



## The child support grant and adolescent risk of HIV infection in South Africa

### Authors' reply

We welcome the comments of Tanya Doherty and colleagues, in particular the excellent point that consideration should be given to raising cash transfer values to further alleviate poverty. Whether raising the value of cash transfers would increase the effects on adolescent HIV-risk behaviour is an empirical question, and deserves testing. Indeed, in a World Bank study in Tanzania,<sup>3</sup> changes in sexual behaviour were noted with higher rates of cash transfer but not with lower rates. We also agree that cash transfers are not a so-called magic bullet, and accordingly suggested that they "might be most effective as part of a combination of prevention methods".<sup>2</sup>

We interviewed the same adolescents at baseline and follow-up (97% retention). Indeed, major efforts were made to trace participants: adolescents were followed up across eight South African provinces, into prisons and hospitals, even to Mozambique, Swaziland, and Lesotho.

We question the assertion that poor girls' motivations for engaging in transactional sex are primarily for highly valued social items. Some qualitative studies report this finding,<sup>3</sup> but in both the Zomba trial<sup>4</sup>

and our prospective sample, small, subsistence-level cash transfers did reduce girls' incidence of transactional or age-disparate sex. In another study in South African adolescents,<sup>5</sup> the combination of food insecurity, familial AIDS, and childhood abuse increased the occurrence of transactional sex from 1% to 57%. These findings suggest a diverse set of risk pathways.

With regard to the methodological clarifications, it was not possible from our tables to establish actual orphan numbers, because adolescents could be simultaneously maternally and paternally orphaned. Total orphan numbers were 834 at baseline and 895 at follow-up. The reduced numbers of adolescents living in informal housing were partly attributable to reconstruction and development housing programmes in study sites, but also resulted from extensive mobility, especially for orphaned adolescents. We agree that these shifts could have affected HIV risks and therefore controlled for informal or formal housing at baseline and follow-up in all analyses (see table 4<sup>2</sup> for propensity-matched models and table 6<sup>2</sup> for multivariate regression models).

The points of debate raised in this letter merit further exploration in randomised trials or prospective studies. To what extent might higher value cash transfers increase HIV-prevention benefits? What are the differences between sexes? And what combinations of social protection

best reduce risks for adolescents living in poverty? These are important questions as social protection emerges as a potentially central component of HIV-prevention strategies.

We declare that we have no competing interests.

Copyright © Cluver et al. Open Access article distributed under the terms of CC BY.

\*Lucie Cluver, Mark Orkin, Mark Boyes, Lorraine Sherr

lucie.cluver@spi.ox.ac.uk

Centre for Evidence-Based Intervention, Department of Social Policy and Intervention, University of Oxford, Oxford OX1 2ER, UK (LC, MB); Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa (LC); School of Public and Development Management, University of the Witwatersrand, Johannesburg, South Africa (MO); School of Psychology and Speech Pathology, Curtin University, Perth, WA, Australia (MB); and Royal Free and University College Medical School, University College London, London, UK (LS)

- 1 de Walque D, Dow WH, Nathan R, et al. Incentivising safe sex: a randomised trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania. *BMJ Open* 2012; **2**: e000747.
- 2 Cluver L, Boyes M, Orkin M, Molwena T, Sherr L. Child-focused state cash transfers and adolescent risk of HIV infection in South Africa: a propensity-score-matched case-control study. *Lancet Glob Health* 2013, **1**: e362-70.
- 3 Wamoyi J, Wight D, Plummer M, Mshana G, Ross D. Transactional sex amongst young people in rural northern Tanzania: an ethnography of young women's motivations and negotiation. *Reprod Health* 2010; **7**: 2.
- 4 Baird SJ, Garfein RS, McIntosh CT, Ozler B. Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: a cluster randomised trial. *Lancet* 2012; **379**: 1320-29.
- 5 Cluver L, Orkin M, Boyes M, Gardner F, Meinck F. Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. *J Acquir Immune Defic Syndr* 2011; **58**: 336-43.