**Screening of Lung Cancer And UTI**

A screening program is a method used in a population to identify the possibility of the presence of a disease that is yet to be diagnosed in an individual with no signs and symptoms. Screening tests are somehow unusual as they are conducted on perfectly healthy individuals. Screening is meant to identify a disease early enough in a community so as to allow early intervention and management.

**Sensitivity**

Sensitivity is the probability that a screening test correctly categorizes as positive persons who have a preclinical infection. The ratio is obtained by getting the number of individuals with the preclinical disease who test positive divided by the number of individuals with the preclinical disease. A good example is lung cancer. Lung cancer, to a large extent, affects older people. Therefore while conducting the screening of this disease, the identified population must consist of older people presumably between 55 and 75 years (World Health Organization, 2013). The population should consist of persons who have smoked for a long time. This is because although lung cancer is caused by multiple factors, smokers will consist more than 85% of the infected person

**Specificity**

Specificity is the probability that screening test correctly identifies individuals without preclinical disease as negative. The ratio is obtained by getting the number of persons without the preclinical disease who test negative divided by the number of individuals without preclinical disease (Columbia University, 2009). An example of a disease is Urinary Tract Infection. UTI is tested using nitrate dipstick test in hospitalized patients. When nitrate test and leukocyte test are used individually they are more specific in identifying individuals without preclinical symptoms of UTI who test negative from a pool of persons without preclinical symptoms of UTI.

**References**

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World Health Organization,. (2013). *Systematic Screening for Active Tuberculosis: Principles and Recommendations*. Geneva: World Health Organization.