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Article

Cash transfers and the social determinants of health: a conceptual framework

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Summary

Cash transfers (CTs) can play a significant role in tackling the social determinants of health (SDoH), but to date there is a lack of conceptual framework for understanding CTs linkages to the SDoH. This article proposes a framework that identifies the linkages between CTs and SDoH, discusses its implications, and argues for active involvement of health promoters in CT design, implementation and evaluation. The development of the framework followed two stages: evidence review and stakeholder involvement. The evidence review entailed a systematic literature search to identify published and unpublished impact evaluation studies of CTs in sub-Saharan Africa. Critical reflection on the evidence synthesized from the literature formed the basis for the development of the framework. Interviews with CT policy makers, managers and development partners were also carried out to help refine the framework. Interviews were audio-recorded and transcripts were analysed using thematic framework analysis. The study finds that there is limited recognition of SDoH in CT policy making and implementation. The evidence reviewed, however, points to strong impacts of CTs on SDoH. The framework thus conceptualizes how CTs work to influence a broad range of SDoH and health inequities. It also highlights how CT architecture and contexts may influence program impacts. The proposed framework can be used by policy makers to guide CT design, adaptation and operations, and by program managers and researchers to inform CTs' evaluations, respectively. The framework suggests that to optimize CT impact on SDoH and reduce health inequities, health promoters should be actively engaged in terms of the programs design, implementation and evaluation.

Key words: cash transfers, conceptual framework, evaluation, health inequity, social determinants of health

INTRODUCTION

'Health promotion policy combines diverse but complementary approaches including legislation, fiscal measures, taxation and organizational change. It is coordinated action that leads to health, income and social policies that foster greater equity' (WHO, 1986, p. 2). This quote from the Ottawa Charter for Health Promotion recognizes the fact that health determinants lie outside the sphere of the health sector, and that public policies in non-health sectors are of importance to promoting health.

Globally, there is a large body of evidence indicating that policies that address the social determinants of health (SDoH) can lead to improved health outcomes and a reduction in health inequities (Commission on Social Determinants of Health, 2008; WHO, 2011; Marmot *et al.*, 2012; de Leeuw, 2017). The SDoH have been defined by the World Health Organization (WHO) as the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life. They include social policies, economic policies and systems, social norms and political systems (WHO, 2018). Health inequities, defined here as 'the unfair and avoidable differences in health between groups of people within countries and between countries' (WHO, 2018), emanate from the SDoH and result in marked differences in health and health outcomes.

Building upon previous international agreements such as the Alma-Ata Declaration, Ottawa Charter for Health Promotion, the Adelaide Conference on Healthy Public Policy and the Bangkok Charter for Health Promotion, the WHO Commission on Social Determinants of Health (CSDH) called for a multi-sectoral approach to tackle the SDoH and to address the multiple forms of deprivation faced by the poor and the vulnerable in societies (Commission on Social Determinants of Health, 2008). Similarly, the Rio Political Declaration on Social Determinants of Health stated that biomedical interventions alone are inadequate to address the detrimental effects of poor social conditions, and called for government policies which tackle the SDoH and improve well-being in a collaborative manner (WHO, 2011). This highlights that the way that governments develop and implement public policies has implications for the SDoH and the health inequalities that result from their distribution (Graham, 2004, 2007; Krumeich and Meershoek, 2014; Rivillas and Colonia, 2017).

While the health promotion field has acknowledged the role of public policy in addressing the SDoH, translating this into action has been challenging (Clavier and de Leeuw, 2013). A particularly promising public policy that has the potential to promote health equity through action on SDoH is cash transfers (CTs). CTs are social protection interventions generally targeted at poor households and seek to encourage increased demand for services and improve the wellbeing of the poor and the vulnerable.

