

# **Adaptation of a method of measuring zone diameters of bacterial growth inhibition by antibiotics to suit developing countries**

## **Abstract:**

A study that devised a modified method of reporting antibiotic sensitivity results was undertaken. Enterobacteriaceae and Gram positive cocci were tested for drug sensitivity by a disc diffusion method. Zones of bacterial growth inhibition were measured, dividing the isolates into four groups: the highly sensitive, the moderately sensitive, the slightly sensitive and the resistant ones. The slightly sensitive isolates were taken as indicators of antibiotic resistance acquisition. By that system, when more than 50% of the isolates fell into the slightly and resistant groups, that meant that the antibiotic concerned would be discontinued for some time until the bacteria reverted to being moderately sensitive. The study also provided a method of making antibiotic discs from local blotting papers, and a sample of a form on which antibiotic sensitivity results could be recorded was presented. The method is considered to be easy and very appropriate for developing countries in detecting gradual and abrupt acquisition of antibiotic resistance by bacteria.