Aersol Barriers: Zimbabwe

Pictures and description courtesy of Dr. Danai Marange, Parirenyatwa Hospital, Division of Anaesthesia and Critical Care Medicine, Harare, Zimbabwe.

Clear Plastic Barrier Technique

The plastic barrier was our 1st attempt to create an aerosol barrier for intubation/extubation. It is inexpensive and more readily available than the plastic boxes. It was adopted from the technique described by Clyde T. Matava in the recent publication in the Canadian Journal of Anesthesia: Clear plastic drapes may be effective at limiting aerosolization and droplet spray during extubation: implications for COVID-19

We use clamps to secure the plastic barrier onto the drip stands. The rolls of plastic we currently have are narrow so we taped double sheets to widen the plastic. Miracle Missions courtesy of Jacqueline Anderson has donated the plastic and is working on sourcing the correct width so as to minimize the amount of time spend “rigging” the plastic barrier.

Video: Intubation using a clear plastic barrier
The Perspex box was a gift of Cindy Davidson (A D Medical Suppliers). It was modified for our setting by a local company (Compusign). The clear plastic flap was created on the side to allow an additional opening to pass equipment. Dr. Marange explains that she got the idea from the Global Peds Anaesthesia WhatsApp group. She recognizes that they can not afford to cut up disposable gowns as in the picture and are currently looking for another alternative.

Thus far they have trained physician and non-physician anaesthetists in Harare and 1 other neighboring city (Gweru) on how to use the barriers.