There's no place like home: new approaches to understanding the impact of the AIDS epidemic on children's education

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Introduction

How well a child does at school depends on both home and school factors (Douglas 1964; Fuller and Clark 1994; Myburgh and Grobler 1999; Laugksch and Dunne 2000; Lloyd, El Tawila et al. 2001). In recent years education researchers have begun to untangle these effects with the help of both innovative statistical methods (in particular multilevel modelling) and approaches that combine school-based data sets with population-based surveys(Goldstein 1987; Lockheed and Longforn 1989; Fuller and Clark 1994; Kremer 1996; Case and Deaton 1999; Kadzamira 2001).

Research interest in the impact of the HIV/AIDS epidemic on children and their education has developed largely in isolation from these broader trends in education research(Foster 1998; Gregson, Waddell et al. 2001; Case, Paxman et al. 2003). Existing studies in Africa and elsewhere have suggested that orphaned children, particularly girls, are more likely to drop out of school than other children (Ainsworth, Beegle et al. 2002; Bennell, Hyde et al. 2002; Bicego, Rutstein et al. 2003). Rather few such studies have been completed.

Moreover, many of these studies are dogged by methodological limitations. Most schoolbased studies only capture information on enrolled children and provide little information on their family circumstances while population-based studies have only factored in demand-side factors, ignoring possible school effects(Bennell, Hyde et al. 2002; Desmond and Gow 2002; Gould and Huber 2002). In addition, most of the existing data on this issue are cross-sectional, making it difficult either to attribute causality or to examine how the impact of parental illness and death unfolds over time. Third, in many studies the only educational outcome considered has been enrolment, or in some cases lifetime attainment, rather than the dynamics of enrolment, grade progression and repetition, and drop-out according to age(Ainsworth and Fimer 2002; Badcock-Walters 2002; Bicego, Rutstein et al. 2003).

The aim of our research is to understand when and how children become educationally disadvantaged because of AIDS. It examines the various ways in which the educational outcomes of children who have experienced parental illness and death differ from those who have not and the extent to which demographic factors such as family structure, birth order, gender, and child fostering mediate this educational disadvantage.

The study is situated in KwaZulu-Natal, the largest province in South Africa. KwaZulu-Natal has experienced a very severe HIV/AIDS epidemic. The prevalence of infection in the adult population rose from an estimated 7.1 percent in 1990 to 36.5 percent in 2000 (UNAIDS 2001)).

The paper applies learning from the school effects literature to improve understanding of the role of the family in mediating the impact of the AIDS epidemic on children's education in South Africa. The approach is innovative for three key reasons:

- 1) The research links together national school datasets with population-based data on children's households to assess the role of both school and home factors in mediating the impact of the illness and death of their parents on children's educational outcomes.
- 2) The survey data are longitudinal a representative sample of households in KwaZulu-Natal has been followed since the collapse of the Apartheid regime eleven years ago. Few other household panels exist that have collected detailed information on orphans and their education.
- 3) The education outcomes assessed are wide-ranging and age-specific. In addition to obtaining school progression indicators such as repetition, attendance, school interruption and drop-out, we administered specially designed functional literacy and numeracy tests to the younger children and collected information on the exam results of older students.

Data Sources

The research is based on a linked dataset combining information from the South African government's Annual School Survey with data collected in a large household panel survey, the KwaZulu-Natal Income Dynamics Study (KIDS) and with community-level data from the census and other official sources.

KIDS has followed about 1000 households since 1993. The sample for the first round of fieldwork was representative of the province's African population. A second round of fieldwork took place in 1998 and a third round in 2004. KIDS is based on the World Bank's Living Standards Measurements Study and includes modules on the demographic structure of households, household income and expenditure, circumstances surrounding both illness episodes and deaths in the household, participation in schooling and educational achievement, and anthropometric measures for children aged eleven or less.

Data collection and data capture for KIDS-3 are complete. Interviews were completed with 808 of the main panel households interviewed in the second round of fieldwork in 1988 (85 per cent), together with 469 new households that have either split off from or fostered children from the original panel of households. Although no results available at time of submission, cleaning and preliminary analysis of the data are well underway.

Data Analysis

Outcome variables for the analysis have been measured in 2004 and include:

- 1. Learning outcomes: functional test results from specially designed literacy and numeracy tests; national matriculation results; and highest grade completion.
- 2. School progression indicators: repetition, attendance, school interruption and drop-out.

Explanatory variables include:

- 1. AIDS-related variables: parental illness and/or death during period 1998-2004
- 2. <u>School effects:</u> Learner to educator ratios; number of text books; qualifications of educators, funding per capita; and school infrastructure.
- 3. <u>Socio-demographic variables:</u> family composition; presence of father/mother; fostering; sibling order, child migration, intra-household differences in levels of parental commitment to education; gender; and geographical location

4. <u>Economic variables</u>: overall levels of family poverty; intra-household differences in resource allocation to orphans versus natural-born children; and opportunity costs to education.

The 1998 KIDS data show that primary school enrolment is nearly universal in KwaZulu-Natal for both boys and girls but that dropout of secondary school age children remains a problem. Measures of educational achievement reveal a more worrying picture with many children, especially those from poorer households, being several grades behind that expected for their age. Loss of their parents had an adverse effect on children's schooling even during the 1990s, prior to the huge increase in the prevalence of orphanhood that has characterised the period 1998-2004, with orphans aged 12 or more being significantly less likely to be in school than other children of their age (Figure 1).

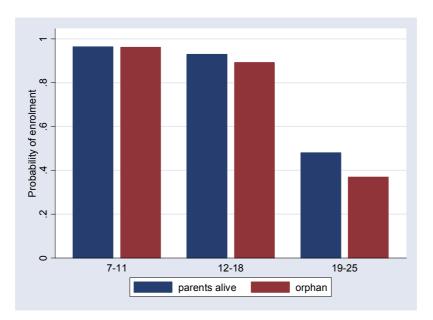


Figure 1 Percentage of children enrolled according to orphan status by age group, KwaZulu-Natal Income Dynamics Study, 1998

Implications of the research

South Africa is a place of change, a country that is taking risks for a better future. Many of these changes involve investing in the children of South Africa – with education being recognised as crucial to the realisation of this ideal. Tragically, however, the children of South Africa are being denied these opportunities because of a rapidly spreading HIV/AIDS epidemic, which is robbing them of their parents and childhood, putting their education at risk and consequently threatening their future wellbeing and prosperity.

It therefore becomes imperative to deepen our understanding of how children affected by the AIDS epidemic are becoming educationally disadvantaged so that we can act preemptively. Their problems are socially complex and will require researchers to use innovative and inter-disciplinary approaches. The empirical challenge is great, and one we are just beginning to tackle.

It is hoped that this research will contribute significantly to knowledge of how the AIDS epidemic impacts on households, children, families and society. The implications for

well-being will be discussed, as well as recommendations for interventions. In addition, the proposed research will generate new knowledge about the determinants of educational outcomes - which are important proxies for measuring well-being.

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