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Effects of a Large-Scale Unconditional Cash Transfer Program on Mental Health Outcomes of Young People in Kenya

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A B S T R A C T

Purpose: This study investigates the causal effect of Kenya's unconditional cash transfer program on mental health outcomes of young people.
Methods: Selected locations in Kenya were randomly assigned to receive unconditional cash transfers in the first phase of Kenya's Cash Transfer Program for orphans and Vulnerable Children. In intervention locations, low-income households and those with orphans and vulnerable childrens began receiving monthly cash transfers of $20 in 2007. In 2011, 4 years after program onset, data were collected on the psychosocial status for youth aged 15–24 years from households in intervention and control locations (N = 1960). The primary outcome variable was an indicator of depressive symptoms using the 10-question Center for Epidemiologic Studies Depression Scale. Secondary outcomes include an indicator for hopefulness and physical health measures. Logistic regression models that adjusted for individual and household characteristics were used to determine the effect of the cash transfer program.
Results: The cash transfer reduced the odds of depressive symptoms by 24 percent among young persons living in households that received cash transfers. Further analysis by gender and age revealed that the effects were only significant for young men and were larger among men aged 20–24 years and orphans.
Conclusions: This study provides evidence that poverty-targeted unconditional cash transfer programs, can improve the mental health of young people in low-income countries.

IMPLICATIONS AND CONTRIBUTION

Kenya's Cash Transfer for orphans and Vulnerable Children program contributes to the protection of young people's psychosocial health, with largest effects on young men and orphans. Results suggest that poverty-targeted unconditional cash transfers programs could help reduce the burden of mental health among young people in sub-Saharan Africa.

Mental disorders account for a significant portion of the global disease burden and are an important indirect cause of many other health conditions including both communicable and noncommunicable diseases and injury [1], leading the World Health Organization to proclaim that "there can be no health without mental health" [2]. Moreover, among young people, neuropsychiatric disorders account for 15%–30% of disability-adjusted life years lost in the first three decades of life. The burden of mental health for young people is particularly heavy in low- and middle-income countries, where 90% of the world's population of children and adolescents live [3]. Mental health problems, including depression, in adolescence can be

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particularly damaging because mental health problems can impair a young person's development of the social, cognitive, and economic connections and investments that will impact their future success [4]. Given these prevalence estimates and the importance of mental health as an underlying correlate of many dimensions of health, designing adequate responses to challenges to the mental health of young people in low- and middle-income countries is a major issue on the global health policy agenda.

There is increasing evidence that poverty and mental health are inextricably linked in a two-way relationship [5]. The "social causation" hypothesis posits that poverty represents a risk factor for substance abuse and neurological disorders because of stress, social exclusion, decreased social capital, and exposure to trauma and violence [6,7]. According to the "social drift" hypothesis on the other hand, mental illness increases the risk of poverty because of increased health expenditures, reduced productivity, stigma, and loss of employment and earnings [5,8]. In sub-Saharan Africa (SSA) there is growing use of unconditional or "social" cash transfer programs as a poverty alleviation strategy with over a dozen national governments now implementing interventions similar to the Kenyan program. More recently such programs have also been promoted as an intervention that can reach young people as they transition into adulthood, notably having the potential to reduce risky sexual behavior and human immunodeficiency virus incidence in high human immunodeficiency virus prevalence settings [9–11].

A recent review of the evidence on interventions that address both these causal pathways concluded that the mental health effects of poverty alleviation programs was inconclusive, whereas the effects of mental health programs on poverty alleviation were mostly associated with improved economic outcomes [12]. The review called for more evidence on the impact of specific poverty alleviation interventions targeted toward vulnerable groups more at-risk of mental health disorders and using so-called "hard" assessments of mental health that implement screening tools for certain disorders.

Becoming orphaned is an important risk factor for depression and low mental health [13,14], and this risk may be exacerbated by household poverty. In SSA, a total of approximately 12-month children have lost a parent to AIDS; therefore, orphans and vulnerable children (OVC) are a population of considerable interest [15,16]. The social causation hypothesis suggests unconditional cash transfer programs, by alleviating poverty and targeting households with OVC (an at-risk population), may help to address this problem.

This study examines the effects of a large unconditional cash transfer program, the Government of Kenya's Cash Transfer for Orphans and Vulnerable Children (CT-OVC) Program, on the mental health of young people aged 15–24 years. Unconditional cash transfer programs provide consistent cash payments to targeted households without any behavioral conditions and are most common in SSA, whereas conditional programs provide cash contingent on health or school related behaviors and are more common in Latin America. The CT-OVC program targets households that are poor and have at least one orphan or vulnerable child below 18 years of age (see Appendix Panel 1).

Methods

CT-OVC program and study setting

The CT-OVC program provides regular cash payments of approximately US $20 to households that are poor and have at least one orphan or vulnerable child below 18 years of age. The program is implemented by the Ministry of Gender, Children and Social Development of the Government of Kenya and is the largest social protection program in the country, reaching 170,000 households as of January 2014 (Appendix Panel 1).

Select locations within each of seven districts in Kenya were selected in 2007 to be part of the first phase of the CT-OVC program based on overall poverty, level of development, and OVC prevalence in the districts. Participants in this study were selected from these locations during this phase of the CT-OVC program. Control locations were scheduled to enter the program later in the scale-up process, though to date they have yet to be enrolled.

Randomization and masking

Because of financial constraints not all locations in the seven districts could enter the program immediately thus allowing for the possibility of experimental evaluation design. First, four locations in each district were identified as eligible to be included in the CT-OVC program, then two locations in each district were randomly selected for program implementation and the remaining two locations served as the control group. Randomization was conducted at the level of location rather than the community because CT-OVC program implementation functions are delegated to the location and thus it is the lowest administrative level for the program. Targeting of households was conducted according to established program guidelines in all intervention locations while in control locations stage one and stage two targeting was implemented to identify comparison households (Appendix Panel 1). Additionally, households were masked at baseline to reduce the possibility of anticipation effects (where participants change their behavior in anticipation of receiving the transfer). That is, neither the household nor the field enumerators were aware of the household's assigned study arm during baseline data collection.

Data collection

Household surveys were administered in control and intervention locations for a baseline assessment in 2007 (wave 1) and follow-up assessments in 2009 (wave 2) and 2011 (wave 3). From the complete list of eligible households in control and intervention locations, households were randomly selected for in-depth surveys at the rate of 1:2 (control:intervention). Minimum sample sizes were determined on the basis of power calculations (accounting for intracluster correlation at the community level) to be able to observe changes of 5% in school enrollment, 20% in curative health care, and 10% in per capita consumption—the three main outcomes for the evaluation of the CT-OVC program. In total, 1,540 households were selected from intervention locations and 754 from control locations.

Data used in the present study come from wave 3, the only wave in which mental health of adolescents was assessed. The wave 3 survey included a young person's module that was administered to up to three household members aged 15–25 years to assess mental health, aspirations, and sexual behaviors. This module included a 10-item short version of the Center for Disease Control Depression Index (CES-D 10) [17,18] and a six-item Hope Scale [19] to assess the mental health status of respondents. In our analysis, we excluded 75 participants aged 25 years in 2011 to focus on young adults (ages