Knowledge, attitudes and practices on antibiotic usage among nursing undergraduates in University of Ruhuna

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Introduction
Emergence of antibiotic resistance has become a public health concern throughout the world. The aim of this study was to evaluate the knowledge, attitudes and practices regarding antibiotic usage among nursing undergraduates in University of Ruhuna.

Methods
A cross sectional study was conducted among nursing undergraduates of all academic years in University of Ruhuna. A pre tested self-administered questionnaire was used to obtain data. Questionnaire included questions to assess the knowledge on antibiotics (ten questions with a maximum score of 10), to assess the awareness on antibiotic resistance (six questions with a maximum score of 15) to evaluate attitudes regarding antibiotic usage (seven statements with a maximum score of 35) and regarding practices in antibiotic usage (six questions with a maximum score of 30). Data was analyzed using SPSS 20 statistical software. Correlation of knowledge, attitudes and practices with academic year was analyzed with Pearson correlation.

Results
Out of 134 students, 107 (80%) were females. Mean (SD) age was 24 (2) years. Mean (SD) of knowledge regarding antibiotics, awareness on antibiotic resistance, attitudes regarding antibiotic usage, practices regarding antibiotic usage were 8.3 (1.7), 11.43 (2), 25 (4) and 22 (3.5) respectively. There was a positive correlation in knowledge score ($r = 0.523$ and $P<0.01$), awareness on antibiotic resistance ($r = 0.460$ and $P<0.01$) and attitudes regarding antibiotic usage ($r = 0.316$ and $P<0.01$) with the advancement of the academic year. No significant difference was observed in practices with respect to the advancement of the academic year.

Conclusions
There were significant differences in knowledge, awareness on antibiotic resistance and attitudes regarding antibiotic usage with respect to the advancement of the academic year. However, no significant difference was observed in practices. This highlights the need for focused educational interventions to enhance the rational usage of antibiotics.