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TO THE EDITOR:

Early mortality in Ugandan children with SCA and HIV

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Latham et al report a devastatingly high (53.8%, 14/26) early mortality among Ugandan children born with both sickle cell anemia (SCA) and vertically transmitted HIV (SEARCH).[1] This finding confirms a hypothesis raised nearly a decade ago. Commenting on the original US3 study,[2] Obaro observed that the lower prevalence of SCA among infants who were HIV-positive (0.5% vs 0.8%) "suggests early mortality in children with comorbid SCA and HIV," a suggestion now tragically validated with direct mortality data.[3]

In our own retrospective study of indications for hospitalization among patients with SCA in Uganda, only 0.4% (n = 2) of patients had HIV coinfection,[4] likely because many children with dual diagnosis die before reaching hospital care (as SEARCH demonstrates) and for those who survive, both conditions may not be consistently documented in clinical records. In addition, among children with dual diagnoses in the SEARCH study, none received both hydroxyurea and antiretroviral therapy.[1] This aligns with our study's observation that only a third of patients with SCA were on hydroxyurea.[4]

Conversely, a retrospective cohort study (2004-2018) of 35 children who were HIV-/SCA-positive who survived to enter care at a pediatric HIV clinic in Kampala, Uganda found that, compared with 95 controls who were HIV-positive/SCA-negative, they had higher CD4 counts and fewer treatment failures, a pattern consistent with a strong "survivor effect."[5] The study suggests that SCA does not adversely affect the progression of HIV in patients on anti-retroviral therapy.

Collectively, these data indicate that without integrated early intervention, including universal access to hydroxyurea, antiretroviral therapy, and malaria prevention, the default outcome for infants who were SCA/HIV-positive is death. Furthermore, health system data may also substantially underestimate the true burden of dual diagnoses of SCA and HIV. Thus, newborn screening is essential but insufficient. We urge immediate development of national guidelines and colocated care pathways for this high-risk population.

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