

# Catalysing snakebite management policies and strategies

## HEPS-Uganda explains its work on a neglected public health issue

Uganda, like any other developing country, has limited resources to comprehensively support programming for snakebites and to ensure community and health worker awareness about preventive measures and management of snakebites. The communities and health workers need to know about the availability of commodities used for managing snakebite cases, including antivenom and means to support research on the prevalence of snakebites, its exposures and determinants to inform policy decisions. Additionally, there is no approved snakebite control national strategy to guide national-level planning.

Globally there are more than 3,000 species of snakes, of which 600 are venomous and about 250 are considered by the World Health Organisation (WHO) to be medically important.<sup>1</sup> WHO estimates that up to 5.4 million snakebites occur annually, of which an estimated 2.7 million (50-55%) cause envenoming.<sup>2</sup> Snakebite envenoming is estimated to cause 81,000-138,000 deaths and lead to 435,000-580,000 amputations and other permanent disabilities annually.<sup>3</sup> In sub-Saharan Africa, an estimated 32,000 people a year die from snakebites.<sup>4</sup>

Snakebites have remained neglected as a public health issue and only recently have they started to receive global advocacy and policy attention.<sup>5</sup> Globally, snakebite envenoming and the associated mortality and morbidity are grossly under-reported and have not been given attention especially in low- and middle-income countries like Uganda. It is estimated that more than 70% of snakebite cases are not reported or documented because many of the victims do not seek treatment in public and other formal health facilities.<sup>6</sup> The underestimation also emanates from poor facility-level record-keeping, imprecise snakebite death certification and the incompleteness of the Health Management Information System.<sup>7</sup> The number of snakebite cases and deaths is thus likely to be substantially higher than reported.

Factors contributing to the high burden of snakebites in Uganda include the snake fear factor, stigma, prohibitive traditional lifestyles, high-risk agricultural and pastoral occupations, low awareness about preventive measures, and weak snakebite management approaches or practices in both health facilities and at the community level. Additionally, traditional beliefs also lead to risky responses to snakes and snakebites. Children and farmworkers are particularly vulnerable.<sup>8</sup>

The government has since instituted snakebite controls, among which include strengthening national and district capacity for vector control including Neglected Tropical Diseases (NTD),<sup>9</sup> and capturing the number of snakebite cases through the HMIS system. However, snakebites had not received adequate attention as a public health problem and there was paucity of information regarding the prevalence of snakebites, its exposures, most affected communities/areas, and coping mechanisms of the affected individuals and their communities.

To this end, the Coalition for Health Promotion and Social Development (HEPS-Uganda) in collaboration with Health Action International (HAI) worked closely with the Ministry of Health (MOH) and WHO country office to trigger awareness, interest and recognition of snakebites as one of the major neglected tropical diseases that require critical attention among health policymakers and health practitioners in Uganda.

HEPS and HAI conducted a study to document the number of snakebite cases reported by the health facilities, estimate the availability of commodities used for management of snakebite cases in the health facilities, identify the burden of snakebites in high prevalence communities in Uganda, its management and their coping mechanisms. This study involved data interrogation for the number of snakebite cases from HMIS between 2013 and 2017. Findings indicated that a total of 12,479 snakebite cases were reported for a period of one year – between March 2017 and February 2018 – with the Northern region having the highest prevalence (4,910), followed by the Central region (2,859), Eastern region (2,701) and Western region (1,973) (HMIS 2017/18).

Up to 92% of health facilities managed snakebite cases supportively; only 8% used antivenom. An estimated 45% of facilities referred snakebite victims to another health facility. We also found that only 4% of health facilities in the public, mission and private sectors had antivenom in stock. Additionally, availability of general snakebite commodities (including antivenoms, adrenaline, syringes, antibiotics and painkillers) in public health facilities in Uganda was as low as 35%. Further still, we found that there was limited knowledge regarding management of snakebites across all levels including first aid related to snakebites. The health facilities were poorly equipped for snake bite management and communities used, traditional practices. It was revealed that communities still use many 'traditional' approaches that are not evidence-based, ranging from tightly tying a string above a snakebite wound, to

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sucking venom out of the victim's body.

This study subsequently informed national action, a Country Task Force on Snakebites and other NTDs was formed and a National Snakebite Prevention and Management Strategy was developed by MOH. The national taskforce was multi-sectorial in composition and was commissioned to guide the drafting of Uganda's first national snakebite strategy – the roadmap for all subsequent efforts to reduce the burden of snakebites in Uganda. Key contextual insights and learnings from the formative study were incorporated into the national strategy against snakebites. Through collaborative efforts, a snakebite focal person was appointed by the MOH to coordinate all subsequent snakebite control efforts.

In order to bridge the knowledge gap about snakes and snakebite management, materials related to snakebite management, including dos and don'ts for snakebite victims, were developed and widely disseminated. The educational materials were used to create awareness in communities of Kamuli, Lira and Entebbe districts on snakebite prevention and management which has increased community vigilance in reporting snakebite cases.

Additionally, the Annual International Snakebite Awareness Day (ISBAD) has been celebrated, since 2018, to further publicise best practices in snakebite management and promote preventative measures against snakebites, especially among high-risk populations.

HEPS's community model recognises the critical role of community leaders in improving health practices. These include elected leaders, academia, development/ implementing partners, sub-national stakeholders, Members of Parliament and the media. These are pivotal to ensuring that the right information reaches the right people in a timely fashion.

Moving forward HEPS is working towards including essential medicines for neglected tropical diseases including snakebites in the National Essential Medicines and Health Supplies List (EMHSL), improve reporting and data use and leverage on a multi-sectoral approach to ensure community empowerment to improve community members' health-seeking behaviours.<sup>10</sup>

#### References

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- 9 National Development Plan II 2015/2016 – 2019/2020
- 10 The Independent (2019) '92% of health workers can't treat snakebites-Study' 5 August. Kampala.

#### About HEPS-Uganda

HEPS is a health and human rights non-governmental organisation which envisions a society in which all Ugandans can exercise their health rights and responsibilities. Established in the year 2000, HEPS is a coalition of health consumers, health practitioners and CSOs. It works to ensure equitable access to health care services with special focus on access to medicines for all Ugandans. HEPS conducts research to inform advocacy and has over the years developed expertise in research creating a network of over one hundred research associates spread in all regions and also establishing strategic relationships with the MOH, WHO, Management Sciences for Health (MSH), HAI, MeTA, Medicines for Malaria (MMV) to mention but a few. HEPS-Uganda's Core Programmes include the following:

#### Community Empowerment Program (CEP):

Under the community empowerment programme, HEPS-Uganda empowers health care consumers with knowledge about their health rights and responsibilities, and imparts skills to claim their health rights and exercise their health responsibilities as well as facilitate a health consumer-provider feedback mechanism. The organisation has trained over 5000 volunteer trainers of trainers, many of whom have become part of the Village Health Teams and parish development committees.

#### Health Policy Advocacy Program (HPA):

HEPS advocates consumer-friendly health and health related laws and policies at national and district level through coalition building and partnerships. HEPS represents CSOs on the MOH Technical Working Group for Medicines and has established a national civil society Coalition on Access to Essential Medicines (UCAEM) and two sub-national coalitions in the Eastern and Northern region.