



Improving healthcare providers' face-to-face interactions with clients living with or at-risk for HIV

? Question

- What face-to-face interventions have proven effective in helping providers educate clients and improve their health literacy?

🔑 Key Take-Home Messages

- Providers who pay attention to their clients' health literacy or to their own communication techniques spend more time discussing health behaviour change during visits, and their clients report greater satisfaction with their communication (1, 2).
- While most interventions improve client perceptions of communication and attention, these changes in perception do not always translate into actual improvements in health literacy, health knowledge or treatment adherence (1, 3, 4).
- Effective interventions involved multiple strength-building sessions in which the approach and information were tailored to the clients' circumstances (e.g. readiness to change, literacy level, health status, barriers to change) (5-7).
- Key strategies for improving client-provider interactions include presenting information clearly by using plain language (8), organizing discussion points by priority (the most important information should be discussed first) (9), and using visual aids to support messaging (9-11).
- Client-provider interactions can also be improved by framing HIV risk and explaining how risks can change and accumulate over time based on behaviours (8).
- Motivational interviewing can enhance one's understanding and retention of information and can improve adherence to medication and/or behaviour change (9).

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The Issue and Why It's Important

Low health literacy has a negative impact on health choices and outcomes.

Although the internet has become a popular source of health information for many, the accessibility and usefulness of health information online depends on the user's ability to critically assess that information (12) – in particular, the user's health literacy level. Health literacy is “the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course” (13). More than half of Canadians do not meet the minimum literacy requirements to manage their health needs (14). For persons at higher risk of HIV, and for those already living with HIV, poor health literacy interferes with their ability to fully understand HIV risk factors, the illness itself and the treatment options available (15). People with HIV who have low health literacy show poor adherence to antiretroviral therapies, have lower CD4 counts and have higher viral loads (15).

Effective counselling can improve health literacy and help people make informed health decisions.

Ensuring that clients understand the nature of health concerns like HIV risk or treatment adherence can have a positive effect on their willingness to change or adopt different health behaviours (11). Counseling clients about HIV improves their understanding of the health issues involved, helps them to process their own experience with HIV and improves HIV health literacy. Effective counselling – including detailed information about the risks associated with different activities – can encourage behaviour and attitude change and help people make informed health-related choices (11).

Effective patient-provider relationships can improve health literacy.

Health care providers who have face-to-face contact with clients have a unique opportunity to improve clients' HIV health literacy. During one-on-one meetings, they can target their interactions to meet a client's specific needs in a way that larger group workshops, pamphlets and online factsheets cannot (16). On the other hand, poor patient-provider relationships – along with low health literacy – are associated with poor medication and/or treatment adherence. However, both patient-provider relationships and health literacy can be improved through intervention (17).

Health providers may not have a good sense of their patients' health literacy or how to improve it.

Healthcare providers may not always be aware that health literacy is an issue for their patients or of how patients express low health literacy. It is not uncommon for health care providers to misinterpret

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low health literacy as low motivation to change health behaviours (18). Although simply repeating information for clients with low health literacy is a common strategy used by providers (18), this does not meet client needs or improve their understanding of the health information being delivered. In fact, Fransen and colleagues (18) suggest that the needs of a client with low health literacy may be quite different from the needs of one with higher health literacy. Clients with low health literacy may be more interested in developing skills to help them manage a chronic condition (like HIV) and may be less interested in developing a strong knowledge base.

Health care providers may be better able to meet their clients' needs by using interactive strategies like motivational interviewing and the Teach-Back method.

Interactive strategies allow providers to tailor interactions to their clients' current attitudes toward their health behaviour and to better assess what clients already understand about their health needs.

- Motivational interviewing is a technique that encourages an individual to choose change for themselves. Implementing this technique requires training in empathy display, reflective listening (i.e., listening carefully to the speaker, summarizing their idea, and repeating it back to them) (19) and managing a client's resistance to change without escalating to confrontation (20).
- The Teach-Back method is a confirmational communication technique that is commonly used by health care providers to ensure that clients (or their caregivers) understand the information provided. The core goal of the Teach-Back method is to improve health literacy, since a client who understands the information given will be able to successfully "teach-back" this information (21).

What We Found

HIV-specific research

- Kalichman and colleagues (3) tested the benefits of **using a pictograph aid** (images to represent objects and/or locations) during medication adherence skill-building interventions for lower literacy adults living with HIV. The pictograph-enhanced intervention was compared with the standard adherence intervention and with general health counseling. For clients with marginal health literacy, there was no evidence that the pictograph intervention was more beneficial than standard adherence counseling. For clients

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12. van Servellen G, Nyamathi A, Carpio F, Pearce D, Garcia-Teague L, Herrera G, et al. Effects of a treatment adherence enhancement program on health literacy, patient-provider relationships, and adherence to HAART among low-income HIV-positive Spanish-speaking Latinos. *AIDS Patient Care & Stds*. 2005;19(11):745-59.

