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Nursing Practice to Support People Living With HIV With Antiretroviral Therapy Adherence: A Qualitative Study

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Abstract

Antiretroviral therapy (ART) management is a core competency for nursing practice in HIV as documented in best practice guidelines. Nurse-led interventions are effective in fostering ART adherence in people living with HIV (PLWH). However, these evidence-based interventions and professional expectations pertaining to these guidelines do not reflect current practice, nor do they expose the challenges faced by nurses. We conducted a qualitative exploratory study with nurses to explore their professional practices in the context of ART adherence. Sixteen nurses participated in data collection: nine in a focus group and seven in individual interviews. We identified four themes: building a therapeutic relationship with PLWH as a foundation of HIV nursing care; nursing activities to support PLWH with ART adherence; challenges faced by nurses providing ART-related care; and resource mobilization supporting nursing practice development in ART management and HIV care. Aspects of HIV nursing practice need to be strengthened to enhance best practice care, such as managing powerlessness in the context of ART nonadherence.

Key words: exploratory qualitative research, HIV, medication adherence, nurses, professional practice and role

The world has committed to ending the HIV epidemic by 2030 (Joint United Nations Programme on HIV/AIDS, 2014). To reach this objective, a target of 90-90-90 by 2020 is proposed: (a) 90% of all people living with HIV (PLWH) will know their HIV status; (b) 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy (ART); and (c) 90% of all people receiving ART will attain viral suppression. ART adherence is essential to achieve viral suppression and for improving health outcomes in PLWH, including preventing and controlling HIV, avoiding resistance, and reducing HIV-related deaths (Joint United Nations Programme on HIV/AIDS, 2016; 2017).

Despite medical advances in ART that have facilitated treatment management over the years (e.g., fewer pills to take, fewer side effects), ART adherence remains a complex health behavior. What matters is "not just the pills" (Barroso, Leblanc, & Flores, 2017, p. 462). Pill taking has to be balanced with a broad range of multilevel health and social needs that are critical to successful ART adherence, from basic biologic and physiologic needs, such as having shelter or access to food, through security, self-esteem, and cognitive needs to self-actualization and interpersonal needs (Barroso et al., 2017).

Nurses play pivotal roles in HIV care (Dumitru, Irwin, & Tailor, 2017; Tunnicliff, Piercy, Bowman, Hughes, & Goyder, 2013). ART management (i.e., initiation, support, and follow-up) is one of the core competencies for nursing practice in HIV, as documented in international best practice guidelines (Canadian Association of Nurses in HIV/AIDS Care, 2013a; 2013b; Dumitru et al., 2017; Relf et al., 2011). Guidelines encompass recommendations that help to describe professional expectations, knowledge, and competencies that nurses should have in order to provide evidence-based care supporting both ART adherence and their own decision making (see Table 1 for the summary of Canadian Best Practice Guidelines). Moreover, there is an

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Table 1. Canadian Association of Nurses in HIV/AIDS Care (2013a) Best Practice Guidelines—Summary of Recommendations

Practice recommendations
1. Nurses incorporate specific skills and knowledge about HIV infection and AIDS into everyday practice.
(a) Nurses incorporate knowledge of maternal and child health, elder care, addiction care, harm reduction, and the impact of stigma.
2. Nurses have knowledge of the impact of social determinants of health on PLWH.
(a) Nurses consider the holistic needs of patients when delivering care.
3. Nurses practice reflectively to maintain continued awareness of current and evolving perceptions, attitudes and biases, values and beliefs when working with PLWH.
(a) Nurses provide care in keeping with the principles of cultural safety.
4. Nurses inform patients of available treatment options for HIV infection on an ongoing basis.
(a) Nurses provide education to patients on side effects, importance of adherence, and scheduling of medications.
(b) Nurses ensure that patients are partnered with a primary care provider who can provide treatment.
5. Nurses have an understanding of the efficacy of ART in treating HIV infection.
(a) Nurses have knowledge of side effects and drug-to-drug interactions associated with ART.
(b) Nurses understand the importance of adherence in minimizing resistance and an awareness of strategies that can be used to support adherence.
6. Nurses have knowledge of the common opportunistic infections that are a result of a declining $CD4^+$ T-cell count.
(a) Nurses are knowledgeable about treatment options for common opportunistic infections.
7. Nurses interpret the lab tests that are specific to an AIDS diagnosis, including $CD4^+$ T-cell count, $CD4^+$ T-cell fraction, and viral load.
8. Nurses interpret diagnostic tests for HIV antibody testing and provide informed care to persons who present for HIV testing.
9. Nurses are knowledgeable about the process of providing HIV testing.
(a) Nurses understand factors that make persons vulnerable to HIV infection.
(b) Nurses understand how to offer HIV testing to vulnerable clients.
(c) Nurses understand the process of HIV testing either by point of care or by ELISA.
10. Nurses understand the importance of pre- and post-test counseling for HIV testing.
(a) Nurses can explain the difference between nominal, nonnominal, and anonymous testing
(b) Nurses support clients through the process of partner notification.
(c) Nurses help clients get appropriate follow-up, including support groups and primary care.
11. Nurses identify clients who are at risk for HIV infection and provide prevention education.
(a) Nurses incorporate the principles of harm reduction into care of vulnerable clients.
(b) Nurses identify gender, ethnicity, lifestyle, and socioeconomic issues that put clients at risk for HIV infection.
12. Nurses have an understanding of how to prevent vertical transmission for pregnant women living with HIV.
(a) Nurses have knowledge of the antiretroviral options used in pregnancy and during labor.
(b) Nurses understand the issues that this often-marginalized population confront and how to support women living with HIV throughout pregnancy.

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Table 1. (*continued*)

Education recommendations
13. Nurses understand that not all Aboriginal communities are ready to face issues related to HIV and build HIV awareness and readiness in Aboriginal communities.
(a) Nurses provide quality end-of-life care to PLWH dealing with end-stage cancer or irreversible AIDS-defining illnesses.
14. Schools of nursing will integrate principles of HIV care into undergraduate curriculum.
(a) Undergraduate curriculum will support evidence-based training and practice for HIV.
15. Nurses will incorporate knowledge of HIV into everyday practice and continuing education.
16. Nurses working in the field of HIV have access to formal training and education to achieve competencies in practice and standards of practice in HIV.
Organization and policy recommendations
17. Nurses advocate with policy makers for improved access to HIV care and treatment, including ART, as part of holistic, primary health care for all populations.
18. Health care organizations have policies that reflect uniform approaches to management of PLWH in all facilities, including seamless coordination of transfer and discharge between facilities for PLWH.
19. Health care organizations provide mechanisms of support for nurses through orientation programs and ongoing professional development opportunities regarding care and treatment options for HIV.
20. Nursing best practice guidelines can only be successfully implemented with adequate planning, resources, organization, and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:
• Assessment of organizational readiness and barriers to implementation.
• Involvement of all members (whether in direct or indirect support functions) who will contribute to the implementation process.
• Dedication of a qualified individual to support needed education and implementation processes.
• Opportunities for reflection on personal and organizational experiences in implementing guidelines.

