Long-Term Effects of Cash Transfer Programmes on Adolescents’ and Young Adults’ Mental Health and Its Social Determinants: A Quasi-Experimental Study of Three Countries

Sara Evans-Lacko, PhD
Overview

1. Context of poverty and youth mental health in LMICs

2. Does longer duration of exposure to CTPs during childhood (0-17 years) reduce depressive symptoms in early adulthood (18-30 years)?

3. If so, might increased education or employment explain the association with long-term mental health outcomes?
61% of the world’s poor are under 24 years of age

Source: Aguilar et al., 2020; Castañeda et al. 2018; World Bank, 2018.
Mental health is a key factor intertwined with poverty and future life chances

- Living in poverty can lead to mental health problems
- Youth mental health problems limit life chances & increase likelihood of continuing to live in poverty
- Cash transfer programmes do not address these dynamics
Impact of poverty reduction programmes on (mental) health: some evidence

Conditional Cash Transfers

Effect of the Brazilian cash transfer programme on suicide rates: a longitudinal analysis of the Brazilian municipalities

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Abstract

Purpose There is a growing awareness of the economic and contextual factors that may play a role in the etiology of suicide. The Programa Bolsa Família (PBF) the Brazilian conditional cash transfer programme, established in 2004, aims to attenuate the effects of poverty of Brazilians. Our study aims to evaluate the effect of Bolsa Família Programme (BFP) coverage on suicide rates in Brazilian municipalities.

Methods We conducted an ecological study using 2004–2012 panel data for 5507 Brazilian municipalities. We calculated age-standardized suicide rates for each municipality and year. BFP coverage was categorized according to three levels (<30%, ≥30% and <70% and ≥70%) and duration (coverage ≤70% for all years, ≥70% for 1 year, ≥70% for 2 years, ≥70% for 3 or more years). We used negative binomial regression models with fixed effects, adjusting for socio-economic, demographic and social welfare co-variables.

Results The findings were based on an analysis of 4,564,319,647 Brazilian residents living in 5507 municipalities in 15 years. The results showed that BFP coverage was significantly associated with a lower suicide rate. For example, for municipalities with ≥70% coverage for 3 or more years, the suicide rate was 49.7% lower compared to those with <30% coverage.

Conclusion The results indicate that conditional cash transfer programmes can significantly reduce suicide rates in Brazilian municipalities.
Engage stakeholders including youth to inform policies and programmes that seek to improve long-term outcomes for young people.

Increase knowledge about the impact of cash transfer programmes on youth mental health and life chances.
The long-term effects of cash transfer programmes on young adults’ mental health: A quasi-experimental study of three countries

Annie Zimmerman, Crick Lund, Ricardo Araya, Sara Evans-Lacko, Yadira Diaz, Juliana Sanchez Ariza, Philipp Hessel, Emily Garman, Mauricio Avendano
Evidence for long-term effects of cash transfer programmes (CTPs) on mental health?

- Recent systematic review Zimmerman et al., 2022) identified 12 studies examining impacts of CTPs on youth mental health—all short term impacts

- Most evaluations focus on children’s physical health, nutrition and education outcomes
  - Some of these look at long-term outcomes and suggest increased educational attainment

- Yet, little known about impact of early and sustained exposure of CTPs on mental health
Research questions

1. Does longer duration of exposure to CTPs during childhood (0-17 years) reduce depressive symptoms in early adulthood (18-30 years)?

2. If so, might increased education or employment explain the association with long-term mental health outcomes?
Data from three countries with CTPs

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia’s Familias en Accion</td>
<td>• 2015 National Mental Health Survey</td>
<td>n=3,674</td>
</tr>
<tr>
<td>South Africa’s Child support programme</td>
<td>• National Income Dynamics Study (NIDS) 2014</td>
<td>n=7,372</td>
</tr>
<tr>
<td>Mexico’s Opportunidades</td>
<td>• Mexican Family Life survey (MxFLS-3) 2009-2012</td>
<td>n=8,832</td>
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Study design

• Exploits cross-country and cohort variation in the age of children when the program was first introduced

• Seeks to capture impact of policy on cohort of children and adolescents, rather than impact of individual receipt of cash transfers

• Treatment: number of years (from age 0 to age 17) living in country with CTP

• Outcome variable: Depressive symptoms (SQR-20 for Colombia, CESD-10 for South Africa, and CCDSD for Mexico)
Year CTP introduction and eligibility change in South Africa, Mexico and Colombia

- CSG Introduced (under 7 years)
- Oportunidades Introduced (called Progresa)
- CSG changed to under 9
- MxFLS Round 2
- CSG changed to under 11
- NIDS Wave 1
- CSG changed to under 18
- NIDS Wave 2
- NIDS Wave 3 MxFLS Round 3
- NIDS Wave 4
- NIDS Wave 5
- ENSSM
- Familias en Acción Introduced
  MxFLS Round 1
- Year CTP introduction and eligibility change in South Africa, Mexico and Colombia
Mean years exposure to CTP by country and birth cohort category
What did we find?
Each additional year of exposure to CTP (aged 0-17) was associated with a reduction in depressive symptoms (aged 18-30).

Continuous normalised depressive symptoms

<table>
<thead>
<tr>
<th>Years of potential exposure</th>
<th>B (95% CIs)</th>
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<tr>
<td></td>
<td>-0.003 (-0.004, -0.001)</td>
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</table>

Small effect size: Cohen’s d = 0.02

*All models controlled for 3-year birth cohort, country, sex and poverty status.
Theoretical model of long-term effects of CTPs on mental health – role of education & employment?

CTPs from age 0 to 17 years

Mental health age 18-30 years
Might increased education or employment explain the association with long-term mental health outcomes?

<table>
<thead>
<tr>
<th></th>
<th>Odds ratio</th>
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<tbody>
<tr>
<td>Secondary school completion</td>
<td>1.01 (1.00, 1.03)</td>
</tr>
<tr>
<td>Employment</td>
<td>0.90 (0.88, 0.91)</td>
</tr>
</tbody>
</table>
Discussion

• Our data suggest small impacts of growing up during CTP expansion on depressive symptoms during early adulthood
• Although effect size is small, identifying a population impact given only subset received CTP is promising
• Moreover, given CTPs do not target mental health outcomes this can be considered an added ‘bonus’ of CTPs
• Improvements in depression outcomes are not due to improvements in employment outcomes
• Improvements may be related to improvements in education outcomes and likely to be a number of other potentially complex pathways (household, stress, income security, caregiver mental health)
• To improve mental health, need better understanding of mechanisms and specific targeting
• Also, need direct mental health interventions to support youth living in poverty and improve their life chances
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Thank you! Any questions?

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