CTs have been rigorously evaluated across Latin America (the pioneers of CTs) and in sub-Saharan Africa (Garcia and Moore, 2012; Davis *et al.*, 2016; Owusu-Addo *et al.*, 2016). The focus of the existing theories of change and frameworks for CT programs have been on individual and household level outcomes (see Gaarder *et al.*, 2010; Wolf et al., 2013; Robano and Smith, 2014) particularly the poverty-alleviating effects of CTs (see Slater *et al.*, 2008; DFID, 2011; Department of Social Development et al., 2012; Browne 2013; Bastagli *et al.*, 2016). The development of these frameworks has been largely informed by either neoclassical and behavioural economics or psychological theories. The absence of a framework that combines multiple theoretical perspectives concerning health determinants and outcomes (Alonge and Peters, 2015) has resulted in a limited understanding of CTs impact upon a broad array of SDoH and their potential influence upon health inequities. Aside from Bastagli *et al.* (2016) and Slater *et al.*'s (2008) frameworks which take into account structural factors that may affect CTs operations, other frameworks do not address contextual factors and governance structures that may influence program impacts. The paucity of conceptual frameworks which take into account the complexities of CTs, and their linkages to the broader determinants of health, limits the ability of policy makers to design CTs optimally, and researchers to identify the role that these may play in reducing health inequities.

A 2011 publication by the WHO called for the active involvement of public health agencies in CT programs (Forde *et al.*, 2011). The aim of this paper is to propose a framework which extends the existing frameworks on CTs, and can be used to engage policy makers for the use of CTs to address the SDoH, and also guide CT program design, planning and evaluation. Policy makers adopting such a framework would be able to identify the multiple pathways of change that can originate from CTs and the range of social determinants which CTs could modify to improve health. This could provide a more complex and complete understanding of CTs as social policy measures for operationalizing the SDoH and guide evaluation and evidence gathering. A framework which conceptualizes the linkages between CTs and health determinants can also facilitate the engagement of the health sector and health promoters in CT programs as advocated by the WHO. It is anticipated that the involvement of health promoters (i.e. researchers, practitioners and policy makers) in CTs will contribute to shaping the programs in a way that would optimize their impact on the SDoH and health equity.

OVERVIEW OF CTs

CTs constitute one of the most widely studied social policy interventions globally. They are direct, regular and predictable non-contributory payments that raise and smoothen incomes with the objective of reducing poverty and improving household capacity to absorb

financial shocks (Arnold *et al.*, 2011). Since the mid-1990s, CTs have become an influential social policy instrument which has come high on the agenda of most governments in low- and middle-income countries (DFID, 2011). They are particularly prominent in Central Europe, Latin America, Asia and sub-Saharan Africa (SSA) and are generally used to achieve poverty reduction and human capital development goals (Owusu-Addo *et al.*, 2016). CT programs can be conditional cash transfers (CCTs) or unconditional cash transfers (UCTs). By their nature, CCTs are conditional upon beneficiary households adopting certain positive behaviours conditioned under the program, including investment in children's education, nutrition and health services utilization (Fiszbein and Schady, 2009). The key difference between CCTs and UCTs is that the latter give cash to households with no conditions (co-responsibilities) attached (Baird *et al.*, 2013). CCTs are prominent in Latin America and require beneficiaries to comply with co-responsibilities including investment in school-age children's education and health. In contrast, UCTs dominate in SSA due to limited human and financial capacity to monitor conditions (Davis *et al.*, 2016).

A recent study by the World Bank (2015) revealed that globally, as at 2014, there were 130 UCTs with marked growth found in SSA where the number increased from 21 in 2010 to 40 in 2014. Similarly, the number of CCTs increased from 27 in 2008 to 64 in 2014. The proliferation of CTs in the developing world is justified on the grounds that social policy actions of this nature play a significant role in the fight against intergenerational poverty, health inequalities, and in meeting the needs of those who are affected by social disadvantage and poverty.

CTs align with the health promotion principle of inter-sectoral collaboration. This is reflected in their broad range of objectives (e.g. health, education, nutrition, agriculture, women's empowerment and poverty reduction) which entail action on the SDoH. Clearly, CTs contribute to health and wellbeing of the poor and the vulnerable, with clear scope for health sector involvement in their design, implementation and evaluation (Kingdom, 2010; Forde *et al.*, 2011).

METHODS

The development of the framework followed two stages: evidence review and stakeholder involvement.

