

## PP 02

## Antibiotic Sales in Selected Pharmacies of Galle during Lockdown Period of COVID-19 Pandemic

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**Background:** Many measures such as restrictions of public movement and good hygiene practices were implemented by the government due to the COVID-19 outbreak in 2020 and 2021. These lockdown restrictions may limit access to doctors, healthcare institutes and pharmacies. This may contribute to reducing drug use in the community. Further, restrictions on movement and hygiene practices may reduce the spread of infections. As a result of that, the use of antibiotics among the general public might have reduced during this period.

**Objectives:** To assess the sales of commonly used antibiotics in community pharmacies in the suburb of Galle district, during lockdown periods of COVID-19 outbreak in 2020-2021

**Methods:** A cross-sectional study was conducted using records of antibiotic sales in three community pharmacies in Galle suburbs, Sri Lanka. Sales records data of four commonly used antibiotics (Co-amoxiclav, Cefuroxime, Ciprofloxacin, and Metronidazole) during the two lockdown periods were obtained from three pharmacies. For comparison, sales record data for two commonly used non-antibiotic drugs (Diclofenac sodium and Losartan potassium), were obtained for the same periods. Unit sales of the antibiotics and control drugs were compared before and during lockdown periods using non-parametric tests at 0.05 significance level.

**Results:** A clear sale reduction of antibiotics and control drugs was identified during both lockdown periods. However, the sales reduction of antibiotics in the first lockdown (52%) is significantly higher than that of the second lockdown (12%) (p=0.04) while the sales reduction of control drugs is not different in the two lockdown periods (p=0.73).

**Conclusions:** There was a reduction in both antibiotic and controlled drug sales during both lockdowns. However, antibiotic sales reduction during the first lockdown is more than that of the second lockdown. The relaxed restrictions during the second lockdown can be one possible reason for this difference.

Keywords: Antibiotic sales, Community pharmacy, COVID-19, Lockdown periods