INVITED SPEAKERS

Professor Michael Eddleston is a Professor of Clinical Toxicology at the University of Edinburgh, Consultant Physician and Clinical Lead at the National Poisons Information Service, and Co-Director of the NIHR RIGHT4: Preventing Deaths from Acute Poisoning in LMICs. His research primarily aims to reduce deaths from pesticide and plant self-poisoning in rural Asia, a significant cause of over 200,000 premature deaths annually and a major global suicide method. To achieve this, he conducts clinical trials in South Asian district hospitals to better understand the pharmacology and effectiveness of antidotes, and community-based controlled trials to identify effective public health interventions.

His work is supported by translational studies of antidotes in minipig models of poisoning at a large animal intensive care facility he established in Edinburgh. He also collaborates with sociologists and anthropologists to gain deeper insights into the socio-cultural aspects of self-harm and works with the World Health Organization and Food and Agriculture Organization to support the implementation of their findings.

My research journey – pesticide poisoning?

Pesticide poisoning remains a critical public health issue, particularly in rural agricultural communities in low- and middle-income countries. This presentation will outline my research journey into understanding and mitigating the impacts of pesticide poisoning, a journey marked by both scientific inquiry and practical application.

Pesticide and plant self-poisoning cause over 200,000 premature deaths each year and represent a major global means of suicide. To address this, my research focuses on conducting clinical trials in South Asian district hospitals to evaluate the pharmacology and effectiveness of antidotes. These trials have led to significant advancements, such as high-dose immunosuppression for paraquat poisoning and the use of magnesium sulfate for organophosphate poisoning, which have been published in leading medical journals and influenced clinical practices worldwide.

Throughout my career, I have strived to bridge the gap between research and practice, ensuring that our scientific discoveries translate into tangible health benefits. By sharing my research journey, I hope to inspire and equip others in the field of clinical toxicology to continue this vital work, ultimately reducing the global burden of pesticide poisoning.