Evidence review

The conceptual framework described here was informed by a broader, large-scale systematic review which examined the impacts of CTs on SDoH and health inequalities in SSA. The complete review methods and findings are reported in detail elsewhere (Owusu-Addo *et al.*, 2018). As part of the review, the operation of CTs in relation to their impact upon the broader determinants of health was conceptualized using the SDoH framework (see Owusu-Addo *et al.*, 2016). This was followed by a literature search to identify published and unpublished impact evaluation studies of CT programs in SSA covering the period 2000–16. The identified evaluation studies (79 reports) comprised of journal articles (41), technical reports (22), working papers (15) and a PhD thesis (1). These were reviewed, quality appraised and categorized based on the core outcomes they addressed. The review covered 24 CT programs across 14 countries in SSA. The outcomes of CTs identified by the review included financial poverty, education, child labour, social capital, nutrition, sexual risk behaviours, utilization of health services among others. Critical reflection on the evidence synthesized from the literature, and a review of the theories of change for CTs found in the primary studies included in the review, formed the basis for the development of the framework with the core themes linked through the domains to show how CTs could impact on SDoH and health inequity.

Stakeholder involvement

In stage two, the draft framework developed based on the evidence review was presented at the 8th African Evaluation Association International conference held in March 2017 in Kampala, Uganda. This conference was attended by policy makers, researchers, evaluators and development partners championing the Sustainable Development Goals in Africa. This provided a platform for eliciting feedback on the framework and its relevance during the plenary session from the conference participants who were familiar with CT programs.

The Ghana CT program and interviews with program key stakeholders

Ghana's CT program, the Livelihood Empowerment Against Poverty (LEAP) introduced in 2008 focuses on fighting extreme poverty and vulnerability (Ministry of Manpower, Youth and Employment [MMYE], 2007). Like most CTs, LEAP transfers cash to extremely poor households with the objective of alleviating short-term poverty and encouraging human capital development. Program eligibility is based on extreme poverty and having a household member in at least one of four demographic categories: households with orphans or vulnerable child (OVC), elderly poor (65+), severely

disabled without productive capacity, or pregnant women and mothers with children under 12 months old (this category was added in 2015).

LEAP conditions (described as 'soft' conditions as there are no penalties for noncompliance) include: enrolment of children in school, school attendance, birth registration, utilization of antenatal and post-natal services, complete immunization of babies, protection of children against child labour, and enrolment in a National Health Insurance Scheme. There are no conditions for older adults and severely disabled beneficiaries. LEAP has national coverage, and has expanded from 1645 beneficiary households in 2008 to 213 044 beneficiary households in 2017 (Ministry of Gender, Children and Social Protection [MoGCSP], 2018). The program is largely funded by the Ghana government but also receives support from Development Partners (the World Bank [loan], Department for International Development (DFID) [donations] and United Nations International Children's Fund (UNICEF) [technical support]). The program has implementation structures from the national to the community level (Ministry of Gender, Children and Social Protection [MoGCSP], 2018).

To further refine and explore the relevance of the framework, interviews were conducted with CT policy makers (who designed the program), program managers (who implemented the program), development partners (who provided funding and technical support to the program), and evaluators and researchers in Ghana ($n = 8$). Interview participants were selected purposefully as information rich cases (Patton, 2015) with the primary interest being relevance and rigour rather than thematic saturation (Emmel, 2013). The interviews lasted between 45 min and 65 min. The Ghanaian context was selected for refining the framework because of its long history of delivering CTs and the first author's knowledge of this program and its leaders and stakeholders. The interviews followed a semi-structured interview guide which was developed based on the draft framework, examining participants' understanding of the concept of social determinants and the incorporation of this into CTs policy making. The stakeholder engagement phase offered the opportunity for clarifying grey areas in the framework, and the incorporation of multiple perspectives into the development of the framework as done in other studies (Hawkins *et al.*, 2017).

Data analysis

The interviews were audio-recorded and transcribed verbatim. Notes taken during the conference plenary session were added to the interview transcripts for analysis. Given the focus of the study on policy and practice, the thematic framework approach developed by Ritchie *et al.* (2008) was used for the analysis. This approach was considered appropriate as it allowed concepts and themes to be developed both deductively and inductively during the analysis as well as permitting the charting of data into a framework matrix. While the systematic review findings formed the basis for the development of the initial framework, data from the interviews and conference participants helped elicited ideas on CT design and whether or not SDoH concepts were incorporated into program design. Dominant themes around CTs design and contextual factors were found from the interviews which helped further conceptualization of the linkages between CTs, SDoH and health equity. Themes from the interviews and the conference plenary session regarding CT impact on SDoH were largely consistent with the review findings. Conference participants for example, indicated the need to show in the framework examples of sexual behaviours impacted upon by CTs.

