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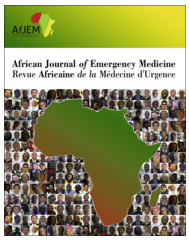

ORIGINAL RESEARCH ARTICLES

A promising poison information centre model for Africa☆

Un modèle prometteur de Centre d'information antipoison pour l'Afrique

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Introduction: The burden of poisoning exposures in Africa is a significant public health concern, yet only ten African countries have poisons information centres. The establishment of poisons centres was subsequently identified as a priority. This article focuses on workshop discussions with international multi-sector stakeholders in Eastern Africa regarding the possibility of a sub-regional poisons centre serving multiple countries.
Methods: The project was led by an independent consultant under the guidance of an international steering group. Steering group members provided input at international multi-stakeholder meetings and during monthly teleconferences.
Results: Participants of the stakeholder meetings agreed that the establishment of a sub-regional poisons centre in Eastern Africa was necessary and feasible. Virtual collaboration is possible due to recent technological developments, and the overall suggestion was for countries to establish their own poisons centres and to network and coordinate these centres through a network hub.
Conclusion: A number of benefits might result from such a poisons centre network hub, including: (1) Improved cooperation between countries on poisoning problems; (2) Harmonisation and strengthening of research and surveillance; (3) Common standards and best practices e.g. regulating chemicals, data management, and staff training; and (4) Greater bargaining power to secure resources. Further investigation is needed to identify the most suitable location for the network hub, the activities it should fulfil, and the availability of specialists in poisons information who could become members of the hub.

Introduction: La charge que représentent les expositions à l'empoisonnement en Afrique est une préoccupation de santé publique importante, et pourtant, seuls une dizaine de pays africains sont dotés de centres d'information antipoison. La création de centres antipoison a donc été identifiée comme une priorité. Cet article se concentre sur les discussions de l'atelier organisé avec les parties prenantes multisectorielles internationales en Afrique de l'Est concernant la possibilité de la création d'un centre antipoison sous-régional desservant plusieurs pays.
Méthodes: Le projet a été mené par un consultant indépendant, sous la direction d'un groupe de pilotage international. Les membres du groupe de pilotage ont apporté leur contribution lors de réunions internationales multipartites et de téléconférences mensuelles.
Résultats: Les participants des réunions des parties prenantes ont convenu que la mise en place d'un centre antipoison sous-régional en Afrique de l'Est était nécessaire et faisable. La collaboration virtuelle est possible grâce aux récents développements technologiques, et la suggestion générale était que les pays établissent leurs propres centres antipoison et mettent en réseau et coordonnent ces centres par le biais d'une tête de réseau.
Conclusion: Une telle tête de réseau de centres antipoison pourrait présenter un certain nombre d'avantages, notamment: (1) Une amélioration de la coopération entre les pays sur les problèmes d'empoisonnement; (2) Une harmonisation et un renforcement de la recherche et de la surveillance; (3) Des normes communes et des meilleures pratiques, par exemple la réglementation des produits chimiques, la gestion des données et la formation du personnel; (4) Une meilleure position de négociation pour obtenir des ressources. Une enquête plus approfondie est nécessaire pour identifier l'emplacement le plus approprié pour la tête de réseau, les activités qu'elle devra remplir et la disponibilité de spécialistes en information antipoison qui pourraient participer à cette tête de réseau.

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African relevance

- The article provides information about the existing poisons centres in Africa and the services they provide.
- Poisoning exposures in Africa are challenging, under-reported, and present a significant public health burden.
- To address the lack of poisons centres in Africa, this study was initiated to investigate the feasibility of a sub-regional poisons centre serving multiple countries.

