

Participant Summary

Title: Factors Associated with Retention of Subjects in the Pediatric HIV/AIDS Cohort Studies

Authors: Russell B. Van Dyke¹, Brad Karalius², Kunjal Patel², Kenneth Rich³, George R. Seage III^{2,4}, and Paige L. Williams⁴ for the Pediatric HIV/AIDS Cohort Study (PHACS).

Affiliations: ¹Department of Pediatrics, Tulane University Health Sciences Center, New Orleans, LA; ²Department of Epidemiology, Harvard School of Public Health, Boston, MA; ³Department of Pediatrics, University of Illinois at Chicago, Chicago IL; and ⁴Center for Biostatistics in AIDS Research, Boston, MA.

Background: It is important to prevent children from dropping out of studies like AMP and SMARTT. Children who drop out may be different from those who remain, and this can make the results of the study less valid. We wanted to identify reasons that children drop out so it can be prevented.

Methods: We studied all of the children enrolled in AMP and SMARTT. We looked at the age that children dropped out and what factors were related to dropping out.

Results:

AMP

451 HIV-infected (HIV+) and 227 uninfected (HEU) children enrolled in AMP. Their median age at entry was 11 years. As of October 2011, 14.9% of HIV-infected and 8.4% of uninfected children had dropped out. Risk factors for dropping out (in addition to death, being in jail, or the site closing) were: being HIV-infected, an older age at study entry, a higher caregiver education, and the region of the study site. The drop-out rate was not higher for HIV-infected children when age and site region were considered. For HIV-infected children, the drop-out rate was higher for those with a lower viral load at entry. For the uninfected children, drop-out rate was higher for those with a lower household income.

SMARTT

2476 HIV-uninfected children enrolled in SMARTT, including 1240 Static and 1236 Dynamic children. The median age of the Static children at entry was 4.1 years. 11.8% of Static and 12.9% of Dynamic children dropped out. Risk factors for dropping out (in addition to death, being in jail, or the site closing) were: a younger age at study entry and site region. Children aged 1-2 years at entry had a drop-out rate more than twice that of children 5-12 years of age.

Conclusions: The drop-out rate is highest for HIV-uninfected children enrolled before 2 years of age. The drop-out rate for HIV-infected children increases as they age through adolescence. (figure) This will make it difficult to continue to study them as they become adults. The drop-out rate is very different at different study sites. It will be important to find the reasons for these differences so that we can prevent children from dropping out.

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AMP Subjects: Loss to follow-up by age and cohort (Excluding losses due to death, incarceration, or defunding of site)
Losses per 100 person-years

