

consensus on priorities for health research. In a three phase process, we 1) identified research and programme experts with wide-ranging backgrounds and experiences from all geographic regions through systematic searches and key informants; 2) invited these experts to propose research questions related to epidemiology/description, interventions (discovery, development/testing, and delivery/implementation), and policy/systems; and 3) asked the experts to prioritise the research questions based on five criteria: clarity, answerability, importance or impact, implementation, and equity.

**Findings:** 142 experts submitted 512 questions which were cleaned and reduced to 303 for scoring. The research types of the top 10 questions in each of the eight health areas included epidemiology/description (26%), interventions: discovery (11%), development/testing (25%), delivery (33%), and policy, health and social systems (5%). Across health areas, the top questions highlighted integration of health services, vulnerable populations, and different health platforms (such as primary health care, schools, families/parenting, and interactive media).

**Interpretation:** We have identified, for the first time, priority questions for research in eight key areas of adolescent health research in low- and middle-income countries. These expert-generated questions may be used by donors, programme managers, and researchers to prioritize and stimulate research in adolescent health.

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### **Impact of Ebola on loss to follow-up of HIV-infected soldiers and their dependents in Sierra Leone**

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**Background:** UNAIDS noted that the recent Ebola outbreak was disruptive to HIV/AIDS care, citing fear of health facilities and closure of some HIV clinics during the epidemic. We investigated the impact of the Ebola outbreak on the loss to follow-up of HIV-infected soldiers and their dependents receiving care through the Republic of Sierra Leone Armed Forces (RSLAF) Medical Unit.

**Methods:** We completed a retrospective chart review, approved by the Institutional Review Board, of 263 HIV-positive soldiers and their dependents at the RSLAF Medical Unit in Freetown, Sierra Leone from January 1, 2014 through May 1, 2015. Patients were excluded if they transferred care to another facility during the study period. Medical records were abstracted for baseline characteristics at enrollment and clinical data available at each visit. We have completed preliminary descriptive analyses of the average percent loss to follow-up of HIV-infected patients before and during the Ebola epidemic in four-month increments throughout the study period.

**Preliminary Findings:** Patients receiving care at the RSLAF HIV clinic were between 9–63 years old, with 2.3% under 18 years old and 72.2% between 25–44 years old. Males comprised 62.7% and soldiers comprised 65.8% of the patients. The majority of patients (77.7%) were diagnosed with WHO Clinical Stage 3 at enrollment. In the four-month period prior to the start of the epidemic (January–April

2014), the average percent loss to follow-up was 9.8%. This increased to 12.1% at the start of the epidemic (May–August 2014), then to 25.2% at the height of the epidemic (September–December 2014). At the downturn in the epidemic (January–April 2015), the average percent loss to follow-up continued to rise to 32.3%.

**Interpretation:** Our preliminary findings show a trend of increased percent loss to follow-up for HIV-infected soldiers and their dependents at the RSLAF HIV clinic over the course of the Ebola outbreak. Further analysis is in process to measure more precisely the potential impact of this epidemic on loss to follow-up and other important clinical outcomes in these patients. Our findings will help inform strategies to minimize the impact of future epidemics on the management of existing diseases.

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### **The effectiveness of using taxes on sugar-sweetened beverages to reduce obesity in middle income countries: a systematic review**

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**Background:** The prevalence of obesity has increased globally over the last several decades, notably in middle income countries (MICs). MIC governments are considering a tax on sugar-sweetened beverages (SSB) as a way to address this challenge. Interest in this policy option has spurred new studies on the effectiveness of the tax in the MIC context. There is now a need to evaluate the tax's effectiveness in the MIC context to inform policy decisions.

**Methods:** To address this need, we conducted a systematic review for the period 1990–2015. Our review includes only primary research on whether changes in the price of SSB are associated with changes in the consumption of SSB, total energy intake, or obesity-related outcomes in MICs.

**Findings:** We identified nine papers from Brazil, Mexico, Peru, India, and South Africa. They range from repeated cross sectional studies with quasi-experimental studies to modeling studies based on cross-sectional data. While the study designs are relatively weak, our review finds that their estimates are consistent. Price elasticity estimates all fall within the range of -0.6 to -1.3, similar to estimates from the United States. Given larger changes in price, changes in SSB consumption are statistically and clinically significant. Studies also estimate around a 3 percent reduction in obesity prevalence given a 20 percent increase in the price of SSB, taking substitution to other beverages into account.

**Interpretation:** Our review indicates that a tax on SSB may be an effective way to reduce obesity in MICs, but more research is needed. Implementing governments should consider improving their monitoring systems to create opportunities for higher quality studies on effectiveness. Additional research is needed to better understand the implications of the tax for manufacturers and retailers of SSB, and to consider the case for taxing other products such as edible oils.

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