with 8 incidents relating to ongoing NGT position testing. 2 NGTs moved without a change in nostril measurement; both identified via X-ray, not pH testing. 1 tube was in the lung and caused low harm. The other was in the oesophagus caused no harm. There were another 2 recorded incidents of missed medications and/or feed due to failed ongoing pH tests.

**Conclusions** These results highlight that NGTs can spontaneously displace and pH testing does not always identify these. It also indicates that failed pH test results can and do lead to delays in feeding and medications. Incident reporting likely captures only a fraction of these adverse outcomes and further primary observational research is required for more accurate representation.

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## Colon and anorectum

## PTH-90 PREVALENCE OF CLOSTRIDIOIDES DIFFICILE INFECTION IN CENTRAL INDIA: A PROSPECTIVE OBSERVATIONAL COHORT STUDY

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Introduction The true burden of *Clostridioides difficile* infection (CDI) in India remains poorly understood. Prolifigate, unregulated antibiotic use and inappropriate prescribing suggest that CDI could be widespread in India. Our aim was to establish and compare baselines rates of CDI in both in-and outpatient settings in Nagpur city district and rural Melghat, Central India.

Methods We recruited adult participants aged  $\geq$ 18 years of age who could provide written or thumb-print informed consent. A diagnosis of diarrhoea was defined as 3 or more loose stools in a 24-hour period. Immunosuppression was defined as those on prednisolone (>5mg/day), immunomodulators or biologics. Baseline characteristics were also collected and included: demographics, symptomatology, antibiotics exposure, duration of diarrhoea, hospitalisation status at recruitment, and duration, BMI, animal exposure, housing conditions, toilet access, and seasonality. All diarrhoeal samples were tested for CDI using the C. DIFF QUIK CHEK COMPLETE-enzyme immunoassay in accordance with the manufacturers' instructions.

**Results** *C. difficile* testing was performed on 1223 patients with acute diarrhoea. A total of 36 patients (2.9%) tested positive for both GDH antigen and toxin expression. A higher% of urban inpatient diarrheal samples tested positive for toxigenic *C. difficile* (26 cases; 8%) compared to that seen for urban outpatients (9 cases; 3%) and the rural diarrhoeal group

(1 outpatient case). Of those testing positive for toxigenic C. difficile, 63.9% were immunosuppressed and almost all (94.4%) were on antibiotics at the time of recruitment. The majority of the toxigenic CDI cases were detected during the monsoon season, lived in very good or good housing conditions, had access to good toilet facilities and reported no cohabitation with animals. Non-toxigenic C. difficile was detected in 6.2%, 4.8%, and 0.5% in the urban inpatient, urban outpatient, and rural populations tested, respectively. Conclusions Toxigenic C. difficile is an important but neglected aetiologic cause of infective diarrhoea in Central India. The higher prevalence within the urban inpatient setting likely reflects greater exposure to antibiotics and hospitalisation. Our findings underscore the need to enhance awareness of and testing of patients with diarrhoea in India, particularly in high-risk individuals with recent or ongoing antibiotic exposure or hospitalisation.

## PTH-91 MULTIPLEX PCR FOR DETERMINING AETIOLOGY OF INFECTIOUS DIARRHOEA IN RURAL AND URBAN CENTRAL INDIAN POPULATIONS

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Introduction Infectious diarrhoea is a major cause of morbidity and mortality in Central India. There is an urgent unmet need to implement rapid point-of-care tests to deliver effective and targeted treatment plans. The aim of this exploratory study was to assess the performance of the FilmArray Gastrointestinal Panel for the detection of enteric pathogens directly from stool specimens collected from diarrhoeal and non-diarrhoeal control populations in Central India.

Methods Faecal samples were collected from participants with and without acute diarrhoea presenting to an inpatient or outpatient setting in Nagpur city district and rural Melghat. Each stool sample was stored at 4°C and preserved in Cary-Blair enteric transport medium for multiplex PCR using the FilmArray GI Panel according to the manufacturer's instructions. This panel allows for the simultaneous detection of 22 common diarrhoeal agents, including bacteria, viruses and protozoa. Baseline characteristics were also recorded and included: demographics, symptomatology, antibiotics exposure, duration of diarrhoea, hospitalisation status at recruitment, and duration, BMI, animal exposure, housing conditions, toilet access, and seasonality.

**Results** 179 participants provided stool samples for analysis on the FilmArray GI Panel. 70 and 109 participants were from rural Melghat and Nagpur urban district, respectively. Of these, 138 were from mainly non-hospitalised participants with acute diarrhoea from urban (n=89) and rural areas (n=49). In the urban cohort, 81% (88/109) of all diarrhoeal and non-diarrhoeal samples tested positive for one (27%) or more (54%) pathogens. In the rural cohort, a striking 97% (68/70) of samples yielded positivity to one (14%) or multiple organisms (83%). The most prevalent pathogen detected in both the diarrhoeal and control cohorts was *Enterohaemorrhagic E. coli* (51% vs 59%, respectively). However, other pathotypes of diarrhoeagenic *E. coli* were highly prevalent in both cohorts, including ETEC, EPEC, *Shigella*/EIEC, and STEC. A