

The Development of a Medical Toxicology curriculum using a Delphi study

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Introduction

The availability of trained Medical Toxicologists in Africa is limited and education in Medical Toxicology remains inadequate. The lack of toxicology services contributes to a knowledge gap in the management of poisonings.

The overall aim of this project is to improve education in Medical Toxicology in Africa, anticipating improved patient outcomes, better poisoning prevention, and stronger public health efforts.

Objective

To develop a comprehensive and up-to-date curriculum that covers the fundamental principles of Medical Toxicology.

Methodology

To capture the collective opinion of experts in South Africa, Africa and globally, three different groups of Medical Toxicology experts were invited to participate in a Delphi study. Focusing on knowledge, skills, and attitude, the participants reach consensus on 118 competencies which were included in the curriculum for a Post Graduate Diploma in Medical Toxicology. Results of the Delphi study was published in an international peer reviewed journal.

Results

The Faculty of Medicine and Health Sciences, Stellenbosch University South Africa launched the programme in 2021 and it is offered by means of a hybrid learning curriculum. Our students have diverse backgrounds and include physicians, pharmacists, emergency medicine specialists, chemists, stakeholders from agricultural industry, cosmetic industry and academia. Sixty topics relevant to poisonings on the African continent are presented on an online platform for easy accessibility. Lecturers includes specialists in poison information as well as experts in various fields of toxicology. Feedback from two cohorts of students were positive.

Discussion

The Delphi study brought together expertise and provided well-informed recommendations on the curriculum content. Students reported the course to be extremely valuable and believe that it will go on to contribute immensely to the understanding and handling of toxicology and poisonings on the African continent. Moreover, they liked learning from experts in their respective fields, so the idea of getting the different experts to present the different topics worked very well.

Conclusion

This diploma is the first postgraduate training programme in Medical Toxicology in Sub-Saharan Africa and raises awareness, educates, and empowers medical toxicologists to mitigate the burden of poisoning.