Note. ART = antiretroviral therapy; ELISA = enzyme linked immunosorbent assay; PLWH = people living with HIV.

increasing evidence of effective nursing interventions to enhance ART adherence in PLWH. For example, evidence from a systematic review ($n = 10$ primary studies) suggested that nurse-led interventions (such as tailored counseling, education, and reminders) could enhance medication adherence for people living with chronic conditions, including PLWH (Camp, Rompaey, & Elseviers, 2013). However, the guidelines cited above do not necessarily reflect current practice, nor do they expose the challenges of translating the evidence-based care (e.g., Camp et al., 2013) into practice Camp et al. (2013) into practice. Evidence is lacking on (a) the current nursing practice (e.g., nursing roles and activities) to promote ART adherence in PLWH, (b) difficulties and challenges that nurses encounter in the context of ART adherence, and (c) strategies nurses use to overcome the challenges they face in everyday practice.

We aimed to fill this gap and explore nursing practice to help PLWH adhere to ART, as well as the challenges faced by nurses. Our study represents an initial phase of a wider project to develop and evaluate an education intervention for nurses working with PLWH in Quebec, Canada. Findings from our study will inform development of an intervention to support nursing practice in HIV care.

Methods

The report of our qualitative study was informed by the Consolidated Criteria for Reporting Qualitative Studies (Tong, Sainsbury, & Craig, 2007), as shown in Table 2.

Design

We used a qualitative exploratory design (Deslauriers, & Kérisit, 1997) to investigate aspects of nursing practice related to ART adherence, including experiences of providing care to PLWH and supporting them with ART adherence, as well as barriers and facilitators to practice development in the field.

Table 2. Consolidated Criteria for Reporting Qualitative Studies (COREQ): 32-Item Checklist

No.	Item	Description
Domain 1: Research team and reflexivity		
Personal characteristics		
1.	Interviewer/facilitator	The Student-Research, G.R.
2.	Credentials	G.R.—Student-Researcher—MSc, PhD Candidate (Nursing)
		L.R.—BSc (Hons), PhD (Nursing)
		J.C.—PhD (Nursing)
		M.-P.G.—PhD (Community Health)
		J.P.—MSc (Nursing), PhD Student (Nursing)
3.	Occupation	G.R.—PhD Candidate (Université Laval); Research Coordinator (Research Centre in Montreal, Canada).
		L.R.—Research Fellow (University of Otago); Associate Professor (Université de Montréal in Canada); Hon. Research Fellow (University of Melbourne)
		J.C.—Full Professor (Université de Montréal in Canada); Researcher and Chair's Holder (Research Centre in Montreal, Canada)
		M.-P.G.—Full Professor (Université Laval), Researcher and Chair Holder (Research Centre in Quebec City, Canada)
		JP—Professor (Université du Québec à Rimouski in Canada), PhD student (Université Laval)
4.	Gender	Four female-identifying and one male-identifying (interviewer, female-identifying).
5.	Experience and training	G.R.— has experience in qualitative research (animating a focus group with PLWH; conducting semistructured interviews with WLWH; and analyzing qualitative data in different projects).
		L.R.—is an early career researcher with expertise in qualitative research, including refugee health services research and access to primary health care for vulnerable populations.
		J.C.—has specific expertise in developing and evaluating Web-based nursing interventions for PLWH in the context of ART adherence.
		M.-P.G.—has specific expertise in implementation science, mixed methods, knowledge-transfer, evidence-based decision making, and evaluation of ICTs.
		J.P.—has clinical experience with PLWH, experience in behavioral change interventions and as a motivational interviewing trainer.
Relationship with participants		
6.	Relationship established	G.R. conducted focus group and interviews and had relationships with a majority of participants prior to this study; she was directly involved in participant recruitment and data collection. J.C. and J.P. had various relationships with participants.

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Table 2. (*continued*)

No.	Item	Description
7.	Participant knowledge of interviewer	G.R. introduced herself to participants as a PhD Nursing Student at Université Laval and as a Research Coordinator, with many years of experience in developing and evaluating interventions to support ART adherence.
8.	Interviewer characteristics	Member of HIV mentoring program interested in interventions targeting ART adherence among PLWH and nursing practice in that context.
Domain 2: Study design		
Theoretical framework		
9.	Methodological orientation and theory	Qualitative exploratory design; taking into account nurses' descriptions of current practices to support PLWH in ART adherence, as well as challenges encountered; inductive thematic analysis.
Participant selection		
10.	Sampling	Focus group: Nurses enrolled as part of participation in a meeting held by HIV mentoring program. Nurses were approached based on convenience sampling strategy (i.e., focus group was planned in advance as an "activity" that was part of 1-day meeting).
		For interviews: A combined maximum variation strategy and purposive sampling approach used to select nurses for interviews. A heterogeneous sample was assembled with variation in terms of nursing practice settings (e.g., clinic, academic/research, management); work locations (e.g., various levels of deprivation of HIV clientele); and nurse profiles (e.g., gender, professional qualifications, current or past experience in HIV). Purposive criteria included nurses who were French speaking and interested in reflecting on their practice with PLWH.
11.	Method of approach	Potential participants were contacted by e-mail and telephone.
12.	Sample size	16 participants
13.	Nonparticipation	A number of nurses did not respond to invitation to participate in the research, and some declined invitation given the nature of their practice (e.g., not working with PLWH) or on the basis of availability (lack of time, retired). No participants withdrew from the study.
Setting		
14.	Setting of data collection	Conference room (10 participants), G.R.'s office (1 participant), telephone (two participants), and workplace (three participants). Participants indicated preferred location for an interview, according to their convenience.
15.	Presence of nonparticipants	No.
16.	Description of sample	16 nurses participated in the study; most worked in specialized outpatient HIV care clinics located in university-affiliated hospitals and private medical centers. Two worked in a university setting and one worked in a public health organization. Most were female (13). Participants were experienced with PLWH care, with the majority having more than 12 years clinical practice experience. Different nurses' roles were represented: clinician ($n = 6$), research assistant ($n = 2$), professor and researcher ($n = 2$), public health intervener ($n = 1$), and manager ($n = 1$).

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Table 2. (*continued*)

No.	Item	Description
Data collection		
17.	Interview guide	Focus group and interview topic guide covered the same questions/topics. We particularly invited nurses to reflect on concrete examples from their practices so as to provide rich illustrations of the scope of practice and different ways in which they fostered ART adherence for HIV patients.
18.	Repeat interviews	No repeat interviews undertaken.
19.	Audio/visual recording	Audio recording.
20.	Field notes	No field notes taken during or after interviews or the focus group. A reflexive diary of the analysis was maintained by G.R., providing an audit trail of the analysis process and its emerging categories and also promoting reflexive research practice.
21.	Duration	Focus group lasted 1 hr and interviews were an average duration of 45 min (range, 37–53 min).
22.	Data saturation	Data saturation obtained at two different points: during data collection and during data analysis. At the moment of data collection, G.R. ended interviews because no new data were emerging. G.R. and L.R. worked together throughout the data analysis process to identify any new emerging themes related to our scope of enquiry, which was discussed with the wider team at regular intervals.
23.	Transcripts returned	No participant received focus group or interview transcripts. The only opportunity to provide feedback was at a regional conference bringing together nurses interested in HIV nursing care.
Domain 3: Analysis and findings		
Data analysis		
24.	Number of data coders	Coding was led by G.R. and involved comparison across transcripts. Descriptive codes were organized into higher-order thematic categories.
25.	Description of the coding tree	A list of codes was developed iteratively, and each code was defined.
26.	Derivation of themes	G.R. and L.R. independently assessed the descriptive value of the categories against the transcripts. Other team members (J.C., M.-P.G., J.P.) were involved in discussions of preliminary thematic findings and throughout the data interpretation process.
27.	Software	NVivo Pro Version 11
28.	Participant checking	Not done
Reporting		
29.	Quotations presented	Illustrative quotes support presentation of findings while participant anonymity is respected. A clear demarcation established between exemplars belonging to participants from the focus group and those from interviews.
30.	Data and findings consistent	The findings were strongly supported by the data.
31.	Clarity of major themes	Major themes were clearly identified.
32.	Clarity of minor themes	Minor themes clearly identified and related to major themes.