The use of methodological triangulation (findings from systematic review, feedback from conference participants and interviews) strengthened the credibility of the results. To further establish transparency in the research process, a memo was kept at all stages to record hunches in relation to the data that were being collected and this was an aid in the development and refinement of the framework.

RESULTS

Recognition of the concept of SDoH

Analyses of the documents included in the review and interviews pointed to a limited recognition of the SDoH concept. For instance, out of 79 reports reviewed as part of the processes towards the development of this framework, the term 'social determinants' was mentioned in only one report (Owusu-Addo, 2016). Similarly, while the interviews with CT policy makers, development partners and program managers in Ghana revealed an understanding of the influences of social factors upon health among the participants, there was a limited recognition and uptake of the SDoH concept in CTs design and implementation, and the need to engage with the health sector.

> You are right because I think the end goal of social protection programs such as cash transfers is not to get the cash to the household but the end goal is to see a healthy and mentally, and physically healthy people who are able to earn a decent living. So yes, the social determinants perspective is worth considering. (Interview # 5).

> The program currently collaborates with the National Health Insurance Authority but this is because we want program beneficiaries to get free access to the health insurance card so they can access health services. One of the things we have not done well is collaboration with the Ghana Health Service which like we're discussing it's important to look at (Interview # 6).
>
> I think the health sector has itself to blame because if programs like this [the Ghana CT program] come up then you [the health sector] have to take the advantage of the platform (Interview # 2).

SDoH concepts were also less familiar to the participants of the 8th African Evaluation Association International conference who attended the session on 'Impact Evaluation: Cash Transfers and Social Welfare' where the draft framework was presented. For instance, during the plenary session, a participant made the following observations:

> This framework is extremely helpful to those of us working on CTs. I am currently working on a UNICEF supported CT program but have never thought of CTs in this way in terms of their linkages to the wider determinants of health. A really useful advocacy tool (Conference Participant, AfREA 8th Conference in Uganda).

This shows that the SDoH ideas have not been given due recognition in CT design, implementation and evaluation. However, the evidence from the systematic review and the insights from the interviews indicate that CTs are addressing a range of different structural and intermediate determinants of health.

A conceptual framework for understanding CTs impacts on SDoH

The framework (Figure 1) is modelled after the WHO Commission on Social Determinants of Health's conceptual framework for action on SDoH (Solar and Irwin, 2010) to show how CTs can impact upon a broad range of SDoH and reduce health inequities. It divides SDoH into structural and intermediate determinants where the structural determinants in this case comprise economic (e.g. poverty), social (e.g. education) and political factors (e.g. civic participation) that create socio-economic position, and intermediate determinants which are factors that mediate the effect of socioeconomic position on health including material circumstances, psychosocial circumstances, behavioural factors and access to health care (Solar and Irwin, 2010). Building on this, the framework for CTs impact on SDoH consists of three core components namely evidence of CT impact on SDoH, CT architecture, and contextual factors that may influence CT design and impacts. These components have been explained below.

Overview of evidence on CTs impact on SDoH

The framework conceptualizes how CTs work to improve health at two critical levels, addressing: (i) structural determinants of health and (ii) intermediate determinants of health. While the interviews provided qualitative data regarding CTs impact on SDoH, these were in line with the findings from the systematic review. Therefore, we largely rely on the findings from the systematic review to provide evidence concerning the impacts of CTs on SDoH.