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with lower health literacy, there was no evidence that either the standard or pictograph-enhanced intervention was more beneficial than general health counseling. The authors posit that while the standard adherence intervention may be adequate for clients with moderate health literacy, clients with lower health literacy may need a more intensive approach than either the standard or pictograph-enhanced intervention.

- Kalichman and colleagues (5) conducted a pre versus post-test evaluation of a brief **HIV treatment adherence counseling intervention** consisting of two adherence improvement sessions and one booster session. The material presented in these sessions was tailored for lower literacy levels, incorporated principles for health education with lower literacy populations (e.g., providing context for new information), and used memory cues (such as stickers that referenced daily events – e.g., toothbrush, car, TV) and strategies for changing daily routines. Clients who took part in the intervention showed an increase in self-efficacy related to medication adherence and increased HIV health literacy (measured by assessing AIDS knowledge, viral load understanding and CD4 count understanding). The authors also found an improvement in adherence over three months.

Research based on other chronic illness and health concerns (e.g., smoking cessation, stroke, diabetes)

- Flock and colleagues (6, 7) investigated the impact of training clinicians in the **Teachable Moment Communication Process (TMCP)**, a technique for discussing risk-taking health behaviour. This technique is similar to the Motivational Interviewing technique described above, but one key difference is that the TMCP interaction is focused around a particular event or moment, so that a direct link is drawn between a risk-taking behaviour and a client's particular health concern. These opportunities can occur organically during a visit or can be initiated by the provider (e.g., a patient mentions being concerned about possible STI symptoms, and the provider uses this opportunity to discuss risk reduction tactics). Using this technique, clinicians draw an explicit link between the risk-taking behaviour and the health concern; they convey concern for the client's health, but also show optimism for change and present themselves as partners in that change. Clients are then asked to give feedback, which allows the clinician to gauge the client's readiness to change and proceed with health behaviour change recommendations based on this information. Clinicians who took part in this training were more likely to provide health advice that aligned with the client's level

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of readiness to change and more likely to invite interactions that allowed them to assess readiness for change. After undergoing TMCP training, clinicians also spent more time discussing health behaviour change (in this case, smoking cessation) with their clients. In turn, clients of TCMP-trained clinicians showed better recall, increased confidence and increased readiness to change compared to clients of control group clinicians.

- Koelewijn and colleagues (2) conducted an intervention aimed at improving client uptake of health behaviour change to enhance cardiovascular health. The intervention group received risk information and engaged in **Motivational Interviewing** with a nurse. The goal of this session was to build a sense of intrinsic motivation in clients, in order to help them change their own health behaviours. Clients in the intervention group reported greater satisfaction with provider-client communication and showed improved risk perception as well as a more realistic understanding of their health risks and outcomes. Clients also showed some (though limited) behaviour change at follow-up.
- Liddy and colleagues (22) investigated the benefits of **clinic-based health coaching** for people with diabetes. Health care providers at different clinic sites were trained in a health coaching program. After an initial face-to-face meeting with each client, other appointments were conducted according to client needs (via email, phone, face-to-face contact or some combination). Clients enrolled in the health coaching program showed improved health literacy, including a better understanding of how diabetes and their own behaviour can impact their health outcomes.
- Price-Haywood and colleagues (1) investigated whether **training primary care physicians to identify signs of low health literacy** would improve their communication and thus improve client knowledge and screening behaviours. Physicians were taught to identify the signs that a client may have low health literacy (e.g., filling in forms incorrectly, being unable to name their medications or explain why they were needed) and were taught effective counseling strategies for these clients (e.g., presenting complex information/instructions in smaller steps, using simple language, using diagrams, using the Teach-Back method). Clients rated physicians who underwent the training higher on general communication and shared decision-making, but client knowledge did not significantly improve as result of the intervention.
- Seligman and colleagues (4) conducted a study to determine if **notifying doctors about clients with lower health literacy** would affect their behaviour toward these clients during appointments. Clients were screened for their health literacy level (measured using the short form of the Test of Functional Health Literacy in Adults). Physicians taking part in the intervention saw a notice on clients' charts notifying them that the clients had inadequate or marginal functional health literacy (no additional training about counseling low health literacy clients was provided to physicians). Physicians in the Intervention were more likely to attempt a wider variety of strategies to improve communication during clients' appointments. They were also more likely to involve family members and friends in client discussions and to refer clients to other professionals to improve their care. However, these clinicians felt less satisfied with the appointments and clients in the intervention scored no higher than controls on a post-visit measure of self-efficacy.