1. Introduction

The burden of poisoning exposures in Africa is a significant public health concern. However, only ten of 58 countries (17.2%) have poisons information centres (PICs). The true extent of acute poisonings in Africa is not known. It is difficult to obtain accurate figures since poisoning cases are usually poorly documented. Reasons include lack of resources and knowledge to diagnose poisoning, the fact that only certain acute poisonings are required to be reported to the local or national department of health, and low levels of death registration. Hence, it is difficult to obtain reliable epidemiological data. According to WHO estimates based on data from 2012, unintentional poisoning accounts for 39,800 deaths and 27,949,000 DALYs in the UN Africa region.[1,2]

Acute poisoning is a manifestation and result of the interplay between psychological, economic, cultural, policy/legislation, and other regional factors. This is illustrated by the marked inter-population differences in the nature and magnitude of the problem, particularly when contrasting developed and developing countries. Studies have revealed that deliberate self-harm is a common form of acute poisoning in the developing world.[3] The mortality rate is often high, due to (1) the inherent toxicity of the poisons taken, (2) the greater availability of highly toxic chemicals and products because of weak regulation, (3) ingestion of large doses, and (4) poor medical care.[3] The lack of infrastructure and financial resources are further limitations that may have a profound effect on health strategies in Africa. Many countries have very limited resources to detect, measure, and manage the effect of chemicals on health, as exemplified by the lack of PICs, toxicological expertise among health professionals, and laboratory analytical facilities.

The Strategic Approach to International Chemicals Management (SAICM) is a global policy framework to foster the sound management of chemicals.[4] Its goal is to produce and use chemicals in ways that will minimise significant adverse impacts on the environment and human health by 2020.[4] Initial capacity-building activities for the implementation of SAICM objectives are supported by the Quick Start Programme (QSP), a fund administered primarily by the United Nations Environment Programme.[5]

The SAICM African regional group identified the establishment of PICs as a priority need, and the possibility of a sub-regional poisons centre serving multiple countries was suggested. The Zambia Environmental Management Agency (ZEMA), on behalf of the Eastern Africa sub-region, secured funding for the project from the Quick Start Programme. The World Health Organisation (WHO) was the executing agency for the project due to a long-standing programme of work directed at assisting countries to establish and strengthen PICs. The overall objectives of the project were: (1) To document the incidence of poisoning exposures in the East African sub-region; (2) To identify existing PIC services in the sub-region; (3) To identify the different models of PIC service provision and reasons for their establishment; and (4) To explore options to improve the availability of PIC services in Africa. The project was divided into three phases to meet the set objectives: Phase (1) An extensive literature review (objectives 1 & 2); Phase (2) A survey (objectives 1–3); and Phase (3) National and international multi-stakeholder consultations (objective 4).

2. Methods

An independent consultant under the guidance of a steering group (Table 1) conducted the 18-month project. The role of the steering group was to provide technical input and oversight of the project to ensure that it met its objectives. Steering group members attended the international multi-stakeholder meetings and provided further input during monthly teleconferences.

Sixteen countries (Fig. 1) within the Eastern Africa sub-region that have a SAICM National Focal Point (NFP) were included in the first two phases of the study. The SAICM NFP is the officially-designated representative for communication on SAICM issues and activities in countries. Somalia and South Sudan, which have no SAICM NFP, and Reunion and Mayotte, which are French overseas departments with different legal status and levels of autonomy, were excluded from the study.

The specific objectives of the multi-stakeholder consultation meetings were: (i) To identify and explore different models of PIC service provision, and (ii) To determine the requirements for the establishment of PIC services in Africa.

The main participating countries were Kenya and Zimbabwe, which have PICs, and the United Republic of Tanzania and Zambia, which do not. There were two international multi-stakeholder meetings, one at the start of the project (June 2012) and one towards the end (May 2013). National meetings were also held in Kenya, Zimbabwe, United Republic of Tanzania, and Zambia.

Participants for the national and international multi-stakeholder meetings were drawn from purposive sampling. They included members of PICs and poisons centre host institutions (e.g. hospitals); representatives of ministries of health, environment, agriculture, labour and industry; medical/nursing/pharmacist professional associations; SAICM NFPs and relevant non-government organisations such as those concerned with consumer safety and pesticide safety. Educational authorities and bodies (e.g. those involved in training of medical/nursing and other frontline health workers) and industry e.g. (CropLife Africa) were also invited.

During the first international multi-stakeholder meeting (June 2012) and the four national meetings (September to October 2012), stakeholders were informed about the roles and functions of PICs, and views were sought about the desirability and practicality of a sub-regional poisons centre. Participants were asked for ideas on how PIC services could be provided and funded. It was also recognised that there would be a need to agree on protocols and procedures to allow cross