Empowering children to live safely among snakes

Experiences from a school programme pilot in Kenya

Kajiado County, one of the 47 Counties of Kenya, is a predominantly rural county in the semi-arid south of the country. On a good day, it's about three hours' drive from Nairobi, the capital of Kenya, to reach this secluded county infamous for its common snakebite incidents.

Kenya is home to over 140 different species of snake, 30 of which are venomous. Children are at particular risk from the effects of being bitten by a venomous snake – due to their smaller body mass, envenoming (effects after a bite from a venomous snake) manifests quicker – and a bite more often results in severe outcomes, such as amputations or even death. In Kajiado, the loss of life and limbs to snakebite envenoming is still all too frequent. (Snakebite: Case Studies from Kajiado County, Kenya – Health Action International (haiweb.org))

While the causes and consequences of deaths and disability as a result of this neglected tropical disease (NTD) (Neglected tropical diseases — GLOBAL (who.int)) are manyfold (including poor access to care and high-quality treatment), improved local knowledge on how to live safely alongside snakes can quickly make a big difference in its prevention. Working towards this cause, Health Action International (HAI) and Access to Medicines Platform (AtMP) Kenya recently ran a first-of-its-kind pilot of a snakebite programme in Kenyan schools. In June 2022, HAI's Lusiana Mailaj and I joined our colleagues and AtMP (Dorothy Okemo and Mwanaisha Aura), as well as Dutch ecologist and influencer, Sterrin Smallbrugge, to take the project on the road in Kajiado. (Dorothy Okemo – International Snakebite Awareness Day)

We began the trip by bringing together local teachers in a day-long sensitisation workshop on snakes and snakebites. The road we travelled to the meeting location immediately made apparent how challenging it can be for the community members living in these secluded areas of Kajiado if they have been bitten by a snake. With no public transportation available and a only handful of private vehicles, mainly motorbikes, it takes over an hour on the bumpy gravel roads to reach a local health facility. And even then, there is no guarantee that specialised help or antivenom is readily available. In a best case scenario, the chances are that the patient will be referred to a hospital and that requires a few more hours of travelling. More typical is transport by motorbike, or simply by foot.

Together with the County's NTD Coordinator, Mr. Baxson Likama, the team held sessions on perceptions and beliefs around snakes, the magnitude of the snakebite problem, and snakebite prevention and first aid measures. In addition, we introduced our latest prevention material tailored to children: the comic book *Safiya's Eight Secrets*.

"The comic book has been received very well. Now, children understand what to do in case of a snakebite" - Dorothy Okemo, Access to Medicines Platform Kenya.

Although, through our previous research, we already had a good overview and insight into the scale of the snakebite situation in Kajiado county, it was still striking how much a part of daily life the snakebite issue was for the community. There was no pause when sharing how much snakebite affected members of this community, how much fear and misery it caused and how precarious it felt to live among snakes, especially when no one in the community knows how to prevent snakebites or how to act when faced with a snake or a bite. The moment one participant started sharing his personal experiences of being a victim of a snakebite, the floodgates opened to a myriad of enthralling and relevant engagements. Many questions were asked – and perspectives shared – around first aid methods and local beliefs and practices around interacting with snakes. The participants also appreciated the opportunity to learn more about these animals, which are an essential part of the ecosystem. As teachers, there was an energy around how they – as agents of change – could use this knowledge to make a difference in the life of the children they teach.

On the second day of the trip, we visited three schools in the surrounding area to share prevention and first aid messages and educational materials with schoolchildren. It came as no surprise that these children were also all too familiar with the dangers of snakebites and how it affects their communities. Despite the unpleasant experiences and stories shared with them by others, they were eager to learn more about snakes and curious to read about Alika and Jabari's unexpected encounter with Safiya the snake, the characters of the comic book *Safiya's 8 Secrets*. Having worked closely with local Kenyan designers to create the comic book, it was a joy to see that the children absolutely loved reading the adventures of the two kids who meet Safiya the snake and unravel together, one by one, eight life-saving snakebite prevention tips.

There are many clichés that emphasise the power of knowledge – but there aren't many situations where they hold true as much as with teaching children about snakes and snakebites, especially when this knowledge is otherwise lacking. In snakebite endemic regions, knowing about the types of snakes that we live alongside, what measures we could take to prevent a snakebite, and how to respond if bitten, can mean the difference between life and death. Small changes in behaviour through educating and empowering communities can enable people to start live safely and in harmony alongside snakes.

We wholeheartedly hope to be able to scale up this pivotal and much needed programme to many other communities where it can make a difference.

"We believe this initiative will help the county government plus the national government to intervene, and help our community members who are vulnerable to snakebite. [..] We are here, our children are happy, our teachers are also very happy and we believe this knowledge will be extended to the other members of the community."- Teacher, Kajiado.