The findings of our review showed that CTs can impact upon determinants of health such as financial poverty, education, productive capacity (e.g. acquisition of agricultural assets and inputs, livestock ownership and ownership of non-farm enterprises), employment (adult labour force participation), child labour (labour force participation and intensity), civil participation and women's empowerment. As anti-poverty programs, CTs have been found to reduce short-term poverty in SSA (Owusu-Addo *et al.*, 2018). In Malawi, CTs were found to have reduced poverty headcount, poverty gap and poverty severity by 6, 7 and 9 percentage points, respectively (Malawi SCTP Evaluation Team, 2015). Zambia's Child Grant Program similarly, reduced poverty headcount, poverty gap and poverty severity by 10, 10 and 8 percentage points, respectively (AIR, 2015b) while the Multiple Categorical Targeting Grant reduced poverty headcount, poverty gap and poverty severity by 9, 12 and11 percentage points, respectively (AIR, 2015a). Similar evidence from Latin America indicates that CTs have had significant impact on poverty reduction (Leroy *et al.*, 2009). Furthermore, CTs have been found to improve the productive capacity of the poor by increasing their access to agricultural inputs, ownership of agricultural assets and participation in non-farm enterprises towards poverty reduction (Asfaw *et al.*, 2014; Daidone *et al.*, 2014; AIR, 2015b). Poverty is a critical SDoH and is linked to poor health, and influences other SDoH such as education, housing and employment (Commission on Social Determinants of Health, 2008). With the global commitment to ending poverty in all its manifestations (UN, 2016), CTs thus constitute a viable policy option for poverty reduction.

CTs' emphasis on child education outcomes have had strong impacts on enrolment and schooling among school-age children, as found in our review and in other several systematic reviews (Baird *et al.*, 2013; Snilstveit *et al.*, 2015; Owusu-Addo *et al.*, 2018). CTs have also

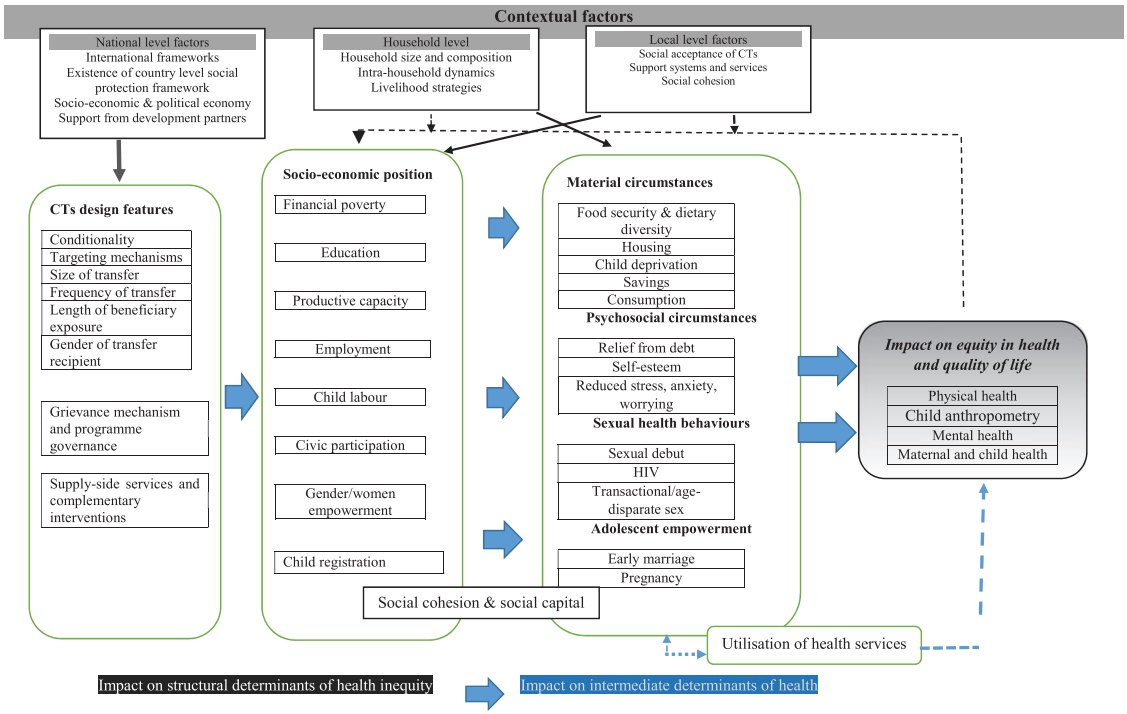

Fig. 1: A conceptual framework of CTs' impact on SDoH and inequity in health.

been found to reduce child labour (Miller *et al.*, 2010; Pellerano *et al.*, 2014). By improving children's education and reducing child labour, CTs can increase employment opportunities in adulthood, and ultimately raise socio-economic status.

