

10th Euro-Global Conference on **Infectious Diseases**
&
5th International Conference on **Histopathology & Cytopathology**

September 27-29, 2018 Rome, Italy

Risk factors for human cutaneous anthrax outbreaks in the hot-spot districts of Northern Tanzania: An unmatched case-control study

Elibariki Reuben Mwakapeje^{1,2,3}, Sol Høgset³, Adis Softic³, Janneth Mghamba¹, Hezron E Nonga², Robinson H Mdegela² and Eystein Skjerve³

¹Minister of Health, Community Development, Gender, Elderly and Children, Tanzania

²Sokoine University of Agriculture, Tanzania

³Norwegian University of Life Sciences, Norway

Bacillus anthracis is an aerobic, gram positive and spore forming bacterium, which causes anthrax in herbivores. Humans get infected after coming into contact with infected animals' products. Unmatched case control study was conducted to identify the importance of demographic, biological, and/or behavioural factors associated with human cutaneous anthrax outbreaks in the hot-spot areas of Northern Tanzania. A semi-structured questionnaire was administered to both cases and controls. The age range of participants was from 1-80 years with a median age of 32 years. In the younger group (1-20 years), the odds of being infected were 25 times higher in the exposed group compared to the unexposed group (OR=25, 95%CI=1.5-410). In contrast, the odds of exposure in the old group (≥ 20 years) were three times lower in the exposed group compared to the unexposed group (OR=3.2, 95% CI=1.28-8.00). Demographic characteristics, sleeping on animal's skins, contact with infected carcasses through skinning, butchering and not having formal education were linked to exposure for anthrax infection. Hence, a one health approach is inevitable for prevention and control of anthrax outbreaks in the hot-spot area of Northern Tanzania.

emwakapeje75@gmail.com