



## An analysis of poisons and antidotes described by Mohammad Ibn Zakariya I-Razi

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**Background and Aims:** History of medicine often provides valid and authentic information that can be used for research and application in modern medicine. Mohammad ibn Zakariya al-Razi was a famous Muslim physician in medieval times. He authored two important books in the field of medicine: Al-Hawi and Al-Mansouri fil-Tib. Some sections of these books provide description of poisons and antidotes. In this study we analyzed these poisons and antidotes and interpreted relevant information in modern context.

**Methods:** We studied volume 20 and 21 of the Al-Hawi and chapter 8 of Al-Mansouri fil-Tib. All poisons and their antidotes were noted for their name, source, and description of poisoning, antidotes and treatments.

**Results:** We found about 30 poisons and their antidotes. These poisons and antidotes were categorized to 3 groups, antidotes for herbal toxins, antidotes for mineral toxins and antidotes for animal bite poisoning. The mechanism of action was studied based on new findings. Most of these toxins affected nervous and gastrointestinal system, some of them affected on cardiovascular system. The active ingredients responsible for these symptoms were evaluated. The oral route was the main way that caused their toxic effects; the topical use of some of them had therapeutic effects on wound healing and disinfection and reduced bleeding.

**Conclusions:** Al-Hawi and Al-Mansouri fil-Tib provide authentic information about the common poisons and antidotes that maybe are safer than new antidotes. It can complement modern medical science for the treatment of poisoning and reduce side effects of the poisoning treatment.

**Keywords:** Mohammad Ibn Zakariya al-Razi; Al-Hawi; Al-Mansouri fil-Tib; Toxins; Antidotes