Note. ART = antiretroviral therapy; ICTs = Information and Communication Technologies; PLWH = people living with HIV; WLWH = women Living with HIV.

Sample

We used a combination of sampling approaches to select nurses to take part in a focus group and semistructured individual interviews. For the focus group, we used a convenience sampling strategy to recruit nurses at one of the quarterly meetings of the HIV mentoring program, which brings together expert nurses from health care organizations across Canada. These daylong meetings provide HIV specialist nurses with education and mentoring and allow them to critically reflect on the challenges and opportunities of practice with PLWH. For the semistructured individual interviews, we used a combined maximum variation strategy and purposive sampling approach to select participants (Patton, 2015). A maximum variation strategy ensured breadth (heterogeneous sample) in terms of nursing practice settings (e.g., clinic, academic/research, management), work locations (e.g., variable level of deprivation of PLWH clientele), and nurse profiles (e.g., gender, professional qualifications, current or past experience in HIV). All nurses (target for the focus group and the interviews) were French speaking. We invited nurses to participate in interviews via e-mail. We sent the invitation letter through the HIV mentoring program contact list. We systematically excluded nurses who had participated in the focus group for the semistructured individual interviews.

Data Collection

The first author conducted a 1-hr focus group (in a meeting room) with nine nurses involved in the HIV mentoring program. The development of the interview topic guide was inspired by a research project on the experiences of PLWH who participated in a self-management Web-based intervention to support ART adherence (Côté, Rouleau, Ramirez-Garcia, & Bourbonnais, 2015). Topics for discussion were formulated to answer the research objectives, including challenges faced by nurses in practice with PLWH related to ART adherence, as well as strategies to overcome challenges, promote ART adherence, and empower patients to self-manage their treatment. The focus group allowed interactions between participants and fostered sharing ideas and perspectives on the topic of ART adherence (Patton, 2015).

The semistructured interviews lasted 45 min on average (range, 37–53 min). For practical reasons, we conducted interviews in different settings: three in the first author's office (two by telephone and one was face to face), one in a meeting room, and three in nurses' workplaces. The focus group and interviews covered the same topics (see Topic Guide, Table 3). During the focus group and the interviews, we particularly invited nurses to reflect on concrete examples from their practices so as to provide rich illustrations of the scope of practice and the different ways in which they fostered ART adherence in PLWH. We digitally audiorecorded the focus group and all interviews with participant consent and fully transcribed the recordings.

Each participant completed a short sociodemographic questionnaire about the following information: age group, gender, work settings, city, highest education level completed, work status (full time, part time), and years of experience.

Ethics Approval

The project received ethics approval from the Institutional Review Board of the University of Montreal Hospital Center [CE 15.345]. Participation in the study was voluntary, and written consent was obtained prior to conducting the focus group and interviews.

Data Analysis

Qualitative data analysis followed an inductive, iterative process informed by Tesch (1990) and Paillé and Mucchielli (2016). We thematically analyzed narratives from the focus group and semistructured interviews (Paillé & Mucchielli, 2016). Coding was led by the first author and involved comparison across transcripts. Descriptive codes were organized into higher-order thematic categories. Two authors (G.R. and L.R.) independently assessed the descriptive value of the categories against the transcripts. The other team members (J.C., M.-P.G., J.P.) were involved in discussions of preliminary thematic findings and throughout the process of interpreting the data. A reflexive diary of the analysis was maintained by the first author, providing an audit trail of the analysis process and its emerging categories and also promoting reflexive research practice. NVivo Software Pro 11 was used to facilitate data management and organization. Quality criteria (i.e., credibility, dependability, transferability, confirmability) for qualitative research were used to ensure rigor across all stages of the research (Lincoln & Guba, 1985; Sandelowski, 1986). Debriefing sessions were held with the research team to discuss emerging trends from data analysis and support interpretation of the findings. Preliminary results were also disseminated and discussed with a sample of HIV nurse specialists for validation through a regional conference.

Results

Participant Characteristics

Sixteen nurses participated in the study. Most participants worked in specialized outpatient HIV care clinics

Table 3. Examples of Questions Included in the Focus Group and Interview Topic Guide

• How would you describe your approach to a patient who is starting ART? Who is involved in planning and managing treatment? What are common difficulties faced by PLWH regarding ART and adherence?
• How is your nursing follow-up carried out in terms of providing support for PLWH in taking ART?
• If we had to develop training on nursing assistance for PLWH in terms of providing support in their ongoing treatment, what would be some essential elements to include?
• What has proven helpful in your practice for encouraging your patients to take their medication?
• Are there any situations in which you have had difficulty supporting your patients in taking their medication? If so, could you please tell us more about these situations?
• At the very beginning of your practice with HIV clients, what helped you or could have helped you feel confident in your ability to support clients in taking their medication?

Note. ART = antiretroviral therapy; PLWH = people living with HIV.

located in university-affiliated hospitals and private medical centers. Two participants worked in a university setting and one worked in a public health organization. Participant sociodemographic characteristics are presented in Table 4.

Participants referred to do their practices holistically in terms of HIV nursing care, with adherence being one of the many facets of their roles with PLWH. Results from qualitative data analysis led to the identification of four core themes: (a) building a therapeutic relationship with PLWH in the context of vulnerability as a foundation of HIV nursing care, (b) nursing activities to support PLWH with ART adherence, (c) challenges faced by nurses providing ART-related care to PLWH, and (d) mobilization of resources to support nursing practice development in ART management and HIV care.

Building a Therapeutic Relationship With PLWH in the Context of Vulnerability as a Foundation of HIV Nursing Care

The creation of a therapeutic relationship with PLWH represented a foundation for nursing interventions, as illustrated in this exemplar: "Of course, something happens in terms of the [therapeutic] relationship with patients. It's the foundation of everything else" (Interview, Female Nurse 4). Participants emphasized relational components essential for building trust with patients. These included, in particular, the establishment of a solid foundation for open and honest communication that encompassed active, respectful, and nonjudgmental listening; being open to patient experiences; and the importance of being centered on PLWH needs. The importance of promoting acceptance, as well as a helpful and nonpunitive approach toward PLWH, was reflected in these two exemplars: "I think that it's important for patients not to feel rejected, but accepted, illness and all" (Interview, Female Nurse 2).