Regarding civic participation (i.e. community involvement), CTs were found to play a significant role in ensuring the participation of excluded groups in politics and traditional local hierarchies. By transferring cash to the extreme poor, CTs can strengthen the relationship between the poor and traditional authorities and break down entrenched patronage, thus enabling civic participation. In Tanzania, CTs were found to have increased the proportion of households attending Village Council meetings and those voting in Community Management Committee elections by 7 and 22 percentage points, respectively (Evans *et al.*, 2014). Similarly, in Uganda, CT was found to have increased beneficiaries' social status and voice in community meetings (Merttens *et al.*, 2016). In the field of health promotion, community participation has been recognized as critical to individual and community empowerment (Green *et al.*, 2015).

The 2016 SDGs report estimates that in SSA, the births of 54% of children under five have not been recorded (UN, 2016). This has significant repercussions for children's access to essential social services including health, education and justice (Commission on Social Determinants of Health, 2008; UN 2016). It is significant, therefore, that evidence points to the potential impact of CTs on children's acquisition of birth certificates (Owusu-Addo *et al.*, 2018). This indicates that policy makers can consider CTs as a tool for increasing birth registration in low- and middle-income country settings.

It has been reported that CTs affect social capital and improve social cohesion at the individual and community levels. A number of studies have shown that CTs enhance beneficiaries sense of belonging and social status (Miller and Tsoka, 2012; Skovdal *et al.*, 2013), reciprocity and social networks (Onyango-Ouma and Samuels, 2012). It must be noted, however, that CTs can also negatively impact on social cohesion by causing tension and jealousy within beneficiary households and among beneficiaries and non-beneficiaries (Onyango-Ouma and Samuels, 2012).

At the second level of SDoH, the intermediate determinants of health, CTs can positively affect material circumstances (e.g. food security, housing, child material wellbeing, household consumption and savings), psychosocial circumstances (e.g. being out of debt, self-esteem, reduced stress and worrying), sexual health

behaviour (e.g. initiating sex, number of sex partners, transactional sex, age-disparate sex), adolescent empowerment in relation to early marriage and pregnancy and utilization of health services. For instance, CTs have been found to increase households' consumptive capacity in the areas of food and other basic needs (Malawi SCTP Evaluation Team, 2015; Handa *et al.* 2016; Merttens *et al.*, 2016). Increases in household income can result in improvements in psychosocial circumstances, such as relief from stressful living conditions and worries about meeting basic needs and, and ultimately improve mental wellbeing (Lundberg *et al.*, 2010). CTs have been reported to potentially reduce child deprivation and vulnerability. For example, Lestotho's CT program significantly reduced the proportion of children age 0–5 in severe food deprivation and those in severe health deprivation by 17 and 20 percentage points, respectively (Pellerano *et al.*, 2014).

In the short-term, CTs enhance household incomes which can improve the ability to pay for health services. Correspondingly, CTs have been found to have a positive impact on health service utilization and health outcomes (Lagarde *et al.*, 2007; Owusu-Addo and Cross, 2014; Owusu-Addo *et al.*, 2018), nutrition (Martins *et al.*, 2013; Renzaho *et al.*, 2017; Owusu-Addo *et al.*, 2018), HIV (Pettifor *et al.*, 2012; Heise *et al.*, 2013) and mental health (Owusu-Addo *et al.*, 2018). In relation to utilization of health services, the framework indicates that while access to health services is an intermediate determinant of health which can be impacted upon by CTs through the removal of financial barrier (i.e. tackling poverty), health system conditions themselves can also directly affect utilization of health services, and thus create inequities in health.

In sum, there are a number of pathways by which CTs can tackle the structural and intermediate determinants of health to potentially impact on equity in health and wellbeing as shown in Figure 1. In the framework the inter-relationship between the structural determinants of health and health status is indicated by the thin dashed lines. Poor health status can significantly undermine the impacts that CTs may achieve on SDoH such as education, employment and productive capacity. Similarly, as noted by Handa and Davis (2006), inequality of access to health services results in poor health which hinders progress in poverty reduction and subsequent development. This bi-directional relationship between health and socio-economic position highlights the need to strengthen health systems, which are themselves an intermediary determinant of health.

