



# RECOGNIZING AND EDUCATING ABOUT EXCIPIENT-RELATED SIDE-EFFECTS FROM USE OF ANTIRETROVIRAL THERAPY AT MBEYA, TANZANIA

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## ISSUES

Pharmaceutical formulation is the process in which different chemical substances constituting Active Pharmaceutical Ingredient (API) are combined to produce a final medicinal product. It involves the characterization of a drug's physical, chemical, and mechanical properties in order to choose what other ingredients (e.g. excipients) should be used in the preparation. Excipients comprise of colours, flavors, emulsifiers, diluents, bulking agents, sweeteners, and preservatives. Excipient-related reaction to certain ART formulations has been described in the literature, but may be overlooked and under-recognized by ART clinicians.

## DESCRIPTION

To increase awareness among clinicians of excipient-related side-effects for adult and pediatric ART formulations used in Mbeya, Tanzania, we developed teaching materials to raise awareness about excipients and possible ART excipient-related side-effects. The materials include a teaching session to demonstrate solubility of dispersible tablets compared to non-dispersed tablets and to allow viewing and smelling of flavoring agents from available ART. Additional topics include future advances for ART formulations, new WHO recommendations and their possible adaptation in Tanzania.

## LESSONS LEARNT

Side-effects and drug interactions are usually attributed to API, and often little attention is paid to excipients as they are often regarded as inert/non-reactive ingredients. However, educational sessions about excipients were well received by those attending, and provided an easy, low-cost way to provide basic education and awareness about potential excipient reactions. Many ART clinicians were unaware of these reactions, and benefited from the session and materials.

## GOING FORWARD

As part of learning curriculum, we intend to integrate this topic into curriculum for all pharmacy attachments and trainings at our center. We also shared this presentation with our counterpart adult CTC clinic at Mbeya Referral Hospital, and hope to disseminate the materials broadly.

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