

Understanding the Social contact patterns and the transmission of ulcerative wounds: a case-control study in Burundi

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Background

Reducing the burden of neglected tropical diseases (NTDs) is one of the key strategic targets advanced by the Sustainable Development Goals. Of the 20 NTDs, more than half present with skin manifestations and are often associated with long-term disability, stigmatization and mental health problems.

In Burundi, an alert on ulcerative wounds of unknown origin was launched in December 2019 by providers in health districts of Giteranyi, Kiganda and Fota.

In this study we assessed the association between different social contact patterns and the risk of acquiring the ulcerative wounds in Kiganda and Fota health districts.

Method

A case-control study was conducted in January 2023 on 132 cases drawn from cases registered since June 2022 and 132 controls.

Results

People who lived in households with a size of 11 persons or more were 10.2 times more exposed ($p=0.034$) than people who lived in households with a size of 5 to 7 people. In addition, people who often shared the bed or the floor with visitors who spent the night in the household were twice exposed ($p=0.025$) than those who had never shared the bed or the floor with visitors. The exposure factor was significant for people who moved outside the sub-hill of residence with a monthly and quarterly frequency with a risk of 2.01 ($p=0.026$).

Conclusion

This study raises the importance of the first-level social contacts, inside the home, which are otherwise the most intensive, as having been at the origin of the spread of these ulcerative wounds.