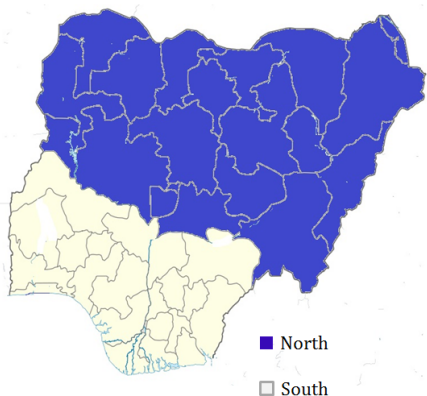


Context



- Scenario worsened by preponderance of counterfeit medicines with some reports suggesting up to 70% incidence rates
- IDPs among those most affected as they cannot afford quality healthcare and medicines
- Various factors account for high incidence of counterfeit medicines, one of which is poor regulation, weak supply chains and poor quality control systems for medicines
- Thus the need for innovation in areas of pharmaceutical and medical devices to develop rapid quality control tools for quick detection of poor quality medicines in resource-limited settings

- Nigeria is an LMIC with a population of over 190 million people
- Currently facing Insurgency by various militant groups especially in the Northern Region
- This has led to over 2 million Internally Displaced Persons (IDPs) and over 8.5 million people in need of humanitarian assistance
- Availability and access to quality vital and essential medicines remain poor; in some cases, over 90% of IDPs do not have access to any form of healthcare



Proposed Tool

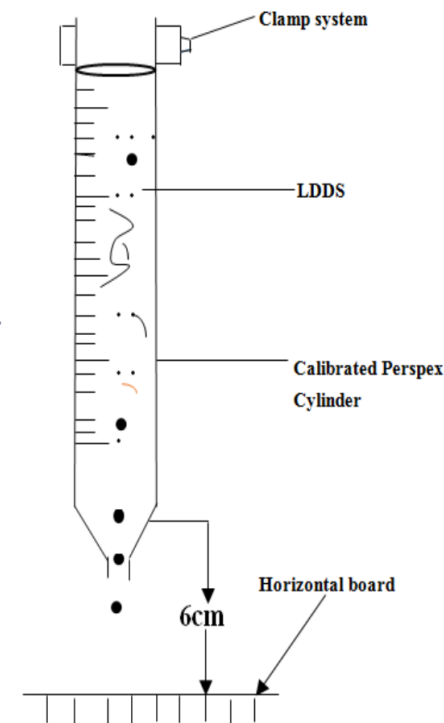
A cost-effective, accurate quality control technique for determining the quality of liquid drug delivery systems

This simple technology can be used in resource-limited settings such as the humanitarian camps in Nigeria to determine the quality of liquid drug delivery systems prior to their use

Uses properties of a solution, surface activity, pH variation and density to confirm quality

Involves using a calibrated Perspex cylindrical measure from a fixed height, taking into account the time taken for a predetermined amount to fall under gravity at certain temperature (27 +/- 1°C) and environment.

This method was used to characterize different brands of acetaminophen and other syrups



This simple drop-off time method can be used to determine quality of liquid dosage forms along with other quality control tests and labeling requirements.

This can be particularly useful in resource-limited settings as it is a cheap, affordable tool to validate quality of liquid drug delivery systems.