

Evaluation of the **D**etermined, **R**esilient, **E**mpowered, **A**IDS-free, **M**entored and **S**afe (**DREAMS**) Programme implemented in South Africa: Initial Findings

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Background:

Adolescent girls and young women (AGYW) are at the epicentre of the HIV epidemic, accounting for 74% of new HIV infections in sub-Saharan Africa. In South Africa (SA) it is estimated that 66 200 new HIV infections occurred among AGYW in 2017. DREAMS was a strategy launched in November 2015 by PEPFAR U.S. President's Emergency Plan for AIDS Relief, aimed at reducing HIV incidence among AGYW within two years (2015–2017). The PEPFAR SA DREAMS programme is a component of the national She Conquers campaign, which aims to reduce HIV infections among the vulnerable (high burden areas) AGYW in SA. This evaluation of the DREAMS programme provides data on AGYW 12–24 years of age living in four of the five districts in South Africa (SA) where the programme was implemented.

Methods:

We conducted a cross-sectional household survey in KwaZulu-Natal (KZN) (eThekweni and uMgungundlovu Districts) and Gauteng (City of Johannesburg and Ekurhuleni Districts). A multistage cluster random sample was used to first select small area layers, then households within the selected areas. All AGYW who were aged between 12 to 24 years old and were eligible for the study were interviewed in the household. Between March 2017 and July 2018 sociodemographic and behavioural data (through face to face interviews) and biological data (through blood samples), were collected. We recruited 18 296 AGYW into the study. All data were weighted to be representative of the population from which sample was selected in the four DREAMS implementation districts. Proportions were calculated in order to determine the level of HIV incidence, prevalence, and treatment by different factors.

Results:

Over one-fifth (22.7%) of AGYW were 12 to 14 years old, 38.2% were 15 to 19 years old and 38.9% were 20 to 24 years old. Overall HIV incidence was 0.87% (95% Confidence Intervals: 0.79–0.96 %) across these Districts. The HIV incidence in Gauteng in the 15–19 years band was 0.75 (95% CI 0.68–0.83%) and in the 20–24 year age band 0.94% (95% CI 0.85–1.04). The incidence in KZN was 0.46% (95% CI 0.41–0.50) in the 15–19 age group and 1.38% (95% CI 1.24–1.52%) in the 20–24 age group. The HIV prevalence was 10.3% overall, with KZN highest at 15% (95% CI: 14.2–16.1) and Gauteng 7.8% (95% CI: 7.2–8.5%). HIV prevalence was at its lowest in Gauteng, 2.5% among 12 to 14 year olds, rising to 7% in 20–24 years old. In KZN, it was 5% in 12–14 year olds, increasing to 23.9% among 20 to 24 year olds. Analysis revealed that 44.5% of the HIV-positive AGYW in Gauteng and 30.3% of the AGYW in KZN do not know their HIV status. Encouragingly, most AGYW who knew their status, tested positive for antiretroviral drugs (ARVs) in Gauteng (84.4%) and KZN (89.5%). The majority (90%) of AGYW who tested positive for ARV's, were virally suppressed. Approximately 50% of participants were sexually active, of whom 32% had a sexual partner who was 5 or more years older. Just under half (48%) had used a condom during their last sexual encounter. Over half (56%) of those

who were sexually active indicated having ever been pregnant. On average, DREAMS programme coverage amongst AGYW was around 50%.

Interpretation:

The HIV incidence in AGYW in the DREAMS evaluation is in keeping with the downward trends found in other study findings. The treatment cascade indicates once AGYW were diagnosed, most of them began treatment and were virally suppressed. AGYW remain susceptible to HIV infection through engaging in risky sexual behaviours, specifically sub-optimal condom use, and engagement in age-disparate. These findings highlight that interventions targeting AGYW remain crucial to reducing their risk exposure.

Count 699