



SOS: I Need Help with my Medication

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As technological advances become more prevalent in daily activities, health literacy is a focus of attention. It refers to the ability to understand how to access and apply health information and health services. (1) Health literacy involves not only reading comprehension, but also a level of critical thinking to be able to absorb the information given. Ultimately, health literacy allows patients to be active participants in decision making. (2)

Digital health literacy

The increased use of technology in health service delivery adds a layer of complexity for patients. Digital health literacy is the ability to get information from an electronic source and apply that knowledge. (2) An example would be providing an electronic system that patients would use to place a request for medication refills. Patients must have access to a computer or smartphone. They must be familiar with how to use the device, and understand how to navigate the internet to interpret the information and input their personal details.

Medication non-adherence as a consequence of poor health literacy

Health literacy impacts medication non-adherence, meaning the inability to take one's own prescription as intended for various reasons. Examples of this include: not being able to name

Canadian Data



1 in 6 people do not have appropriate health literacy (6)



88% of elderly individuals have low health literacy (5)

As per the Canadian Council on Learning, Indigenous Peoples health literacy scores are at least

16%

lower than non-Indigenous Peoples (7)

medications or recall the dose or administration instructions, the inability to read the labels correctly including information on storage, foods to avoid, etc. (1) Medication non-adherence leads to poorly managed disease and higher risk of hospitalization, increased healthcare costs as well as increased mortality. (3) A review of the literature published in 2014 by Zhang et al. found that higher literacy levels were associated with better medication adherence. (3) It has also been reported that 50% of people with chronic diseases are not taking their medications as prescribed. The concept of medication adherence is quite complex as it involves not only understanding instructions on dosing, but also remembering to take the medications on time, often several medications at a time with different dosing instructions and recognizing and addressing the potential side effects. (4)

Causes and risk factors

In Canada, the risk factors identified include the following:

- Being an ethnic or racial minority
- Not completing high school
- Living in poverty
- Speaking a language other than English as a first language (5)

Second generation immigrants were less likely to report good health compared to third plus generation immigrants and this may be explained by the difficulty in adjusting to life in Canada, poor access to health care, limited knowledge of services or lack of support as well as lower incomes. (6) Although there is no robust data examining health literacy in Indigenous populations, Lambert et al. (2014) found that health professionals often do not grasp the difficulties that Indigenous Peoples may have in navigating the health system. Barriers are, among others, cultural differences, poverty, and lack of Indigenous health professionals. (7)



Pediatric medicine and health literacy

In a survey of adolescents 16 years or older in the United States, researchers found that those who reported having a learning disability had worse medication adherence than their counterparts who did not have a learning disability. (8) For pediatric patients with chronic conditions, having a parent with low health literacy has been associated with lower outcomes due to dosing errors or incorrect interpretation of instructions. (9)

Recognize low health literacy

Low health literacy routinely is overlooked. Although there are tools available to use in the clinical setting, they may be limited in scope in terms of gender and ethnicity and thus not applicable to every demographic. (5) Patients with low health literacy may not recognize the signs or feel shame. (1) Indeed, a study showed that 67.2% of patients with low health literacy had never disclosed it to their spouses. (5) A study from the University of British Columbia revealed that pharmacists often fail to identify low health literacy in patients. They are often not aware of the screening tools and when the tools are available, there are time constraints or a lack of support from the leadership. (5)

Verbal Communication

- Plain non-medical language (no jargon)
- Give examples of specific times when to take medications
- Have the patient repeat key points to confirm understanding
- If using an electronic system, have the patient demonstrate use (2)

Written Communication

- Language fit for a 5th or 6th grader
- Highlight or underline pertinent information
- Provide medication lists with clear instructions
- Use the patient's preferred language when possible

Visual Aids

- Pictograms can illustrate instructions (helpful if there is a language barrier)
- May replace written information to not overwhelm patients
- Always review and never assume that videos and pictograms are well understood

What can you do?

Never assume that medical terms are commonly understood. Practitioners should review medication lists frequently with patients to ensure adequate adherence, and ask patients how they manage to remember to take their medications at home. (1) While there may be uncomfortable moments, these are important discussions to have to ensure the success of therapy recommendations.

To learn more

The [Agency for Healthcare Research and Quality](#) provides several tools to aid health professionals in optimizing medication teaching as well as assessment of adherence. In addition, there are training courses tailored for health professionals who wish to learn more on this topic. There is also a section with tools to empower patients in communicating with their health providers.

For examples of health literacy tools that may be utilized in clinical settings, the Newest Vital Sign is often used and is quick to complete (within 5 minutes). You may find it [here](#).

Faiza Yallou currently lives in Edmonton and is interested in highlighting local projects aimed towards optimizing social determinants of health. Faiza is thrilled to be a part of the Edmonton Social Planning Council and to raise awareness about the social issues in our community. Faiza is a volunteer with Edmonton Social Planning Council.

For references, click [here](#)