Strategies for improving client-provider interactions (meta-analyses and literature reviews)

- **Providing clear information:** Clients and patients need candid information about their diagnosis and prognosis to become receptive to changing health behaviours (11). When working with lower literacy clients, language must be very plain (8), sentences should be short, and learning goals should be organized by priority (16). New information should be given context (10). Providers should show how the information relates to the client's health concerns and explain the purpose of the information. To improve recall, health care providers should discuss important information either at the end or at the beginning of an interaction, not in the middle (9). Clients with low health literacy benefit when new information is reinforced by clear and short instructions that are repeated more than once. Reviewing and summarizing information can help clients retain information that was presented earlier in the meeting (8). Ideally, providers should employ multiple short teaching sessions to avoid overload and frustration and help clients build a consistent knowledge base. Whenever possible, providers should also help clients achieve and celebrate the success of completing steps toward making a desired behaviour change. The step-approach can be achieved by breaking down complex instructions into smaller parts (10), allowing clients to enjoy small successes on the road to health behaviour change. Although providers may feel that there is much essential information to deliver, it's important to remember that clients with lower literacy may have different goals than clients with high literacy (18) and can benefit more from developing skills rather than learning facts. Information may be framed best as the motivation to change health behaviour at first, and then as a means to develop the skills to change (10).
- **Using aids:** Written or other visual information should be used to support verbal messages (9), as providing both verbal and written instructions has been shown to promote better understanding and adherence (11). Lambrinou and colleagues (16) recommend that health care providers use communication aids (e.g., diagrams) to enhance understanding. Providers should also encourage clients to ask questions (9) and employ feedback techniques (e.g. Teach-Back) to confirm that clients understand health information (8). After delivering key information, ideally providers should initiate an interactive exercise where clients must demonstrate that they understood the information by either restating it, practising a new behaviour or demonstrating problem-solving using the new information (10).
- **Framing risk information to enhance understanding:** Information about relative risk – that is, how much a particular prevention strategy or risk factor can affect the risk of HIV transmission – can mislead clients. It is better to use absolute risk information – that is, a client's risk of HIV transmission given their current situation. Absolute risk information can be used to refer to either the risk associated with one specific act of exposure or to the risk of transmission over a set period of time, so providers may also want to highlight how risk may change or accumulate over time based on the client's adherence to certain behaviours and/or medications (8). To promote understanding, particularly among clients with low numeracy, prevention programs should present statistical information about risk as frequencies (e.g., this effects 25 out of 100 men) rather than as percentages (e.g., 25% of men are affected) (8). Baseline risk information (i.e., the risk a client faces now, given their current risk-taking behaviour) should be separated from information on their incremental risk (i.e., the changes in a client's risk given different changes in behaviour). Ideally counsellors/educators should use

pictographs as visual aids to demonstrate, for example, how many fewer people would be at risk for acquiring HIV if the client were to engage in a risk reduction strategy, like using PrEP (8). Health care providers should be aware that providing comparative risk information (e.g., the reduction in risk associated with PrEP vs. the reduction in risk associated with consistent condom use) can help clients understand average and general risks, but that this information can obscure clients' understanding of their absolute level of risk and can bias overall risk perception as well as health decision-making.

- Strengthening the provider-client relationship:** Harrington (23) worked to establish a sense of trust with clients by asking about their past experiences with the health care system, how their condition impacts daily life, and their own goals for care. Providers should set realistic goals for their clients' learning, skill development and behaviour change. These goals should be targeted to a client's particular needs (10). Training in techniques like Motivational Interviewing (discussed above) can help providers develop useful skills like showing empathy and engaging in reflective listening. Gaining an understanding of clients' personal needs and motivations to change their health behaviour allows for a more targeted approach for interventions. In addition, clients are more likely to adhere to treatment plans relevant to their goals if they feel heard and understood. Harrington also highlights the importance of approaching health issues from the client's perspective to improve understanding and retention. Having a warm and friendly manner with clients and showing empathy increases client satisfaction and medication adherence (9). Understanding the barriers that a client faces in changing behaviour and then crafting tailored messages that are more personally relevant to the client can help meet the needs of those who may need extra time or a focussed message (9).



Factors That May Impact Local Applicability

All studies cited in this review were conducted in high income countries such as the Netherlands, Canada, the U.S., and New Zealand. Thus, the review findings are highly relevant and transferable to the Canadian context.



What We Did

We searched Medline using a combination of [Health Literacy AND [HIV, or Sexually Transmitted Diseases, or Diabetes Mellitus, Cardiovascular Diseases, or Cancer (MeSH terms)]. A second search was conducted using a combination of [Health Literacy, or Health Communication, or Risk Communication (MeSH terms)] AND [Patient Education, or Professional-Patient Relations, or Physician-Patient Relations, or Tailor, or Personalize]. Reference lists of identified literature reviews and systematic reviews were also searched. The first search was conducted on March 3, 2016 and the second search was conducted on March 24, 2016. Results were limited to English articles published from 2000 to present in high income countries. The search yielded 1,239 references from which 18 studies were included. Sample sizes of primary studies ranged from 9 to 615.

Rapid Response: Evidence into Action

The OHTN Rapid Response Service offers 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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