

Healthcare providers in rural and rural/urban care setting need to familiarise themselves with the unique needs of rural PHAs, understanding of health and health seeking in rural communities, and access barriers resulting from geographic isolation (21). Of particular concern for rural PHAs are increased levels of depression (22), multidimensional stigma (23, 24), and higher rates of mortality (25). With higher rates of injection drug use and experience of incarceration, many rural PHAs constitute a complex group which many health providers are not familiar and/or comfortable working with (20). Yannessa, Reece and Basta (2008) conceptualized stigma faced by rural PHAs in four themes: (1) staff of medical referral sources stigmatizing against rural dual-diagnosis clients, (2) physicians stigmatizing against rural dual-diagnosis clients, (3) medical specialists stigmatizing against rural dual-diagnosis clients, and (4) client-perceived stigma (23).

Lifson et al (2009) identify nurses and other health professionals in rural settings as an important training priority, and suggest they “can play an important role in education, prevention, screening, and clinical care for HIV and other STIs” (26). Mullins (2009) found rural nurses want more (and ongoing) education about HIV/AIDS, risk for transmission of HIV/AIDS in the work setting, prison nursing, fear of transmission of HIV/AIDS, stigma, confidentiality, and ethical and moral issues (20).

Connecting Care—Meeting Changing Health Needs

A recent Canadian study has suggested “new approaches are needed to coordinate multisectoral care and enhance the access and delivery of HIV rehabilitation health services to better meet the disablement needs of people living with HIV in Canada” (4). Currently, little is known about HIV knowledge and expertise in allied health professions. Unfortunately, a recent study of Canadian

rehabilitation professionals found that 79% rated themselves as “not at all knowledgeable” in areas of HIV related policies, and only 27% stated that they had received any training in HIV and AIDS as part of their professional health degrees (7). If PHAs are to receive holistic care which adequately meets their changing needs, education through a trans-disciplinary health approach should be provided to all healthcare, allied, and mental health professionals.

Additional Resources for Healthcare Providers

CATIE & CANAC AIDS Resources for Nurses

<http://www.catie.ca/eng/nurses/index.htm>

The American Academy of Family Physicians - “Recommended Curriculum Guidelines for Family Practice Residents: HIV Infection/AIDS”

<http://www.aafp.org/>

Association of Nurses in AIDS Care

<http://www.nursesinaidscare.org/i4a/pages/index.cfm?pageid=1>

BC Centre for Excellence in HIV/AIDS

<http://www.cfenet.ubc.ca/index.php>

International AIDS Society

<http://www.iasusa.org/pub/index.html>

National HIV/AIDS Clinicians' Consultation Center (on-line resources)

<http://www.nccc.ucsf.edu/index.html>

AIDSinfo

<http://www.aidsinfo.nih.gov/>

Factors that May Impact Local Applicability

Jurisdictions Studied

Individual studies reviewed were all conducted in western contexts (primarily United States), and found in English language journals. Jurisdictional issues with respect to rural and urban settings emerged as important, and are discussed above.

Populations Assessed

Most of the literature on attitudes and training needs of HIV health providers came out pre- HAART and focus on issues of homophobia and transmission. The literature has not yet adequately responded to the care needs of a changing HIV population in the post HAART era.

Resources needed

While clinician training is a complex and resource intensive undertaking, the recommendation to provide professional ethics and cultural competency for practitioners may be feasible given that this type of training is often available in community settings.

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Health care setting characteristics

There remain ongoing debates about who should be treating PHAs, and in which settings. It does appear that many PHAs are receiving care from generalist physicians in community settings, who are able to provide effective care if provided the needed knowledge and/or have adequate experience.

What We Did

To identify literature, we hand searched all systematic reviews and protocols from the HIV/AIDS Cochrane review group, the 'HIV' and 'acquired immunodeficiency syndrome' topic categories on www.health-evidence.ca and several categories¹ on www.rxforchange.ca. We also searched the Cochrane Library, Medline, Embase, Database of Abstracts of Reviews of Effects using standardized search terms (healthcare workers OR health care professional OR healthcare professional OR healthcare provider OR health care provider). We also conducted related articles searches in PubMed using key articles that we located through our other search efforts.

These hits were reduced down to n= 67 articles, which were further reduced down to 4. As there are few systematic reviews in the area, and due to the complex and re-emerging nature of the issues explored, a comprehensive hand search on ISI Web of Knowledge proved most fruitful. The final number of studies included were n=57.

¹under the Professional category, hand searched 'education meetings', 'patient mediated', 'audit and feedback', 'professional – other' categories. Under the Organizational category, hand searched 'revision of professional roles – nursing', 'revisions of professional roles – general', 'changes to setting/site of delivery service', 'clinical multidisciplinary teams', 'continuity of care', 'formal integration of services' and 'organizational (provider – other)