

Policy Brief: Infectious diseases & TB in children with AIDS-affected caregivers

Citation: Cluver, L, Orkin, M, Kuo, C, Moshabela, M, Kganakga, M (South African AIDS Conference V, Durban 2011) *Infectious disease and TB co-occurrence amongst children with AIDS-affected caregivers. Awarded Discovery Clinical Excellence 'Best Paper' award.*

Very little is known about physical health outcomes of living in an AIDS-affected family. We examined infectious and non-infectious diseases, and carer-child TB co-occurrence. This research is a collaboration between South African government, the University of KwaZulu-Natal, the National Action Committee for Children Affected by AIDS (NACCA) and Oxford University.

The Questions:

- Does being AIDS-orphaned or having an AIDS-sick caregiver increase the risk of contracting diseases including TB?
- Does having a caregiver with TB put children at increased risk of contracting TB?

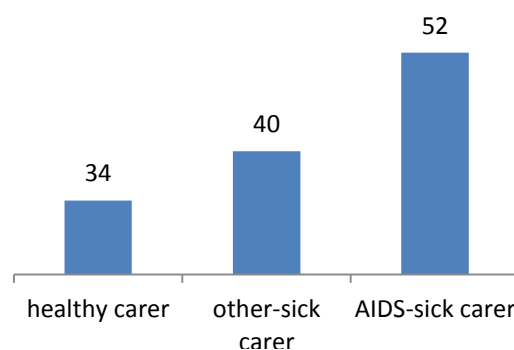
The Research:

- 5238 children aged 10-17 and their primary caregivers (matched pairs) were interviewed in rural and urban sites in KwaZulu-Natal, South Africa.
- Comparison groups were AIDS-orphaned, other orphaned, non-orphaned, children whose caregiver was AIDS-sick, other sick, or healthy.
- Validated scales and symptom checklists used.

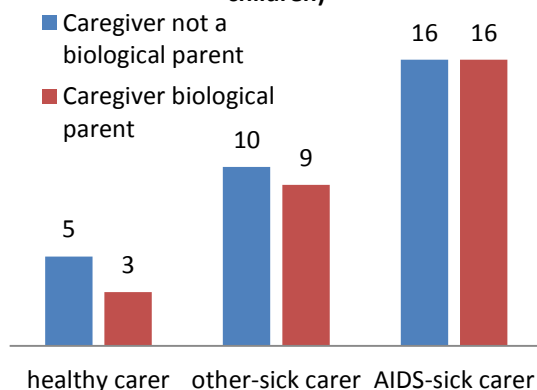
Finding 1: Children with AIDS-sick caregivers are at 2X greater risk of contracting infectious diseases, regardless of vertical HIV-transmission

- Children with AIDS-sick caregivers were twice as likely to have 2+ concurrent infectious diseases (cold/flu, worms, pneumonia, bronchitis, vomiting/diarrhoea) compared with children with healthy caregivers
- AIDS-orphaned children were at greater risk for infectious diseases *only* when they also had an AIDS-sick caregiver
- Being AIDS-orphaned or having an AIDS-sick caregiver was *not* associated with *non-infectious* diseases (asthma, epilepsy, vision problems, injuries/burns)
- This was independent of vertical HIV transmission – infection rates were equal with biological & non-biological caregivers (for all analyses in this paper)

Multiple concurrent child infectious disease (%)



3+ Pulmonary TB-defining symptoms (% children)



Finding 2: Children with AIDS-sick and TB infected caregivers at 5X greater risk of contracting TB

- Children with an AIDS-sick caregiver were 5 times more likely to have TB than children with healthy carers, but only 4% had ever been tested for TB
- AIDS-orphaned children were at greater risk of TB *only* when they also had an AIDS-sick caregiver
- Only 14% of TB-symptomatic children had been tested for TB
- Once tested, 82% were given treatment and 83% adhered for 6 months or more. These show good treatment outcomes once testing takes place, but lack of children reaching the testing stage.

Conclusions:

- Children with AIDS-sick and TB-infected caregivers are at greatly heightened risk for infectious diseases & TB
- All children in households of HIV+ or TB+ adults should be tested for TB

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