



Translating toxicology knowledge into community practice

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Objective: Knowledge and evidence of toxicology have been expanding on the effects of different poison types, treatments and first aids, acute and long term effects of toxic exposures. Furthermore, toxicology has been changing from its conventional role of merely being a clinical specialty and developing to include public health components to the practice. Toxicologists develop knowledge on toxins and effect of acute and chronic exposures and generate evidence on improving treatment options and managements. This knowledge should be translated in to communities to improve their knowledge and practices related to handling toxins, understanding effects and what to do in an event of poisoning and envenomation. Lack of such mechanism can result failures in achieving the ultimate goal, reducing mortality and morbidity following poisoning and snake bites.

The role for communities in toxicology: Continuation of inappropriate first aid practices is a major problem in managing acute poisoning and snakebite patients. Some of these practices were previously recommended and later proved to be harmful. One of the main reasons was identified as lack of community awareness on updated evidence. Clinicians working in primary care hospitals face difficulties in delivering care for acute poisoning patients due to the influence of the relatives of patients. They believe on treatments currently not recommended such as forced emesis and demand it. Although the treatment guidelines were updated, there was no mechanism to inform communities of those. Similarly, gaps in translating knowledge in to communities can fail policy decisions due to poor public support. Restrictions on highly toxic agrochemicals may not work if farmers continue to prefer and use it.

How to translate toxicology knowledge in to community practices

The conventional health education model has been around for long time as the main method of knowledge dissemination. This method was mainly used through poison information centers and seems to have own limitations. Mainly, there is a limited access for community members, particularly in rural parts and the sustainability is questionable due to less community involvement. The need of repeated add to the cost. Hence, new approaches to translate knowledge in to communities are required by addressing those limitations. Interactive approaches such as drama, particularly forum theatre has been considered as a better approach to deliver messages to communities. With the increased use of mobile



phones and internet, integrating mHealth techniques and utilizing social media could also be better options.

Community based approach such as health promotion, which has been adopted by many fields in the health care, is another alternative approach. In this approach, high community involvement and ownership result better sustainability of the knowledge and trigger positive changes within communities.

Conclusion: Translating knowledge on toxicology to communities is vital in getting the latest knowledge in to community practices. Having understood the limitations of existing methods new cost effective approaches should be sought and used to generate sustainable changes of community practices.