A literature review of the epidemiology of poisoning in Ethiopia to support development of training materials to establish a poisons centre

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INTRODUCTION

Few developing countries have a poisons centre. Public Health England and the UK National Poisons Information Service as part of an International Health Regulations Strengthening project have been supporting St Peter’s Hospital, Addis Ababa in establishing the first Poisons Centre in Ethiopia.

AIM

To undertake a literature review of the epidemiology of poisoning in Ethiopia to inform a structured programme of relevant training materials.

MATERIAL & METHODS

Multiple databases were interrogated including Embase, Global Health and Medline for 2012-2019.

RESULTS

Thirty-four relevant articles containing original data were retrieved. There was great disparity in the quality and type of data reported. Amongst seven general epidemiological papers the most common cause of poisoning was organophosphorus insecticides (reported in Gondar), followed by household cleaning products. Pharmaceutical poisoning was infrequent. Other prominent cases of poisoning included envenomations, fluorosis (in the Rift Valley) and liver disease secondary to pyrrolizidine alkaloid exposure from contaminated grain (in Tigray). Most exposures occurred via ingestion for which gastric lavage was commonly instituted. The extent of antidotes and antivenoms availability and administration was poorly recorded. Outcome data were limited.

SUMMARY / CONCLUSION

Literature reviews are useful to identify educational needs when developing training materials for new poisons centres and can be one of the primary information sources available. However, data must be interpreted with caution as incidence, clinical features and outcomes may be inadequately reported. St Peter’s initially held only limited toxicovigilance data on recent local poisonings. This literature review has helped increase the understanding of the epidemiology of poisoning across Ethiopia which contrasted greatly with the UK.

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