

seen. Boys had slightly higher prevalence of under nutrition (7.9%) than girls (4.8%) and children aged 4–5 years showed the highest prevalence (7.3%). The overall prevalence of parasitic infections was 34.5% (71/206). Two species of parasites were identified; *Ascaris lumbricoides* (28.5%, 59/206) and *Entomeaba coli* (10.6%, 22/206). Children with *Ascaris* infection showed higher prevalence of MAU (10.2%, 6/59) than children infected with *Entomeaba coli* infections (9.1%, 2/22). No statistically significant association between intestinal parasitic infections and acute under nutrition was found in this study.

Interpretation: Acute energy under nutrition is not common in this study group, though high prevalence of intestinal parasitic infections was seen, indicating a high level of transmission. Health education and awareness programs among the study population could be effective for addressing the problem.

Funding: No any funds for this study.

Abstract #: 01CD008

The need for structural and community interventions to support HIV care and harm reduction for people who inject drugs in Kenya

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Background: Injecting of heroin is a significant human rights and public health challenge in Sub-Saharan Africa. In Kenya People Who Inject Drugs (PWID) face severe vulnerability to HIV and other infectious diseases and social harms. Government and civil society partners have sought to increase access to HIV care, including anti-retroviral treatment, and introduced needle and syringe programmes; methadone to treat heroin addiction is also planned. This study explores how the new services are experienced by PWID with the goal of informing their scale-up and the future introduction of methadone.

Methods: We conducted a longitudinal qualitative study across three sites: Nairobi, Malindi and Ukunda. In-depth interviews in English and Kiswahili with PWID, community observation, and stakeholder interviews explored the social context and experiences of HIV care. Baseline interviews with 109 people who use drugs (majority people injecting, 76 male, 33 female) were conducted in Dec 2012/Jan 2013, with follow-up at 6 and 12 months with 33 PWID. Sampling purposively sought a range of experiences of HIV care and injecting drug use by both genders. Thematic content analysis identified factors shaping access to services. Written consent was obtained from all participants; the study has ethical approval from University of Nairobi and LSHTM.

Findings: For the majority of PWID, life involves considerable hardship. The risk or experience of HIV is frequently accompanied by hunger, homelessness, social isolation, violence and harassment from the community and police, and imprisonment, reflecting an environment of criminalisation and marginalisation of PWID. The associated poverty limits access to care and creates risk for HIV: HIV care is free, but is focused in clinic facilities, involving considerable direct costs for travel and opportunity costs for earning money. Drug rehabilitation is too expensive for most. Available services are delivered with few restrictions on PWID, and yet programs are under-resourced and rarely linked to interventions that address economic and social constraints on PWID, despite recognition of their importance.

Interpretation: The limited availability, biomedical orientation, and disconnect from community settings of services means they don't respond adequately to the barriers PWID face to care. Services need a community orientation and associated structural interventions to

address needs like food, livelihoods and social support. The lack of systematic support for community and structural interventions from government and donors suggests the potential emergence of a narrow biomedical paradigm for the response to HIV for PWID in Kenya. In the absence of integrating such structural interventions, methadone rollout will likely remain inaccessible for many PWID and not meet current expectations as a treatment for heroin addiction. This study has direct implications for service provision and strategies to ensure structural and social dimensions of HIV care for PWID are addressed.

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Abstract #: 01CD009

Parental factors associated with influenza school located vaccination program in the United States

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Background: The United States Center for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices expanded recommendations on targeted influenza vaccination to include school-aged children in 2009. In this study, we conduct a systematic review to identify the parental factors associated with influenza school located vaccination (SLV) program in the United States.

Methods: We used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to conduct the systematic review. PubMed, Web of Science, and Medline ProQuest databases were searched for English language articles published since 2004 and focused on child/adolescent age groups. Inclusion criteria were studies that included qualitative analysis of influenza vaccinations through a school-based vaccination program in United States, and assessed parental factors including knowledge, attitudes, perceptions, beliefs, and/or behavior towards such programs for their children. Exclusion criteria were studies that included other non-influenza vaccines (i.e. MMR, MCV4), non-parental beliefs (i.e. college students, school personnel, nurses, physicians), infrastructure (i.e. health care billing systems, cost-effectiveness), and studies taking place outside the United States.

Findings: We identified 6 studies from 107 articles that matched the inclusion and exclusion criteria. 5 studies utilized questionnaires and 1 study used focus groups as primary source of data collection, with 1 study grounded in health behavior theory. While parents generally exhibited signs of interest in school-based vaccination programs, the reasons for disinterest were varied. The significant parental factors associated with influenza school located vaccination program are vaccine safety, sterility and delivery, perceived threat, parent demographics, convenience, negative past experience, influenza vaccine importance, cost, access to primary care/insurance, discussion with doctor, trust, previous experience with SLV program, vaccine type, vaccine availability to all students, public health benefits, and beliefs in vaccination is a social norm and their benefits.

Interpretation: We identified cost, convenience and misconceptions regarding safety and side-effects as barriers to vaccination. Thereby, the effectiveness is higher among influenza SLV programs that resolve these barriers. Socio-demographics of parents are significant for their receptiveness of influenza SLV programs. We recommend that information regarding insurance status, estimates for family income and basic beliefs of vaccination be used to customize the SLV program design and implementation. Targeting schools with a high percentage of uninsured and low-income teens for vaccination may be particularly