

The Impact of Low Health Literacy in an Older HIV Patient

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Abstract

Health literacy is an essential factor for health care providers to consider as older adults are attempting to manage complex health care regimes associated with HIV/AIDS. Health providers often fail to recognize low levels of health literacy among older adults. This case study illustrates how low health care literacy decreased the level of HIV knowledge, altered decision making skills, and decreased quality of life for an older adult with a diagnosis of HIV.

Keywords: HIV; Health literacy; Older adults

Introduction

Health literacy is an essential factor for health care providers to consider as older adults are attempting to manage complex health care regimens associated with HIV/AIDS, diabetes, asthma, and congestive heart failure. Health literacy is defined by an individual's capacity to utilize their cognitive and social skills to obtain, process, and understand health information [1]. Research has suggested that individuals over the age of 65 have low levels of health literacy and are not managing their chronic conditions effectively [2]. In the United States, individuals over the age of 55 alarmingly accounted for 19% (217,300) of the estimated 1.1 million people living with the HIV infection, which places them at risk for mismanaging their HIV health care regimen due to possible low health literacy levels [3]. Studies have illustrated that those individuals with low health literacy have decreased levels of knowledge about their illness in general [4-6]. Health literacy can negatively affect how a person navigates the health care system, communicates information to health care providers, engages in self-care and disease management, and utilizes formal health care services [7]. Ultimately, mismanagement of health care regimens due to low literacy leads to poorer health outcomes and increased health care costs [8].

In this case, it is illustrated how low health literacy can lead to poor health outcomes for an older adult diagnosed with HIV.

Case Presentation

On June 23rd a 65 year old man went to the local emergency room at a nearby hospital for complaints of anxiety and a high blood pressure reading.

Previous history revealed that the patient was relatively healthy except for pain in his hands and knees due to arthritis and an occasional gout attack. Upon further examination, his blood pressure reading at the ER was 200/100 and his EKG was normal. He was not complaining of any chest pain and did not have any signs or symptoms of a heart attack. The patient was extremely anxious and told the health care provider that he was recently diagnosed with HIV approximately three months ago. He stated that he does not know how

he contracted the disease and thought that one could get HIV/AIDS only through blood transfusions and saliva. He showed the health care provider a packet of detailed information about HIV and possible treatment regimens that his primary care physician had given to him. The patient was concerned that the antiretroviral therapy (ART) recommended by his physician would make him very ill and eventually cause his death. The patient stated that his CD4 count was 350 cells/uL and he did not know how this number related to the ART treatment regimen. He asked the health care provider if he should get a second opinion about his diagnosis and medication treatment regimen.

The nursing notes indicated that the patient is divorced and recently ended a relationship in order to prevent transmission of the disease to his partner. He now lives alone in a suburban neighborhood and his daughter lives 30 minutes away. The patient grew up on a farm and could not finish middle school due to long work hours on the farm. He described himself as a quiet person with very few friends. He is a retired carpenter and relies solely on social security for his monthly income. He is afraid that Medicare will not cover the medical expenses associated with his HIV diagnosis.

Two weeks later this patient had an appointment in the HIV clinic and his HIV diagnosis was confirmed. He was still very anxious and his blood pressure was 190/100. The patient stated that he has a decreased appetite and lost 10 pounds in the last three months due to his anxiety. He is experiencing regular migraine headaches and feels nauseated throughout the day. He expressed that he did not understand his HIV diagnosis and did not know what to do. The health care provider handed the patient an educational sheet about HIV/AIDS and asked the patient to read it. The patient stated that he could not because he left his glasses at home.

Based on the patient's educational level and a suspicion that the patient has difficulty reading, the health care provider administered the Test of Functional Health Literacy Assessment (TOFHLA) to assess for functional literacy. The patient received a score of 50, which indicates limited health literacy. A TOFHLA score of 75-100 indicates adequate literacy [9]. Research has also illustrated relatively strong associations between cognitive function and health literacy skills [10]. Thus, the Mini Mental Status Exam (MMSE), which measures cognitive function, was administered to further shed light on the level

of health literacy for this patient. The MMSE score for this patient was 27 points out of a possible 30 points indicating a score in the normal range for cognitive functioning [10].

After documenting the test results from above, the health care provider refers the patient to a nurse practitioner who specializes in infectious diseases at the HIV clinic. The nurse practitioner introduced herself and asked the patient if it would be acceptable for her to read the HIV pamphlets to him. The patient agreed and listened attentively. The nurse practitioner emphasized the major causes of HIV, the treatment plan for HIV, and possible ways to cope with the diagnosis. The pamphlets utilized by the nurse practitioner were written at a third grade level and illustrated very simply the relationship between the CD4 count and ART regimen. The patient verbalized understanding of the content and agreed that he would consent to the ART regimen. The nurse practitioner set up a follow-up appointment with the patient and his daughter to discuss the details of the ART medication regimen. The nurse practitioner also enrolled the patient into a HIV support group at the clinic and referred him to a social worker to discuss the financial implications related to the ARC medication regimen. Once the patient starts the ARC medication regimen, a nurse case manager will be assigned to him to monitor medication adherence and to address any issues that may arise. At the end of the encounter with the nurse practitioner, the patient stated that he was especially grateful for being enrolled in a support group so that he could discuss his concerns with other HIV patients and was more knowledgeable about his HIV status.

Concluding Remarks

In this case, it is illustrated how a low health literacy level decreased the level of HIV knowledge, altered decision making skills, and decreased quality of life for an older adult who has a HIV diagnosis. The patient's primary care physician failed to recognize his low health literacy level. More responsibility is placed on older adults to self-manage their chronic illnesses, therefore assessing for health literacy should be done regularly by health care providers across health care settings. A diagnosis of HIV/AIDS requires major life style adjustments and requires the patient to fully understand the health care regimen that has been mutually agreed upon. The following recommendations may be helpful to health care providers as they encounter older adults with HIV who may have low health literacy levels:

Administer the TOFHLA test and MMSE test to older patients to determine the level of health literacy.

At a basic literacy level, health care providers should review the basics about HIV and AIDS. Patients should be able to verbalize the differences between HIV and AIDS, the causes, signs/symptoms, transmission modes, and preventative measures to limit transmission to others.

At a basic literacy level, health care providers should review the ART medication regimen in detail with patients. Patients should be able to verbalize understanding about dosage, adverse effects, side effects, financial implications, and other special considerations.

Health care providers must take in account that individual learning styles differ and supplementing instructions with visuals may be helpful to patients.

Social support networks must be assessed and community resources identified for the patient.

Cultural competency is key for health care providers to demonstrate as cultural differences may impact health literacy for patients.

Emphasizing the value of stress management strategies/techniques is crucial in relation to lowering anxiety levels for patients.

In conclusion, it is suggested that health care providers take an active role in identifying those older HIV patients with low health literacy levels and intervene with appropriate educational strategies to increase their knowledge about their recommended HIV treatment regimens.

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