

Snakebites: A Burden for India

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The World Health Organisation (WHO) has called for a global effort against 'envenoming'.

- In May, the WHO's 71st World Health Assembly in Geneva adopted a resolution "to accelerate and coordinate global efforts to control snakebite 'envenoming' the life-threatening disease that follows the bite of a venomous snake".
- India currently manufactures only polyvalent anti-snake venom (ASV).
- India is a signatory of the resolution.

Relevance for India

- Approximately 50,000 die in India each year due to snakebites. However, according to WHO it may only be 10% of the actual burden.
- Of the 300-odd species of snakes found in India, 52 are venomous, but all their poisons are different.
- The nearly 120-year-old Haffkine Bio-Pharmaceutical Corporation Ltd is the only government-owned maker.

Reason behind the Situation

- Poorly trained doctors, and lack of anti-snake venom (ASV)
- ASV manufacture requires a series of forest department permissions. Horses are needed for the test, for which a large space is necessary. Private companies do not find all this financially feasible.
- Overall, India produces some 1.5 million vials of ASV every year, which is a third of the estimated annual requirement.
- The research showed that "in most cases, primary health centres referred patients elsewhere and the golden hour(the first hour, when emergency treatment is most likely to be successful) was lost".

Note:

Polyvalent ASV

- A monovalent ASV, made from the venom of one species, can treat the bite of only that species. It is more efficient, but the purpose is lost if the snake is not identified correctly.
- A polyvalent combines the venoms of India's four most common poisonous snakes — cobra, common krait, Russell's viper, and saw-scaled viper. More venom is wasted in the manufacture of the ASV, and more vials are required to treat the patient.

Suggestions

- The government should improve health infrastructure facilities i.e. trained doctors, availability of anti-snake venom (ASV) etc.
- The potency of ASV is reducing in the last few years. There is a need for research to understand which combination works best.
- A snake's venom changes with terrain, diet and environment, therefore scientists should incorporate all the factors in the research.