> You're allowed to say it [if the patient forgets the medication] … "I'm not here to punish you, I'm here to help. If something doesn't work, you don't take the meds, tell me; we'll look at it together. I'm here [as a nurse] to help you." I think this is really important because, if not, people feel a bit stuck. (Focus Group, Female Nurse 3)

As described by this participant, a lack of listening to and/or involvement with patients can weaken the therapeutic relationship and may even exacerbate feelings of exclusion, which can ultimately threaten a clientele whose trajectories are already often marked by experiences of social isolation and stigma.

> But [this] is more often where it plays out, it's in the relationship, the support … listening … [patients] deal more with the frustration of not being heard than with their own side effects. All of this is interconnected, but when they come to talk about how they feel and what you tell them makes them feel worse [due to a lack of listening]. (Interview, Female Nurse 3)

The creation of a therapeutic relationship relied on the nurse's ability to focus on the patient and take into account his/her unique trajectory to avoid the reproduction of relational processes that may further vulnerability and exclusion. The exemplar below illustrates a personal approach that takes into account this singularity in establishing interpersonal relations with reference to patient cultural specificities.

> It's different from one patient to the next. A positive narrative with one patient will not necessarily have a positive effect with another patient … You can't talk to a patient from Africa in the same way that you would talk to a drug addict to get him or her to take the required medication. It's completely different. You really need to have that capacity for clinical judgment, to adapt what you say to the person in front of you. (Interview, Male Nurse 2)

Table 4. Participant Sociodemographic Characteristics

Characteristics	Nurses (n = 16)
Gender, *n* (%)	
Female	13 (81)
Male	3 (19)
Age group, years, *n* (%)	
55–65	2 (12)
45–54	6 (38)
35–44	5 (31)
25–34	3 (19)
Education levels, *n* (%)	
Community college	2 (12.5)
Bachelor's	9 (56)
Master's	3 (19)
PhD	2 (12.5)
Nursing practice domain, *n*	
Clinical practice	11
Clinical research	2[a]
Research-teaching (academic/university)	2
Public health	1
Management	1
Nurses' role, *n*	
Clinician	11
Research assistant	2[a]
Professor and researcher	2
Public health intervener	1 (6)
Manager	1 (6)
Years of experience as HIV nurse (mean)	0.7–25 (12)
Years of experience as practicing nurse (mean)	4–35 (21)

[a] One participant worked as a clinician and research assistant and therefore appears in both domains (i.e., clinical practice and clinical research).

As mentioned by participants, PLWH were often exposed to experiences of social exclusion and stigma related to HIV that could impact the way that nurses provided care and built relationships with this clientele. The context of vulnerability reinforces the need to adopt a humanistic nursing practice in which relationships are based on the acceptance of PLWH so as to foster trust, which is fundamental to the process of supporting PLWH in their entire care journey, including ART adherence.

Nursing Activities to Support People Living With HIV With Antiretroviral Therapy Adherence

This theme encompassed nursing activities to support PLWH with respect to ART adherence, declined in three interconnected and interdependent subthemes: (a) assessing an array of dimensions related to PLWH health; (b) teaching and sharing knowledge about HIV, ART, and skills to promote treatment adherence; and (c) coordinating care and connecting PLWH with social and health-related resources. Nurses evaluated an array of dimensions of PLWH health, which allowed nurses to identify needs that could be addressed in collaboration with health and social resources. Education interventions were led by nurses: they provided information, suggested practical tips, and offered advice to manage ART and side effects.

Assessing an array of dimensions related to people living with HIV health. Throughout their experiences, nurses reported assessing an array of dimensions related to PLWH health: biomedical (e.g., ART intake and adherence, side effects, symptoms), psychosocial (e.g., social support, socioeconomic status), and PLWH symbolic representations of HIV and ART.

Assessment of ART-related side effects in PLWH was frequently mentioned by nurses. "Every time we meet with patients, we evaluate the side effects" (Interview, Female Nurse 1). Nurses also evaluated ART intake (e.g., taking with or without food, posology, missed doses, schedule) and the impact of medication on patient daily routines. When nurses faced PLWH who did not adhere to their ART, they evaluated the reasons that might explain nonadherence, such as mental health (e.g., depressive symptoms, psychological distress), substance use, level of motivation, side effects, living conditions, and so on.

Participants explored symbolic representations relating to HIV and ART (e.g., beliefs, norms, attitudes, knowledge) with patients. Sometimes, PLWH had misconceptions and negative thoughts about HIV and ART based on the epidemic portrait of the early 1980s. Exploring these representations allowed nurses to "deconstruct the negative image that people have of

treatments" (Focus Group, Female Nurse 6) and provide the most up-to-date information.

> For 50-year-old men, their perception of HIV is stuck in the 1980s, it's the same story. When we talk to them about medication, they think of lipodystrophy, diarrhea. So: "What do you know about living with HIV? Do you know people who have HIV? What are their lives like?" And from there, they can be brought up to date. (Focus Group, Male Nurse 1)

Nurses also assessed available resources in terms of social support: "We need to be able to properly establish the psychosocial network so as to firmly anchor our approach" (Interview, Male Nurse 2). Finally, another major focus of nursing activity was on assessing social determinants of health that had an impact on the patient's ability to self-manage treatment and cope with the range of challenges related to living with HIV. These determinants included, among others, patient socioeconomic status, availability of insurance coverage, housing conditions, and access to food. Addressing the range of social needs of PLWH was a fundamental aspect of HIV nursing care.

> If you don't take care of the social aspect, you can't deal with your HIV-positive person because you're out of luck if you haven't figured out what the problem is … The whole range of social problems: financial problems, family problems, finances; you're faced with housing, nutrition, lifestyle, minimal stability issues, and more. (Interview, Female Nurse 5)

From nurses' experiences, supporting PLWH in ART adherence went beyond an assessment of medication intake; it also encompassed the psychosocial dimensions of PLWH health. The assessment was an entry point from which it was possible for nurses to identify PLWH's biopsychosocial needs in order to subsequently address them. Assessment appears to be transversal with respect to the other nursing activities that follow.

Teaching and sharing knowledge about HIV, antiretroviral therapy, and skills to promote treatment adherence. One of the essential roles reported by nurses working with PLWH involved knowledge sharing and teaching to keep PLWH informed about HIV and ART, to support the development of skills and agency, and to encourage them to pursue treatment. Nurses educated patients on these basic notions of HIV, including topics such as pathophysiology, prevention of transmission, ART action mechanisms, drug resistance, interactions with other medications and illicit substances, and possible side effects. Such information was imparted especially when providing a new diagnosis and during treatment initiation. Pharmacologic and nonpharmacologic advices (e.g., sleep, food) were offered to help with the management of side effects.

Teaching was also about building patient skills and capacities to foster treatment management and adherence. Participants described providing technical advice to facilitate ART integration into the daily routines of adult patients.

