Surveillance and Testing/Ascertainment in Epidemiology

Cathrine Hoyo

1NC State University

Published on: Aug 22, 2022

URL: https://ncsu-wolfpack-solutions.pubpub.org/pub/wvsw2esn

License: Creative Commons Attribution 4.0 International License (CC-BY 4.0)
ABSTRACT
As you approach your undergraduate education, it is important to keep an open mind as your career may be in disciplines you may not have thought about originally. Your exact career may not even exist yet. As we all listen to the COVID-19 pandemic discussions, appreciate the limitations of available data and what data are still needed. And as we hear about testing adequacy, remember that understanding how well or poorly accurate tests can perform in the population, when the condition being tested for is rare, is important.

Catherine Hoyo, PhD, is a Professor of Epidemiology in the Department of Biological Sciences at North Carolina State University. She is the co-Director of the Integrated Health Sciences Facility Core in the Center for Human Health and the Environment and Director of Epidemiology and Environmental Epigenomics Laboratory. Her research program aims to improve our understanding of how early development influences risk of common chronic diseases, especially those that exhibit racial/ethnic differences in incidence and/or mortality, including cardiovascular and metabolic diseases and some cancers. To accomplish this, her group has taken a two pronged approach. They have developed and continue to follow a cohort of newborns to identify stable epigenetic targets that are acquired early, are mitotically heritable and are associated with known risk factors for early subclinical indicators of cardiovascular and metabolic dysfunction, including pre-hypertension, accelerated adiposity gains and frank obesity as such markers can serve as stable risk markers useful for early detection of exposure. Her group also conducts population-based case control studies in adults to determine if identified epigenetic targets are associated with risk of these cardio-metabolic risks and cancers in adulthood.

Visit the web version of this article to view interactive content.

TRANSCRIPT