

## Week 2 Discussion

### OTC screening kits for HIV

#### 1. Describe the diagnostic or screening tool selected, its purpose, and what age group it targets.

The diagnostic screening tool I selected to discuss is the OraQuick in-home HIV test. OraQuick is the only HIV diagnostic screening test approved by the FDA for people to test themselves at home (CDC, 2021). HIV home-testing allows individuals to take an HIV test and find out their results in the privacy of their own home. In-home HIV tests can help diagnose an individual who wouldn't otherwise get tested. The OraQuick in-home HIV test is for anyone 17 and older (CDC, 2021).

I decided on screening for the Human Immunodeficiency Virus (HIV). HIV screening would be considered a secondary prophylaxis because it is intended to detect the disease at an early stage in its progression. The diagnosis of HIV lowers the risk of developing Acquired Immune Deficiency Syndrome (AIDS) or suffering from AIDS-related fatalities or occurrences. A pregnant woman's risk of transmitting the disease to her unborn child can be reduced as a result of this treatment. Patients between the ages of 15 and 65, as well as those who are pregnant, should have this test conducted on them. Patients who are less than 15 years and less 65 years are at risk should also be screened, according to the guidelines.

Patients who barter sexual services for money are considered to be at high risk of developing HIV. Men who engage in same-sex activities are also at danger, as are the partners of HIV patients who have previously been diagnosed with the virus. Finally, people who are having treatment for any of the diseases listed below are at greater risk of developing cancer: A sexually transmitted disease such as tuberculosis, hepatitis, or another infection

Diagnosis is the process of determining which disease or condition a person has, usually by conducting tests or investigating symptoms. A number of tests that are different also examinations that may be used to study and analyze a disease, and each has its advantages and disadvantages. Some tests are better at detecting certain conditions, while others are better at excluding other conditions. It can take a significant amount of time to diagnosis a disease, and it is often unclear from the start which test or examination will be most useful in making the diagnosis.

I opted for testing for the HIV virus. Since it is intended to detect the disease early on, HIV screening would be considered a secondary prevention. When HIV is diagnosed, there is a lower probability of developing Acquired Immune Deficiency Syndrome or other events linked to AIDS, such as mortality. Pregnant women may be less likely to pass the disease on to their unborn children if they use this method.

#### 2. Has it been specifically tested in this age group?

OraQuick has been tested for the recommended age range.

#### 3. Next, discuss the predictive ability of the test. For instance, how do you Ora Quick has been tested for the recommended age range. know the test is reliable and valid? What are the reliability and validity values? What are the predictive values? Is it sensitive to measure what it has been developed to measure, for instance, HIV, or depression in older adults, or Lyme disease? Would you integrate this tool into your advanced practice based on the information you have read about the test, why or why not?

In one study, there was only one false-negative test by the OraQuick in-home HIV test in a 400 test sample size (Belete et al., 2019). Of 200 tests, self-testing was positive in 199 and false negative in 1. There were no invalid tests, but two were rejected due to an error of spilling test buffer in performing the test and not included in the study (Belete et al., 2019). The positive predictive value and negative predictive value of the OraQuick test are 100% and 99.5% (Belete et al., 2019). The validity of a test is defined as the ability of a test to determine who has the disease and who doesn't. It consists of two components: sensitivity and specificity. Sensitivity refers to the test's ability to designate an individual with a disease as positive. The specificity is