> Find a single daily action on the part of the patient where time is not of the essence. And now we're going to incorporate pill taking. For example, put the tablet next to the coffee machine, so that every morning, while sipping coffee, the person can take their pill. (Focus Group, Female Nurse 6)

When taking care of young children living with HIV, nurses had to find creative ways and tricks to help promote ART adherence:

> What will have a big impact on adherence is to make sure that they can swallow the tablets, depending on the size of the pills. We test with other drugs, such as vitamin C, that are close in size to their pill. They'll try to take them for 2–4 weeks. So, if they're able to swallow their vitamin C, it gives them an idea of what's in store for other drugs (antiretrovirals). The test "pills" can also be mini M&Ms, which are smaller still. (Focus Group, Female Nurse 4)

Nurses relied on general principles to guide their teaching: assessing a patient's prior level of knowledge, making knowledge accessible, and validating understanding. While taking these steps, they also assessed literacy levels and patient interest in education material such as visual support display.

> Pamphlets… mmm… our patients are often, though not always, barely literate. Documents and pamphlets end up in the garbage. For some patients, yes, I'll leave them documentation. I'll tell them to read all this. But it's more in the form of one-on-one teaching. This is what I did with patients who were beginning medication, I made a chart for them, drawing the pill, to explain to them that such a pill in their Dispill is that one. That one must be taken with food. (Interview, Female Nurse 1; *Note:* Dispill™ is a patented, cold-sealed, multidose medication packaging system; CareRx Integrated Pharmacy, 2015).

Teaching and sharing knowledge represented a major nursing activity in which the prior knowledge and literacy of PLWH were taken into consideration. Nurses mentioned offering their expertise by providing information and practical advice, with the intention of supporting and facilitating ART adherence among patients.

Coordinating care and connecting people living with HIV with social and health-related resources. Considering the array of dimensions related to the health of PLWH, nurses needed to work in collaboration with providers from the health, social, and community sectors. In this exemplar, the nurse asked a community intervener with expertise in caring for PLWH from the Caribbean to help him learn how to adopt a culturally sensitive approach: "I brought in a community

intervener who works with that clientele. It helped me a lot" (Interview, Male Nurse 2). Nurses described playing pivotal roles in coordinating care and services for PLWH through networking activities with social- and health-related resources and enabling access to a range of services (e.g., community organizations, pharmacies, Quebec public health insurance) to meet the needs of patients and facilitate ART management.

> Regarding access to medicine, access to care. Well, everything pertaining to coordinating all the things they need…. A patient who's broke can't afford drugs. He's homeless. [We do] everything we [can] to try to help facilitate the care processes and their journey. (Interview, Female Nurse 5)

Connecting PLWH with resources also meant, for this nurse, to support patients by going with them to resources to help establish first contact and promote access to services.

> She came in the winter, wearing summer shoes; she was pitiful. I told her, "Get in the car." At least the doctor saw her. "I'm going to take you home. We'll go via the pharmacy." You know, I went with her. (Interview, Female Nurse 5)

These coordination and networking activities were essential to help PLWH connect with services that met their needs.

Challenges Faced by Nurses Providing Antiretroviral Therapy–Related Care to People Living With HIV

In the domain of ART adherence for PLWH, challenges experienced by nurses have to be understood in a broader context, as illustrated by these subthemes: (a) perceived nursing roles at the interface of social and biomedical boundaries, (b) misalignment between nurses' expectations and roles in promoting ART adherence with PLWH's medication intake, and (c) sociopolitical determinants affecting access to health care resources and services. These themes highlight the fact that nurses experienced complex and multidimensional challenges affecting their practices and PLWH themselves.

Perceived nursing roles at the interface of social and biomedical boundaries. This subtheme covered the scope and nature of nurses' perceived roles in providing care to PLWH and promoting ART adherence. Nurses (mainly those with postgraduate studies, i.e., interviews of Females 3 and 4) adopted critical stances with respect to roles that fell within their scopes of practice and that they could perform, deepen, and actively pursue, such as patient advocacy and more in-depth assessments.

> The fact of empowering the person so that he or she will hammer home to the physician, "No, it's an undesirable effect, it's intolerable for me, and I want to change medications." It should be the nurse who further encourages clients to adopt such a position. (Interview, Female Nurse 4)
>
> You won't make the diagnosis, but you'll do a more in-depth assessment … When someone tells us about a difficulty related to side effects or treatment, well, to be able to offer solutions is key. (Interview, Female Nurse 3)

The nature of nursing activities carried out in the HIV care context, including ART adherence, was seen in terms of its biomedical character. This participant said that defining the nursing role in regard to medical practice overshadowed professional autonomy and thus impacted the deployment of a full scope of nursing practices.

> When working in HIV clinics, it's very biomedical …. And often the nurse will fulfill functions such as … a little bit of education … testing…. administering medication, following-up on lab results, but it's still very defined with respect to the medical practice. You always have a supporting role with respect to the medical practice versus the nurse being trained to be fully autonomous. (Interview, Female Nurse 3)

For this same nurse, autonomy was perceived as the nurse's capacity to carry out activities conferred to her/him and to take charge of caring for a patient, such as undertaking complex health assessments, without referring to other professionals. "Ok, I evaluated you [the patient], but I think that there's around a 50% chance that I, as a nurse, in my scope of practice, I'm able to take charge. And no, I don't have to refer the patient" (Interview, Female Nurse 3).

For many participants (e.g., Interviews with Male nurse 1, Female Nurses 2, 3, and 5), it was also a question of a nurse's capacity to act outside of the biomedical boundaries to engage in the social nature of nursing practice. For this participant, the social dimension of nursing care was fundamental. "It's all these resources [intended to foster ART financial access], finally by default, with time, you get to know more…. Social knowledge, the social aspect, is our premise in absolutely everything" (Interview, Female Nurse 5).

This social role was also apparent in the second theme, with the assessment of social determinants of health and conditions of access to ART, and with nurses' roles related to connecting PLWH to social resources.

Misalignment between nurses' expectations and roles in promoting ART adherence with people living with HIV medication intake. A number of nurses perceived patient motivation as one of the key elements of ART adherence. As such, some nurses would attempt to

identify, at times with difficulty, the patient's sources of motivation, in order to guide teaching and encourage adherence behaviors.

> I find that it goes with the motivation of [the] patient. I think that the most difficult part is to know what will motivate the patient to take his or her medication. It's all very well to [tell] them, "You've got to take your meds!" The challenge is how to pass on this knowledge while making them more aware of what's at stake. (Focus Group, Female Nurse 7)

Others believed, instead, that the disproportionately positive and optimistic perspective of professionals regarding medication could be harmful to relationships with patients, even if the primary intention was to help them pursue treatment. The risk of putting the emphasis on medication is to lose sight of a holistic, person-centered approach. It is as if adherence became an ideal normative goal and something that the nurse projected on the patient. "We often tend to make that projection, assuming that the person is observant and that things will go the way we would like them to" (Focus Group, Male Nurse 1).

Challenges arose when there was a misalignment between nurses' expectations regarding adherence, their roles in supporting it, and patient behaviors. Situations in which PLWH were not taking ART as prescribed or were even missing medical follow-up visits proved difficult for nurses with higher expectations. Consequently, nurses expressed incomprehension, discomfort, disappointment, powerlessness, and a sense of failure.

