



Challenges for HIV-infected adolescents during transition from paediatric to adult HIV clinics in Africa

Herry Mapesi^{1,2,3}

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In 2017, about 250,000 adolescents aged 15–19 years acquired a new HIV infection (UNICEF 2018). Of the approximately 1.8 million adolescents (10–19 years old) living with HIV/AIDS, 1.5 million (85%) are in sub-Saharan Africa (UNAIDS 2017, 2018; UNICEF 2018). High HIV prevalence and incidence in sub-Saharan Africa exposes increasing numbers of adolescents and young adults to HIV through both perinatal infection and risky behaviours (UNICEF 2018). Before the early 2000s, when antiretroviral treatment (ART) came into common use in Africa, only about half of HIV-infected infants reached their second birthday (Newell et al. 2004). ART reduced the number of deaths caused by AIDS-related illnesses by about 42% between 2010 and 2017 (UNAIDS 2017, 2018). Increasing ART coverage in Africa has made it more likely that perinatally and behaviourally HIV-infected children will reach adulthood, but it has not eliminated the burden; instead, the burden has shifted to adolescents. Now, more than ever, public health must focus on transferring adolescents from paediatric to adult-centred care (Lowenthal et al. 2014), also called health care transition (Gilliam et al. 2011). HIV-infected adolescents are accountable for their disease progression and are left alone with the responsibility for managing their disease and their health (Dahourou et al. 2017). This is an especially vulnerable period because only 50% of HIV-infected adolescents transferred

to adult-centred health care settings remain in care a year after transition (Ryscavage et al. 2016).

Adolescents and young adults living with HIV in Africa face complex behavioural and psychological challenges, while they also must cope with a chronic disease that carries stigma. They are more likely than their HIV-negative counterparts to develop renal, bone, and neurocognitive diseases (Dahourou et al. 2017). Stunting and skin diseases are also common in HIV-infected adolescents. Children and adolescents who suffer from HIV-related comorbidities and opportunistic infections are highly stigmatized.

Health care systems in most African countries are not designed to meet the needs of these adolescents (Dahourou et al. 2017). There is a shortage of health care workers with specialized training in adolescent medicine, infrastructure is inadequate and poorly designed, and clinics are overburdened (Pettitt et al. 2013). These insufficiencies pose barriers to an adolescent's transition from paediatric to adult-centred clinics and contribute to their poor adherence to treatment, virologic failure, clinical failure, and drug resistance with poor long-term outcomes (Lee and Hazra 2015). Transition may be improved by hiring more trained personnel with expertise in adolescent care, and developing a sufficiently detailed evidence-based policy to guide the transition process, tailored to the resources of the health care provider. Adolescents may benefit from improved communication between health care providers from paediatric and adult clinics (e.g. a summary from the paediatric clinic that updated the adult clinic on an adolescent's current physical and mental health condition). Other interventions that have been implemented to smooth the transition in low- and middle-income countries (which may create an opportunity to address any experience of stigmatization) could be tried in sub-Saharan Africa, e.g. multidisciplinary clinic models, peer support groups, transition readiness, and financial support programmes (Jones et al. 2019), but little literature describes the best ways to implement these changes.

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✉ Herry Mapesi
hmapesi@ihi.or.tz

¹ Ifakara Health Institute, Ifakara Branch, Ifakara, Tanzania

² Swiss Tropical and Public Health Institute, Basel, Switzerland

³ University of Basel, Basel, Switzerland

We need to conduct studies that compare and evaluate the effectiveness of different health care provision models appropriate to the African context, including youth-friendly and dedicated teen clinics, use of peer educators, and special day clinics for adolescents. With the advances in ART coverage, significant health gains have been made in terms of reduced mortality among this population. Therefore, there is an urgent need to ensure that the transition policy from paediatric to adult-centred clinics is part of health care management for HIV-infected adolescents and young adults in Africa. If this process of transition from paediatric to adult HIV clinic is properly documented, and if a platform to evaluate programs is developed, then other countries across sub-Saharan Africa could use this model to implement, monitor, and improve transition between paediatric and adult-centred clinics for HIV-positive adolescents.

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Compliance with ethical standards

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