barriers in accessing HCFs. Findings also revealed that further explanations for differences in HUP need to be found. This includes assessment of site-specific characteristics like population density, demographics, availability and access to HCFs, existence or absence of financial schemes to cover medical costs, and unique cultural and educational factors. In-depth understanding of HUP is also crucial for public health authorities to improve existing healthcare systems and, in turn, benefit the population seeking care.

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South African high school students’ health literacy and behaviour concerning HIV/AIDS, STIs, and TB (HAST)

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Background: Health literacy is required to reduce the prevalence of infectious diseases, by decreasing transmission, promoting early diagnosis and facilitating adherence to treatment. The high burden of disease in South Africa from HAST (HIV/AIDS, STIs, TB) emphasizes the critical need for health literacy to reduce health inequalities. The study thus aimed to investigate students’ health literacy and behaviour for HAST.

Methods & Materials: In a cross sectional study, 1138 high school students, mean age 16.8 years (SD 1.6), and 541 (47.5%) were males, attending 10 randomly selected schools in two urban and rural districts of KwaZulu-Natal, completed a semi-structured anonymous questionnaire investigating self-reports of infection, understanding of transmission, prevention and intentions regarding health promotion behaviour for HAST.

Results: Of the students, 394 (35.0%) had a family member with TB, and 66 (5.9%) had themselves had TB. Although 388 (34.1%) had ever had sex, 182 (16.5%) had tested for HIV, and 38 (3.5%) students had had an STI. Students (686, 60.0%) lacked a good understanding of transmission of TB and HIV, and only 225 (20.7%) knew STIs can cause infertility and 177 (18.2%) the danger of STIs during pregnancy. Half of sexually active students had used a condom at last sex (207, 53.3%) and 105 (27.1%) partners had tested for HIV. Only 48 (4.3%) students slept in households with open windows at night. Gender differences (females > males) were observed for students’ intentions concerning health seeking behaviour for TB (p = 0.03), and support for testing for TB (p = 0.001), HIV knowledge (p = 0.001), attitudes to HIV testing and intentions to test (both p < 0.005), and in positive attitudes to ARVs (p = 0.003), social support for adhering to ARVs (p = 0.03) and self efficacy to use ARVs (p = 0.001).

Conclusion: Reducing HIV transmission is essential to control the HAST epidemics and health literacy has an important role. Despite two decades of HIV/AIDS in South Africa, high school students’ health literacy is inadequate and focussed health education is necessary to ensure that students understand about transmission, prevention, early diagnosis and adherence to treatment for HAST infections. Most South african children attend school offering opportunities to ensure a health literate generation that uses available prevention methods to improve control of the epidemics.

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Molecular characterization of rotavirus genotypes circulating in the eastern region of Kenya: Predominance of G9 and emergence of G12 genotypes

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Background: The WHO has recommended that rotavirus vaccines be included in all national immunization programs as part of a strategy to control rotavirus-associated diarrheal diseases. Hospital-based surveillance of rotavirus infection is therefore crucial in monitoring the impact pre- and post-vaccine introduction and also to document changes in genotype distribution. This study sought to determine the rotavirus genotypes circulating in the eastern region of Kenya prior to introduction of the rotavirus vaccine.

Methods & Materials: During September 2009 to August 2011, 500 stool samples were collected from children <5 years of age admitted for acute diarrhea in hospitals in the eastern region of Kenya, and analysed for the presence of group A rotavirus using an enzyme immunoassay. G and P genotypes were determined using hemi-nested reverse transcriptase polymerase chain reaction.

Results: 189 out of 500 (38%) samples analysed were positive for rotavirus. The following G types were detected: G9 (50.9%), G1 (26.8%), G8 (12.1%), G12 (3.1%), G2 (0.6%), mixed G (1.3%) and 5.1% were G non-typeable. P types detected included: P[8] (63.7%), P[4] (12.1%), P[6] (4.5%), mixed P (7.6%) and 12.1% were P non-typeable. The most dominant strain was G9P[8] (35%), followed by G1P[8] (26.8%), G8P[4] (9.6%), G12P[6] (2.5%), G9P[6] (1.9%), G9P[4] (1.3%), G8P[8] (1.3%), and G2P[4] (0.6%).

Conclusion: The present study divulges the recurring changing genotypes of rotavirus circulating in Kenya with genotypes G9, G1 and G8 being the dominant strains circulating in the eastern region of Kenya between 2009 and 2011. Additionally, G12 genotype was detected for the first time in Kenya.

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