> I've worked with young people and I find the same type of block that I can't explain. Resistance to taking medication. And they don't come to the appointments. I really don't get it. We try to get them to talk it out. We would like to get them to see a psychologist, but they don't come to their appointments …. We're very, very powerless …. It's my conundrum as a nurse because I want to help but it's as if I just can't. (Interview, Female Nurse 1)

Some nurses took on part of the blame for nonoptimal adherence to ART and experienced self-doubt, which sometimes gave rise to feelings of guilt. "I ask myself what messages I've failed to get across to the patient. What could I have told you more to motivate you?" (Focus Group, Female Nurse, 2)

Motivational interviewing was an approach used and perceived as being beneficial when confronting situations in which the nurse and patient were not on the same page regarding adherence. Adopting this approach was, among other things, a way to respect the patient's rhythm, without imposing a direction that was not his or her own.

> Motivational interviewing is … so easy to understand, so fruitful for clinicians to use, because you no longer fight with the patient … You no longer need to force the issue. It's the patient who does the heavy lifting, and if he or she doesn't do it, well, that means the person just isn't ready yet. There's no point in fighting. (Focus Group, Male Nurse 1)

Sociopolitical determinants affecting access to health care resources and services. In the practice of providing HIV care, nurses said that they were confronted with complex policies and regulations as well as challenging conditions that could hinder or facilitate PLWH access to health care resources and services. Nurses must know these conditions and be aware of their impact on PLWH. Nurses had to find solutions to help PLWH access the resources that they needed to foster ART adherence and to promote health and well-being more broadly. In addition, nurses took into account the social conditions that could influence a patient's ART adherence pathway. For example, nurses organized health care delivery within a geographic area accessible to patients, while considering, in this case, the precarious social trajectories of homelessness.

> Often homeless people have their own habits. They'll make use of a certain resource, sleep in a particular shelter. They'll have a circuit. So, finding a pharmacy that's strategically located based on their circuit will encourage adherence because it's on their beaten path! (Interview, Female Nurse 1)

Participants provided some examples of policies and regulations that impacted access to and affordability of treatment for PLWH: provincial (Quebec) and national (Canada) immigration and refugee protection acts, public health insurance (Régie de l′assurance maladie du Québec [RAMQ]), private health insurance, and social assistance and solidarity programs. Nurses were confronted with the particularities and complexities of the regulatory processes that affected their practices with PLWH, especially because the applicability of the processes varied according to different patient profiles. Nurses reported not feeling sufficiently trained or prepared to deal with the questions of financial access to ART across different groups of PLWH having various precarious circumstances, as well as with complex regulations surrounding ART.

> I wonder, I'm not sure. Those who are on welfare, if they are reimbursed. I don't know the answer to that question … because I have a lot of immigrants and they're all medicated but they don't have the money. Surely there is help. They have social workers with them; surely, they have government help … This is my big question mark, and I don't know where to go for the information. (Interview, Female Nurse 2)
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> Where I've always wanted to go for more information is a tough nut to crack since it's really among people who aren't covered by RAMQ. On this side, it's so complicated, so difficult to be able to refocus then to know, ok, towards where … you know, what are

> the organizations that I can refer them to? What's the difference between the different immigration statuses, who is entitled to what kind of treatment, and in what types of institutions? (Interview, Male Nurse 1)

Nurses who cared for people living in precarious situations (e.g., refugees, immigrants, homeless, on welfare or social security) would benefit from having more support and resources, both for themselves and for their patients.

Nurses reported having to anticipate challenges lying ahead and use creative strategies to circumvent policies, laws, and programs, in order to foster access to treatment in this sometimes-restrictive sociopolitical context. "You get to a point where you're able to get a bit of a handle on the obstacles that patients are going to encounter" (Interview, Female Nurse 5).

> So, I'm with an immigrant patient who is not yet covered by RAMQ, and the person has to pay for all these laboratory costs in addition to medication. Well, I'm inclined to redirect them to research in this case to give them an opportunity that might be better for them. (Interview, Male Nurse 1)

Mobilization of Resources to Support Nursing Practice Development in Antiretroviral Therapy Management and HIV Care

Nurses mobilized resources (knowledge, networks, and strategies) to enhance the development of their practices with PLWH, as illustrated in these subthemes: (a) relying on different sources of knowledge, (b) networking with people and resources, and (c) reflexive nursing practice. All of these resources provided opportunities to support professional development. In addition, nurses drew on these resources to strengthen alliances with and between patients and other service providers and to further build capacity to overcome challenges of managing complex health and social situations pertaining to HIV nursing care.

Relying on different sources of knowledge. Nurses reported relying on different sources of knowledge to support their practices with PLWH, including biomedical/pharmacological, experiential, social, empirical, and theoretical knowledge. They also provided examples of different ways of learning.

Being knowledgeable about the biomedical and pharmacological aspects of HIV and ART allowed nurses to teach PLWH. Attending conferences in the field and consulting colleagues were means of developing and deepening biomedical and pharmacologic knowledge (Interviews with Female Nurses 1 and 5, Male Nurse 1). Nurses also drew on knowledge derived from PLWH's experiences of ART: "People who take medication are often best positioned to identify the things that really work" (Interview, Female Nurse 3).

Furthermore, considering the social dimension of nursing practice with PLWH, social knowledge was the key for most nurses, including knowledge of the sociopolitical determinants of health, community resources, and conditions of access to treatment. A few nurses considered using or used empirical knowledge derived from scientific articles as a source of knowledge on which to base nursing practice (interviews with Female Nurses 3, 4, and 5). Nurses also mentioned theoretical knowledge as a means of linking theory and clinical practice (Interview, Male Nurse 2), of understanding ART adherence behavior (Interview, Female Nurse 4), of developing cultural competencies (Interview, Male Nurse 2), and of considering a wide perspective of the person (i.e., PLWH and their families) when providing care (Focus Group, Female Nurse 8).

All of these sources of knowledge were essential supports for nursing practice in the context of HIV care. Many nurses also consulted colleagues (e.g., nurses, physicians, pharmacists, social workers) as a means of learning and to build working relationships that could facilitate continuity of care for PLWH.

Networking with people and resources. As mentioned, connecting patients with social- and health-related resources was an important part of nursing practice with PLWH. Participants underlined the importance of seeking help and engaging with a range of resources to address the complex situations of care with which they were involved.

> But the whole medico-legal and criminological aspects are a little neglected. What are the human rights of people with HIV? What about their rights with regards to work? What rights do citizens have that people with immigration status don't? … You really have to seek out community stakeholders and … community groups to find answers to those questions. (Interview, Male Nurse 1)

One particular aspect that the nurses found important was establishing high-value alliances with resources and, above all, selecting and targeting those that were welcoming and accommodating to PLWH.

> Some pharmacies are more accommodating than others. You end up knowing the network. You know which pharmacies are more "injecting-drug-user-friendly," and "homeless-friendly" because not all of them are. Some of them are extremely accommodating with our clientele … It's easy to build this alliance with pharmacies. You can establish a really good relationship. (Interview, Female Nurse 1)

Being part of an HIV nursing network allowed nurses to engage with colleagues and share experiences, as well as to break down feelings of loneliness and exclusion.

