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DOCUMENT: TRADE PROJECT

**THE KENYA POLYTECHNIC UNIVERSITY
COLLEGE
DEPARTMENT OF HEALT SCIENCE AND
BIOTECHNOLOGY**

**TITLE: *HELICOBACTER PYLORI* ANTIBIOTIC RESISTANCE
PARTERN IN DYSPEPTIC PATIENTS ATTENDING KIBERA
COMMUNITY BASED HEALTH CENTRE BETWEEN APRIL AND
AUGUST 2006**

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COURSE: DIPLOMA MEDICAL LABORATORY TECHNOLOGY

**THIS PROJECT IS SUBMITTED IN PARTIAL FULFILMENT FOR
AWARD OF A DIPLOMA IN MEDICAL LABORATORY
TECHNOLGY**

ABSTRACT

Surveillance of *Helicobacter pylori* antibiotic susceptibility from patients in KIBERA, the largest metropolitan area in Nairobi, is limited, despite resistance being a key factor in treatment failure.

A survey was performed over four months (April–August 2006) to determine antibiotic-resistance rates of isolates from dyspeptic patients attending a community based clinics serving an ethnically diverse communities.

The *in vitro* antibiotic susceptibilities were determined from disc diffusion on 41 *H. pylori* isolates.

Overall resistance rates were 59 % for metronidazole and 11 % for clarithromycin, with 8 % resistance to both antibiotics.

There were sensitivity of 38% for Metronidazole and 85% for clarithromycin with intermediacy of 3% and 4% respectively.

All isolates were susceptible to amoxicillin and tetracycline.

No associations between resistance and either the gender or the age of the patients were detected.

The need for continued resistance surveillance is indicated to monitor the effects of the test and treat' strategy for *H. pylori* eradication, particularly of isolates from at-risk individuals.