

## **Adequacy of Availability of Antidotes for Common and Critical Drug Poisonings and Doctors' Perspectives Thereof: A Study in Teaching Hospitals in the Southern Gauteng City-Region**

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### **Abstract**

**Background:** Drug poisoning is an important area of study in South Africa (SA) as a treatable cause of mortality. While research has been conducted on poisoning, there is a paucity of literature on the availability of antidotes in SA.

**Objectives:** To assess the availability of antidotes in selected teaching hospitals in the Southern Gauteng City-Region and to explore doctors' experiences of antidote supply.

**Methods:** A data sheet assessing the availability of antidotes in the Emergency Departments (EDs) and pharmacies was completed in person at each of the teaching hospitals. A questionnaire exploring experiences of antidote supply was distributed to 126 doctors working in the EDs.

**Results:** N-acetylcysteine, atropine, diazepam, clonazepam, sodium bicarbonate, vitamin K, calcium gluconate, naloxone, ethanol and pyridoxine were present in all EDs. Doctors reported organophosphate poisoning and paracetamol overdose as the most common drug poisonings (81.7% and 14.3% of 126 respondents respectively). Most doctors experienced no supply issues for N-acetylcysteine, calcium gluconate, sodium bicarbonate or pyridoxine (85.7%, 83.3%, 87.3% and 75.4% of 126 respondents respectively).

**Conclusion:** The antidotes to the most common poisonings reported by doctors were present in all EDs. However, concerns were raised about consistency of supply which will be an important avenue for further research.