> I find it wonderful to be with the committee of experts [nurses] because, wow, you get to swap tips, you share. This is the key to success. You feel less alone, especially nurses outside of metropolitan areas. Because you do feel alone sometimes. (Interview, Female Nurse 5)

Reflective nursing practice. Nurses used reflective practice to help create therapeutic relationships with PLWH. Introspective processes, such as self-consciousness and self-reflection, help nurses identify potential gaps and strengths in their activities and roles in order to reinforce professional development and, ultimately, interventions for PLWH. Reflective practice enabled nurses to acknowledge and examine their own discomforts and gauge the impact of those discomforts on relationships with patients.

> Your whole value structure is often challenged when it comes to HIV. Essentially, you have to be able to recognize what you're comfortable with and what you aren't, to then be able to focus [on how to intervene] … It's okay to be uncomfortable with stuff. You have to be able to recognize what makes you ill at ease, you must also be able to name it. To say so. It means saying this makes me uneasy, so as to then intervene the way you should. (Interview, Male Nurse 2)

Difficult situations experienced by nurses in clinical practice, concerning ART adherence, for example, served as a springboard for putting reflective practice exercises to use.

> You want to make sure to incorporate these abilities into your practice. To really reflect based on these situations, it's basically a reflective practice exercise. It's truly in drawing on clinical cases … that nurses have found difficult … supporting patients in taking medication. (Interview, Female Nurse 4)

Discussion

Main Results

We explored HIV nursing practice, particularly the challenges that nurses face in promoting ART adherence and opportunities for practice development in the field. The nurse–patient relationship was at the forefront of nursing practice to support PLWH. This practice translated into a range of nursing activities to foster ART adherence by supporting PLWH in their whole situation, including the assessment of an array of dimensions related to PLWH health, teaching and sharing knowledge, coordinating care, and connecting PLWH with resources. Providing HIV nursing care, especially ART-related care, to PLWH was challenging in three areas: (a) performing nursing roles at the interface of social and biomedical boundaries, (b) misalignment between nurse and patient expectations regarding ART (non) adherence, making nurses feel powerless when faced with situations of nonadherence, and (c) dealing with sociopolitical determinants affecting access to health care resources and services. Nurses mobilized a range of resources—knowledge, networks, and strategies—to build capacity and overcome challenges relating to their practices with PLWH.

Relational Care: A Primacy for HIV Nursing Care While Exposing Nurses to Their Own Vulnerability

The creation of a therapeutic relationship as the foundation of HIV nursing care corroborated the results of a qualitative study in which health care providers (including nurses) and PLWH felt that a "long-term relationship was an essential part of HIV treatment over the entire course of having HIV infection, starting with initial diagnosis, to entering treatment for HIV, adhering to medication regimens, and staying connected to care" (Dawson-Rose et al., 2016, p. 5). Similar to our results, the findings of Dawson-Rose et al. (2016) emphasized relational components essential for building a trusting and respectful relationship with marginalized patients. Otherwise, the therapeutic nurse–patient relationship has often been labeled as a determinant positively or negatively affecting patient health outcomes, such as ART adherence, stigma, and quality of life (Heestermans, Browne, Aitken, Vervoort, & Klipstein-Grobusch, 2016; Langebeek et al., 2014). However, in nurse-led interventions to support ART adherence (Camp et al., 2013; de Bruin et al., 2017) and in some best practice guidelines for people at risk for or living with HIV (e.g., Canadian Association of Nurses in HIV/AIDS Care, 2013a), the relational components of interventions is sometimes highlighted or perhaps taken for granted, but without being explicitly described as a core component of interventions or of practice guidelines.

Our findings shed light on the diversity of nurses' roles in motivating and supporting PLWH to maintain ART, as underlined in other studies targeting nurse-led interventions specific to HIV (Côté, Godin, et al., 2015; Wood, Zani, Esterhuizen, & Young, 2018) and in best practice guidelines (Canadian Association of Nurses in HIV/AIDS Care, 2013a). However, our study specifically served to highlight misalignment between nurses' and PLWH's objectives regarding ART adherence, as well as the emotional burden expressed by nurses having to cope with situations of nonoptimal ART adherence, translated by feelings of powerlessness, helplessness, sense of failure, disappointment, and self-doubt.

The misalignment described by our participants may be compared to the righting reflex described by Miller and Rollnick (2013), founders of motivational

interviewing. They described the righting reflex as, "the belief that you must convince or persuade the person to do the right thing" (p.10). The righting reflex is a manifestation of a directive conversation dynamic, which can compromise the therapeutic relationship. According to Miller and Rollnick (2013), the righting reflex often stems from a sincere, selfless intention to help. Despite these good intentions, caregivers feel that they ought to confront patients. For example, optimal ART adherence might be the main objective of nurses for the patients they care for. To this end, they try different strategies to help patients adhere to treatment (e.g., provide information about consequences, suggest the use of different strategies to remember to take pills). However, these interventions are not always compatible with many other issues related to HIV and ART that PLWH have to handle. In a therapeutic relationship where nurse goals predominate, patients can feel that nurses do not listen to them. And, in return, nurses can experience feelings of powerlessness, self-doubt, and disappointment when their interventions do not produce expected outcomes. These feelings might also be the signs or triggers of compassion fatigue (Nolte, Downing, Temane, & Hastings-Tolsma, 2017) and of psychological effects of nurses' vulnerability (Rogers, 1997). Compassion fatigue is defined as a state of exhaustion limiting the ability to engage in caring relationships that can impact professional nursing performance commitment (Nolte et al., 2017). Participants in our study were emotionally committed to PLWH, which can, according to Heaslip and Board (2012), increase nurses' vulnerability. Compassion fatigue and carer vulnerability still represent underinvestigated areas in HIV nursing practice that would be worth further study because they can impact the ability to establish a therapeutic relationship and the deployment of nursing activities, while potentially altering professional development.

Nursing Activities

Nursing activities required to foster ART adherence in PLWH (i.e., assessment of many dimensions of PLWH's health, teaching and knowledge sharing, care coordination, and connection to resources) discussed by our participants aligned with nurse-led interventions to support ART (Camp et al., 2013; de Bruin et al., 2017), as well as with Canadian (Canadian Association of Nurses in HIV/AIDS Care, 2013a; 2013b) and international (Dumitru et al., 2017; Relf et al., 2011) best practice guidelines. Providing education and counseling to promote ART adherence (e.g., coping with side effects, providing practical strategies to remember to take pills, sharing self-management skills) have been identified as usual care/practice (de Bruin et al., 2017). Nurses' activities for facilitating linkages to and retention in HIV care have been documented elsewhere, including the care coordination function (Dumitru et al., 2017; Tunnicliff et al., 2013). Supporting PLWH in ART adherence has to do with interprofessional collaborative practice (Ngunyulu, Peu, Mulaudzi, Mataboge, & Phiri, 2017). In that sense, our findings portraying nursing activities for HIV care were not surprising and also broadly aligned to the general scope of nursing practice, including assessment and care planning, communication, and care coordination, as well as teaching patients and their families (D'Amour et al., 2012).

