


ABSTRACT

Challenges and Prospects of Poison Control Systems in India: Lessons from a southern Indian Poisons Control Center




Poisonings and envenomings are a major cause of morbidity and mortality in India. Estimates suggest that over 50,000 Indians die of snakebites and over 20,000 die of pesticide self-poisoning each year. Despite this staggering statistic, the concept of poison control centers is yet to catch on in India. Currently, less than ten poisons centers exist in a country of 1.3 billion with only one doctor for every thousand citizens. We describe our experience of establishing a poison control center in southern India and present a two-year retrospective review of clinical data on poisoning and envenoming-related calls from across the country. Using two clinical-case vignettes we also highlight critical lacunae related to poisoning and envenoming treatment at primary and secondary health-centers, which can have important implications on how Indian Poison Centers evolve and function in the future.

We received a total of 3630 calls during the study period. 52% involved incidents in adults whilst 48% involved children (patients <17 years old). 92% calls were from healthcare providers attending to victims. 34% (1294 calls) pertained to agrochemical exposures and poisonings. Pyrethroids, rodenticides and herbicides were the three most implicated agents. Important challenges included the non-availability of product-related information on containers in nearly 50% of agrochemical poisonings necessitating toxidromal identification of the likely agent; erroneous assumptions amongst healthcare providers regarding the emergency treatment of agrochemical poisonings and envenomings leading to the administration of wrong antidotes and clinical worsening by the time the PIC was called and significantly low access rates amongst the general population.

ABSTRACT

Challenges and Prospects of Poison Control Systems in India: Lessons from a southern Indian Poisons Control Center



在印度，中毒和毒液中毒是最主要的致病及致死原因。據估計，每年有5萬多名印度人死於蛇咬傷，2萬多人死於農藥自殺。儘管統計數據如此驚人，但毒物管控中心的概念在印度尚未普及。目前，印度全國擁有13億居民，卻只有不到10個毒物中心，一名醫生須負責千位名市民。我們分享了在印度南部建立毒物管控中心的經驗，並報告兩年內接到全國各地中毒和毒液中毒相關的臨床數據的回顧性審查。透過兩個臨床案例，我們發現中毒和毒液中毒的治療在基層醫療和2級醫療中有嚴重缺陷，這可能對印度毒物中心未來的演變和功能具有重要影響。

在研究期間，我們共接獲3630件諮詢電話。52%是成人中毒事件，48%為兒童（患者<17歲）。92%的電話來自中毒者的醫療單位。34%（1294件）與農藥暴露有關。除蟲菊酯、殺鼠劑和除草劑是最常見的中毒物質。最重要的挑戰是在農藥中毒中，有近50%的案件無法獲得與產品內含物，因此需由中毒症狀推測可能的中毒物質；及醫療院所對於中毒或毒液中毒治療上的錯誤判斷導致給錯解毒劑以致症狀惡化。毒物管控中心的服務可顯著降低民眾就醫的頻率。