

# The Forgotten Victims of Snakebite

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Scola Kiplagat from Emsos, Kenya was just two when she died. Her cries awoke her parents on the night of her death, but they couldn't figure out why their little girl was that agitated. Did she have a bad dream? Was she thirsty? Was her belly aching? As they attempted to comfort her, Scola's sister, Jepchirchir, with whom she shared a bed, also began to cry. That's when the parents saw the cobra that had slithered into their daughters' bed.



Snakebite causes serious physical and psychological damage

## The Only Effective Treatment? A Five-Hour Motorbike Ride Away

The venom transmitted through the bite spread quickly in Scola's body. Within minutes, her limbs became limp. All help was too late; she died in her mother's arms. Jepchirchir survived, but the snakebite left her facing a lifetime of destitution. Although her father managed to secure a motorcycle from a neighbour to rush her to the nearest hospital 60 km away from their home, they arrived only to find the hospital's stock of antivenom depleted. It took them another four hours to reach the next closest hospital—this one stocked with the life-saving antivenom where Jepchirchir was finally treated.

## The Night She Lost Her Sister She Also Lost Her Future

Jepchirchir survived, but those hours riding through the night allowed the venom to spread in the little girl's body, killing tissue and organs and leaving her with a severely deformed hand, blind, unable to speak or walk, and with no control of her bowels. As a result of her injuries, Jepchirchir will never have the opportunity to lead a productive life or marry; she will forever be dependent on the help of others.[\[1\]](#)

## A Shocking, Yet Underestimated Number

Jepchirchir is not alone with her fate. Every year, between 1.8 and 2.7 million people are seriously injured and develop clinical illness, known as 'envenoming', following a venomous snakebite. Approximately, 81,000-138,000 people die after being bitten by a venomous

snake—a likely underestimation given that many of them don't make it to health facilities to be counted. Once countries adopt national snakebite recording systems in healthcare facilities, which is recommended in [HAI's action plan](#) on snakebite, the global health community will have to face a more accurate indicator of this long-neglected health emergency. Already, the casualties—estimated to be possibly as high as 138,000 deaths every year—make snakebite the deadliest neglected tropical disease (NTD) on the World Health Organization's (WHO) priority list.

### **A Bite Takes a Second; The Consequences Can Last a Lifetime**

Despite the horrific number of snakebite deaths, we shouldn't forget those who survive. At least, 400,000 snakebite victims every year suffer the same fate as Jephchirchir. They are left with serious, permanent disfigurement, disability and psychological strain. The venom of a snake can cause different reactions in the body, like paralysis, suffocation, kidney failure, blindness and severe tissue damage (necrosis), which sometimes requires limb amputation. In addition, the psychological effect of snakebite shouldn't be underestimated. A study found that the occurrence of post-traumatic stress disorder after snakebite envenoming is similar to that observed after the 2004 Asian tsunami.<sup>[2]</sup> And sometimes it's not only the venomous bite that hurts the victim, but also the discrimination and exclusion from family, friends and community.

### **One Bite Destroys the Lives of Many**

Not only are victims affected by the long-term consequences of snakebite; so, too, are their families and communities. Treatment costs are often high and with their main breadwinner unable to provide, many families resort to selling their belongings, or taking loans in order to meet costs. In India, for example, expenses can amount to 12 years' of income for the average farmer or herdsman.<sup>[3]</sup> How is a victim's family supposed to settle these costs? Sometimes, the last resort is to take children out of school and use the money that was intended to pay for school fees for snakebite treatment instead. One snakebite can destroy the future of a family for many generations. And all of this has an adverse effect on the community, which also loses a valued, productive member.

### **Striking the Poorest of the Poor and Not Sparing Anyone**

If the numbers are so high and snakebite has such a devastating effect on victims, their families and communities, why is so little being done about it? Partially, because snakebite affects the poorest of the poor—people living in remote, rural communities in tropical and subtropical areas of Africa, Latin America and Asia. Their voices are not being heard by those of us in the West, nor by politicians in endemic countries. Often, even people living in urban areas nearby are unaware of the epidemic happening around them. With our [action plan](#), HAI is working on changing that. Together, with other stakeholders, HAI successfully campaigned for snakebite to be reinstated on the WHO's list of NTDs in June 2017. This tremendous step allows WHO to lead large-scale action to tackle this global health emergency. HAI's action plan is part of this comprehensive solution addressing the burden of snakebite with a [multi-level approach](#).

## **Giving a Voice to the Voiceless in Sub-Saharan Africa**

An important part of HAI's work plan is piloting projects in Kenya, Uganda and Zambia, which empower civil society to advocate for better policies regarding snakebite. The projects are focused on rural communities to install life-saving education, prevention and treatment. Collecting the right data is essential; without knowing the numbers, it's difficult for civil society in snakebite-endemic countries to campaign on the issue. Because snakebite can't be eradicated—that would mean erroneously killing all snakes, which play an important role in a functioning ecosystem—the overarching aim is to reduce the burden of it by improving prevention measures and treatment. By empowering civil society, HAI's action plan is giving a voice to forgotten victims whose devastating stories will be told to audiences across the entire global health community and beyond.

[1] This story has been adapted from the documentary [Minutes to Die](#).

[2] Williams, S.S., et al. (2013). Delayed psychological morbidity associated with snakebite envenoming. *PLoS Neglected Tropical Diseases*. 5(8): p. e1255.

[3] Vaiyapuri, S., et al. (2013). Snakebite and its socio-economic impact on the rural population of Tamil Nadu, India. *PLoS One*, 8(11): p. e80090 and Hasan, S.M., et al. (2012). The impact of snakebite on household economy in Bangladesh. *Trop Doct*, 42(1): p. 41-3.