Challenges

There is overwhelming evidence regarding PLWH's perspectives on the challenges, determinants, and complex needs related to ART adherence (Barroso et al., 2017; Heestermans et al., 2016). However, there is still little research on how nurses have faced the challenges of supporting PLWH in ART adherence. Our findings represent a unique contribution to the field and shed light on complex and multidimensional (i.e., professional, relational, and sociopolitical) challenges that nurses face in everyday practice.

Some participants provided a critical perspective on their roles in supporting ART adherence, and more broadly, in caring for PLWH. A potential gap has been noted between current nursing activities and the roles that nurses would hope to be strengthened and further engaged in (e.g., complex assessment skills, advocacy). This resonated with concepts of enacted and ideal roles (D'Amour et al., 2012; Déry, D'amour, Blais, & Clarke, 2015). On one hand, the enacted role refers to professional activities actually carried out by nurses. On the other hand, the ideal role refers to "the range of activities for which nurses are educated and licensed, as distinct from the job responsibilities that might be expected on the basis of nurses' qualifications and licensed training" (Déry et al., 2015, p. 136). Professional autonomy was highlighted by some of our participants, who maintained that nursing care involved more than simply supporting medical practice and the biomedical aspects of HIV care regarding ART adherence.

Perceived nursing roles at the interface of social and biomedical boundaries were in line with the results of a review of 14 articles (Tunnicliff et al., 2013), which showed that HIV nurse specialists have a "wide-ranging and diverse role that fulfils a wider social care function as well as a clinical function" (p. 3351). Participants seemed to be comfortable with the biomedical aspect of

their practices (e.g., teaching and sharing knowledge). However, the social aspect of nursing care appeared more challenging for some nurses. Indeed, as stated in one Canadian best practice guideline for HIV nursing care, nurses "must understand how the social determinants impact on the health and well-being of individuals and possess the skills that allow them to advocate for practices and approaches that support equity" (Canadian Association of Nurses in HIV/AIDS Care, 2013a, p. 18). Participants raised the importance of these determinants in their patients' trajectories of care and acknowledged the impact of living in complex and sometimes impoverished social conditions on the abilities of patients to access ART and other resources critical to self-management. Some participants appeared to struggle with this social facet of practice, possibly provided with much less guidance compared to that received concerning the biomedical dimension of HIV care.

Mobilization of Resources

A comparison of the mobilization of resources—knowledge, networks, and reflective practice—with practice recommendations revealed that they broadly corresponded to professional expectations required in providing HIV nursing care (Canadian Association of Nurses in HIV/AIDS Care, 2013b). Participants relied on various sources of knowledge (experiential, biomedical/pharmacological, social, empirical, theoretical) to inform their practices. This was also in line with the work of nurse theorists (e.g., see Carper, 1978; Chinn & Kramer, 2011; Leininger, 2006) who have discussed various ways of knowing (i.e., empirical, ethical, aesthetic, personal, political, sociocultural, and emancipatory) that shape nursing practice and the discipline of nursing more broadly (Richard, 2013). Our participants found it important to mobilize informative resources and networks to address complex questions and thus be better equipped to support PLWH, using reflective practice, an approach extensively discussed in the nursing literature as a means of developing knowledge and improving professional practice (Dubé & Ducharme, 2015).

Strengths and Limitations

A strength of our study stemmed from the wealth of experiences of nurses working with PLWH on an ART regimen. The heterogeneous sample of nurses made it possible to portray nuances in their roles and identify a range of challenges and opportunities to further develop practice. The findings could be transferable to other nurses working with people living with complex health and social conditions in urban settings where the health system model is comparable (e.g., the public system). We also believe that our results could be transferable to other medication-use contexts for clients in vulnerable situations (e.g., mental health) and/or those with other chronic diseases. In light of our findings, some recommendations would be worth considering in future work (Table 5).

There were several limitations to the study. The interview/focus group topic guide was not validated, but it was inspired by research in the field (Côté, Rouleau, et al., 2015). Participants did not validate the interview data or data analysis, but preliminary findings were discussed at an HIV nursing conference. Despite time-limited discussions in the focus group, participants who took part were experienced and shared rich knowledge about their practices. During the focus group, the first author took the role of facilitating exchanges and discussions. Even if interpersonal dynamics were documented as part of the focus group (with observation and field notes), the first author was there as a group facilitator, emphasizing the nature and content of the discussion, while putting less stress on interpersonal dynamics.

Conclusion

Our study provided a greater understanding of nurses' current practice in the context of HIV care and sheds light on particular challenges pertaining to ART adherence and areas for practice improvement. Our findings provide a solid basis upon which to design an education intervention for HIV nurses in the context of continuous professional development, and this will be undertaken as the next step of our wider research program. In light of our results, this type of intervention could be multilevel, taking into account the systemic components of the nursing practices in question, including a strong relational dimension; nursing activities in support of ART adherence; relational, professional, and sociopolitical challenges; and the mobilization of resources. Supporting best nursing practice in the context of HIV care will require professional development opportunities specifically targeted to nurses that reflect the complex challenges they face to enhance quality of care and improve health outcomes for PLWH.

Disclosures

The authors report no real or perceived vested interests related to this article that could be construed as a conflict of interest.

Table 5. Recommendations for Future Work

Implications for research
• Conduct a mixed-method study to (a) measure enacted (actual) scope of nursing practice in the context of nurses supporting PLWH in ART adherence and (b) explore (qualitatively) reasons for potential gaps between the enacted and full scope of nursing practice.
• Compare current nursing practice with the Canadian Association of Nurses in AIDS Care Best Practice Guideline.
• Map and compare the needs of nurses working across different settings (e.g., rural and remote areas); those with various roles and levels of clinical experience; and those who care for PLWH with a range of profiles (e.g., drug users, homeless people, women).
Implications for education and practice
• Further emphasize the importance of the relational dimensions of the role of nurses in HIV care to promote ART adherence (e.g., in international best practice guidelines).
• Provide opportunities for ongoing professional development to build confidence and skills in relational and cultural competencies; acquire and deepen many sources of knowledge needed by nurses to strengthen professional development; and help nurses translate this knowledge to nursing activities with PLWH.
• Provide accessible information about education resources (e.g., local, regional, and international conferences on HIV) and psychosocial resources (e.g., resource directory).
• Offer greater opportunities for nurses to critically reflect on their practices with PLWH and to maintain relationships with other care providers and networks.
• Support nurses' abilities and competencies to cope with uncertainty and challenging situations, such as facing sociopolitical determinants that impact PLWH's access to ART and managing nonadherence.

Note. ART = antiretroviral therapy; PLWH = people living with HIV.

Key Considerations

- ❍ We suggest that evidence-based practice and other sources of evidence in HIV care should include explicit recommendations about the relational dimensions of nursing practice. If the quality of the nurse–patient relationship is improved, it may have a significant impact on patient care and on ART adherence.
- ❍ It is important to reinforce nurses' capacity building in order to ensure that they are prepared and confident about providing HIV- and ART-related care.
- ❍ Specific areas of improvement (e.g., dealing with situations of nonadherence, questioning socioprofessional roles) are needed to strengthen nursing practice in HIV care and optimize the quality of professional practice and patient care.

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