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**Background:** Displacement due to conflict and persecution is occurring at levels not seen since World War Two. Exposure to conflict and displacement are risk factors for mental health disorders and substance use. We aimed to systematically review the literature about alcohol and illicit use among refugees, internally displaced people (IDPs) and asylum seekers, and identify priority areas for intervention and future research.

**Methods:** Structured searches of seven medical, allied health and social science databases were conducted in accordance with PRISMA guidelines, identifying 54 relevant original peer-reviewed articles. We present here findings from 41 quantitative studies, drawing preferentially on studies using validated measures to assess prevalence and risk factors for substance use.

**Findings:** Over two thirds of studies focused on resettled refugee populations in high-income countries, predominantly in the United States and Central Europe. Seven studies were conducted in camp settings. Most studies used cross-sectional methods (80%); only two cohort studies and one brief intervention study were identified. The highest-quality prevalence estimates of hazardous/harmful alcohol use ranged from 17%-36% in camp settings and 4%-7% in community settings. Best estimates of alcohol dependence were 4%-42% and 1%-25% in camp and community settings, respectively. Prevalence of drug dependence was below 5% in the five studies conducted in community settings, and 20% in the one study conducted in a camp setting. Male sex, trauma exposure and mental health symptoms were commonly identified as independent risk factors for substance use.

**Interpretations:** Our understanding of substance use among these populations remains limited, particularly in low and middle-income countries, where over 80% of the global refugee population resides. Nonetheless, best estimates suggest that as many as one in three displaced persons in camp settings may be using alcohol in harmful or hazardous ways. Less is known about illicit drug use. Findings suggest a need to integrate substance use prevention and treatment into services offered to refugees, IDPs and asylum seekers. Longitudinal research is required to examine changes in substance use across the migration trajectory. There is also a need to develop and evaluate inteventions to reduce substance use and related harms among forced migrant populations.

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## Three year review of anti-jiggers education and treatment intervention programming in Sabatia District, Western Province, Kenya

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**Project Purpose:** Jiggers (*Tunga penetrans*) is a vector-borne disease. An estimated 2 million Kenyans are affected. Limited resources from the Ministry of Health (MOH) due to competing public health priorities and no standard practice of care have made addressing this neglected disease a challenge. In partnership with the MOH and community health workers (CHWs), Students for International Development (SID) implemented three anti-jigger campaigns in 2012-2014 during May-August in Sabatia District, Western Kenya.

**Structure:** Consultation with dispensary staff and health district officers informed the site of intervention each year in Wunundi, Wodanga and Munungi regions, respectively. CHWs identified most severe households cases for treatment - 30 cases (2012), 120 cases (2013), 50 cases (2014). In the 2012 pilot year, treatment took place at a public health camp. Individuals soaked the infected area in potassium permanganate (PP) for 20 minutes. Project managers and CHWs did home follow-ups with: 1) home fumigation using a non-toxic insecticide 2) dispelled common myths 3) introduced accessible alternative of tobacco and petroleum jelly. 2013 year was scaled up with: 1) home cleaning with cow dung 2) fumigation 3) 10 consecutive PP treatment days 4) shoes upon completion. 2014 year held home visits (cleaning/fumigation) for 10 treatment days, and had an education emphasis.

**Outcome/Evaluation:** Campaigns led to a 90% case reduction rate. Consistent treatment (7-10 days) is most effective. This builds rapport between CHWs and patients, reduces stigma, and increases personal hygiene practices. Home interventions eliminate financial barriers. A pre/post count of individual's jiggers and a survey of jiggers health education (beliefs, interventions, causes) were administered by CHWs pre-, mid-, and post-intervention. Overall, there was a positive shift in health-behaviour knowledge, though a limitation of interviewer bias exists.

**Going Forward:** An unmet goal is quarterly follow-ups by CHWs when SID is absent. Sparse evidence for best practices of care has been challenging in guiding treatment of "severe" cases. We hope to standardize treatment guidelines with Kenya MOH and support their efforts in making this a key public health priority, through monitoring and evaluation.

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## Trends in between-country health equity in Sub-Saharan Africa from 1990 to 2011: improvement, convergence and reversal

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**Background:** With substantial amounts of foreign aid invested in sub-Saharan Africa, it remains unclear whether health inequity in this region decreased over time.

**Method:** We use the World Health Organization's data about of 46 nations in sub-Saharan Africa to run a convergence model to track the variation of health indicators (under-5 mortality, U5MR