

Accelerating achievement of HIV outcomes among adolescent mothers living with HIV

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BACKGROUND

Understanding adolescent motherhood and HIV infection in resource-constrained settings is critical. Supporting the HEU children of adolescent mothers living with HIV to access PMTCT and early HIV testing is critical to their survival, preventing HIV infection and long-term well-being. Understanding experiences of accessing PMTCT and early HIV testing among adolescent mothers living with HIV is important to keep their children HIV-free.

In this study, we report clinic factors associated with better treatment outcomes among young women living with HIV in South Africa, including adolescent mothers.

METHODS

All adolescent girls living with HIV from 52 clinics and 9 maternity obstetric units in a health district in South Africa were approached, resulting in n=792 young women living with HIV aged 11-25 participating in the study. Self-reported questionnaires—using validated tools where available—were piloted with n=25 HIV-positive adolescents. Participants who had at least one child before the age of 20 were coded as being adolescent mothers. Analyses included two steps: (1) comparing HIV-related outcomes among adolescent mothers living with HIV (n=354) to nulliparous adolescent girls and young women living with HIV (n=438), and (2) identifying clinic-level factors associated with two or more improved HIV-related outcomes for both groups, using STATA16.1.

RESULTS

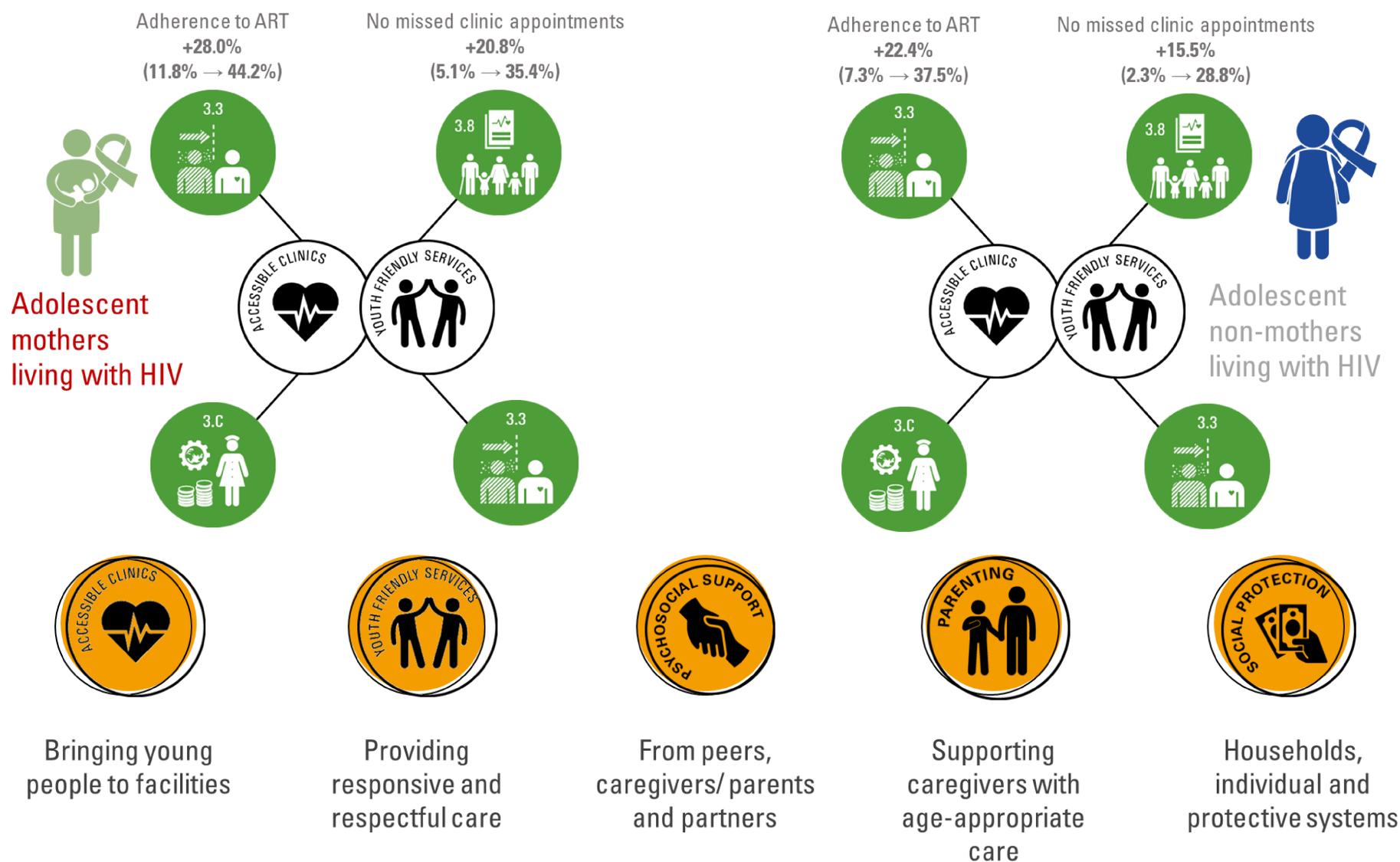
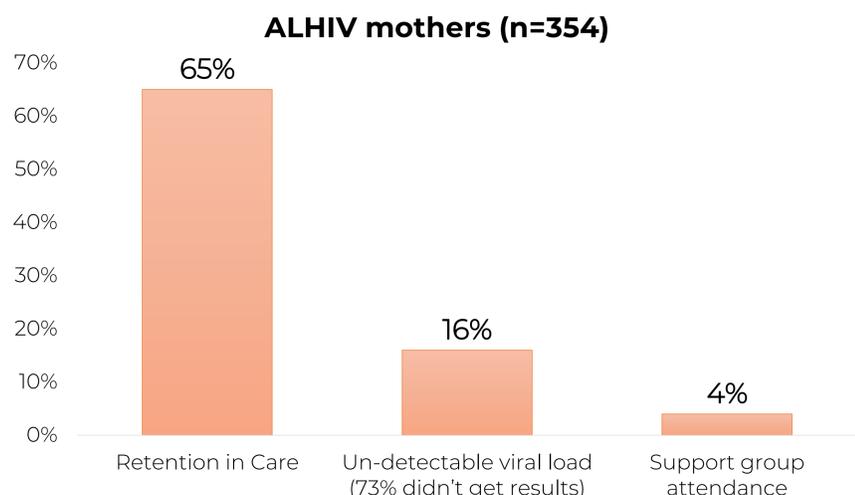
Compared to non-mothers, adolescent mothers living with HIV reported lower past-week adherence (p=0.014), more treatment interruptions (p=0.004), more missed clinic appointments (p=0.029).

