INCIDENCE OF CHLAMYDIA AND GONORRHOEA DIAGNOSED ON THE GOLD COAST BETWEEN MARCH AND APRIL OF 2017-2020 INCLUDING THE COMMONWEALTH GAMES 2018 AND THE COVID-19 PANDEMIC

Authors:
Poulton G[2], Thng, C[1], O'Sullivan, M[1]
[1]Gold Coast Sexual Health, [2]Bond University

Background:
Our study aims to evaluate testing and incidence of sexually transmitted bacterial infections *Chlamydia trachomatis* and *Neisseria gonorrhea* at the Gold Coast Sexual Health Clinic from 2017 – 2020 to describe the potential impact of mass events: Commonwealth Games in 2018 (GC2018) and the COVID-19 pandemic in 2020.

Methods:
A retrospective observational cohort study was conducted using exclusively data collected from the Gold Coast Sexual Health Service over the course of four years 2017- 2020. The data included the number of tests conducted and the incidence of positive diagnosis of CT and NG in the cohort of clients who presented to the service. Interrupted time series analysis looking at the effect of a particular time point on incidence rate ratios was used to evaluate the data.

Results:
Testing rates spiked in 2018 during GC2018. However, there was no corresponding increase in infection rates observed. Conversely, during COVID-19, testing rates dropped off and we observed a decrease in incidence.
Remarkably, during the two years of mass upheaval, incidence dropped to similar levels though testing rates differed.

Conclusion:
The findings suggest that health promotion and directives for STI testing during times of mass upheaval are effective. However, our data support those of existing studies that mass gatherings due to sporting events do not lead to significant increases in incidence of STIs.
The findings pertaining to the COVID-19 pandemic are of unclear significance as events are still unfolding. Predicting and anticipating the impact of demands for STI testing is essential to assist in managing and planning for anticipated fluctuations in demand during times of mass upheaval. However, understanding the impact of mass upheavals on STI incidence crucial to inform cost efficiency of health promotion and service delivery.

Disclosure of Interest Statement:
The authors declare no conflict of interest.