



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

Manassé NIMPAGARITSE, PhD Florence MUNZERO, PhD Charlotte NZEYIMANA, MD Eric MANIRAKIZA, MD Marcellin KASH KARUBARA, MD Etienne VERMEIRE, PhD



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.
- ❖ **Aim:**
 - ❖ assessing 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).
- ❖ 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)

Exposure factor/ Variables		n	Cases		p-value
			%	Adjusted OR [95%CI]	
Social contacts In the home	Number of household members				
	2 to 4	31	51,6	1,21 [0,53-2,74]	0,643
	5 to 7	138	43,5	1	
	8 to 10	87	56,3	1,71 [0,98-2,99]	0,061
	More than11	8	87,5	10,2 [1,19-88,12]	0,034
	sharing the bed or floor with visitors who spend the night in the household				
	Often	56	57,1	1,96 [1,09-3,54]	0,025
	Sometimes	93	55,9	1,94 [0,97-3,87]	0,061
	Never	115	41,7	1	

Exposure factor/Variables		n	Cases		p-value
			%	Adjusted OR [95% CI]	
Social contacts outside the neighbourhood	<i>Travelling outside the sub-hill of residence to visit his relatives</i>				
	Never	88	47,7	1,61 [0,85-3,08]	0,147
	daily or weekly frequency	10	70,0	2,62 [0,60-11,41]	0,199
	monthly and quarterly frequency	81	58,0	2,01 [1,09-4,02]	0,026
	biannual or annual frequency	85	42,4	1	

- ❖ 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.