Adolescent mothers living with HIV were on average 17.6 (SD=2.0) years old when they had their first child. 19% had 2 or more children, with more than half of consequent pregnancies occurring before the prior child was 2 years old (rapid repeated pregnancies). Over a third (28%) started ART after the end of the first trimester, while 6% never started. One in ten stopped taking their ART during pregnancy/ breastfeeding, with 30% reporting past-year treatment interruptions (multiple days or over a month).

In multivariate analyses, motherhood was not associated with worse HIV outcomes. Two of the seven clinic experiences were associated with 2+ improved HIV outcomes: accessible care and adolescent-sensitive services. Accessible care was associated with consistent clinic attendance (aOR1.85 95%CI1.01-3.40 p=0.048), uninterrupted treatment (aOR2.29 95%CI1.33-3.97 p=0.003), and no TB symptoms (aOR1.87 95%CI1.07-3.27 p=0.029). Adolescent-sensitive services were associated with higher odds of adherence (aOR2.78 95%CI1.69-4.57 p<0.001), consistent clinic attendance (aOR1.78 85%CI 1.03-3.06 p=0.038) and uninterrupted treatment (aOR=1.80 95%CI1.10-2.93, p=0.019). Accessible and adolescent-sensitive HIV care improved the predicted probability of better HIV outcomes among adolescent girls living with HIV by +24.8% for adherence, +17.7% for clinic attendance, +27.6% for uninterrupted treatment, and +22.1% for no TB symptoms. The impact was stronger for adolescent mothers living with HIV for adherence, clinic attendance and uninterrupted treatment.

DISCUSSION

Approaches to promote timely and uninterrupted access to PMTCT for adolescent mothers and their children from the pre-conception to post-partum period are urgently needed. Accessible adolescent-sensitive clinic-based services are critical to improving survival and long-term well-being among adolescent women living with HIV, and to reducing the risk of onward HIV-transmission to partners and their HIV-exposed children.



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