The architecture of CTs

The framework shows how CTs as a national level policy constitute a social protection action for tackling the SDoH and health inequity. As shown in the framework, CTs are shaped by national social protection policy frameworks and other structural mechanisms including the international development policy agenda, and the socio-economic and political economy of a particular country. This is indicated by the arrow pointing from the national contextual factors to CTs and their design features. When these structural mechanisms create an enabling environment for the development of CTs, then CTs work to tackle direct structural determinants of health such as poverty and education, among others, which shape socio-economic position. When these structural determinants are impacted upon by CTs, they in turn contribute to reducing health inequity through their impacts on intermediary determinants such as utilization of health services and risky sexual behaviours.

Discussions held with CT policy makers and development partners indicated that the Ghana CT program was largely informed by international frameworks that advocated for social protection schemes, and was influenced by the prevailing socio-economic and political context at the country level, the role of development partners and institutional capacity to implement the program. For example, a CT policy maker noted that the Millennium Development Goals led to the development of poverty reduction strategies and subsequently a national social policy framework which formed the basis for the development of the Ghana CT program as captured in the quote below.

> Well, the genesis of Ghana's CT program dates as far back as 2007. In 2007, the then government of President Kuffour had what we call the Growth and Poverty Reduction Strategy document II in line with the Millennium Development Goal 1. That document as a matter of fact was the blueprint of the government's development agenda. Which focused on halving poverty by 2015. And so the issue of cash transfer is not new, it was contained in the government's blue print book which was the Growth and Poverty Reduction Strategy document (GPRS) II, as it was called at the time". Obviously, the MDGs at the time particularly goal 1 which focused on poverty reduction formed the basis of the direct cash transfer program (Interview # 1).

The interviews with CT policy makers further revealed that the socio-economic environment and the political context (all part of the higher level contextual factors shown in the framework) influence the architecture of the CT program in relation to issues such as the program being both conditional and unconditional, the size of the

CT, frequency of the transfer and the gender of the CT recipient. CT design features regarding graduation from the program and targeting mechanisms are also determined by the prevailing economic situation of the country. For instance, in the case of the Ghana program, the policy makers noted that while the government had the political will to commence the program, because of budgetary constraints, the World Bank and Department for International Development (DFID) later stepped in to support the program by providing a credit facility and a grant respectively, with technical support for program implementation provided by UNICEF. The policy makers further observed that the institution of program grievance mechanisms and an overall governance structure are determined by state actors and program designers.

Decisions regarding whether or not CTs would be linked to complementary interventions and services rested with national level actors who conceived of the program. For instance, in the case of the Ghana CT, discussions with the development partners supporting the program revealed that they have been instrumental in linking the CT to complementary programs such as providing beneficiaries with livelihood opportunities and enrolling them onto the National Health Insurance Scheme, as shown below.

> Let me take a step back and say, while cash transfers are very useful towards getting people out of extreme poverty it doesn't happen on its own and so you have to link it to different resources available. So in Ghana for example, one of the hard pushes last year with support from donors [development partners – World Bank, DFID and UNICEF] was to get the National Health Insurance Authority to give automatic insurance to LEAP beneficiaries (Interview # 3).

The interview participants considered that linking of CT beneficiaries to complementary services was a strategy to further improve resilience of beneficiaries against economic shocks. Of importance to program evaluation is the need to understand how these higher level contextual factors influence CTs operations and the outcomes that they may achieve.

Household and local level contexts

Aside from the national level contextual factors, the literature review and interviews identified two other contextual factors that facilitate or mediate the impacts of CTs on SDoH and health inequity. The literature review revealed that household level factors such as household size and composition, intra-household dynamics, and livelihood strategies used by the household can serve as enabling or inhibiting factors in relation to CTs' impact (Handa *et al.*, 2014a; Akresh *et al.*, 2016). Interview participants noted that availability of local markets, social acceptance of CTs, and support services such as schools and health facilities are essential for optimizing CTs impacts.

DISCUSSION

The framework presented here extends current understanding about the operation of CTs and provides a visual tool for conceptualizing how CTs can be used to address the SDoH and health equity. It may be used as a guide for CT design and evaluation and, importantly, offers insights into how CTs can be used as a health promotion strategy. With a focus on the poor and the vulnerable in society, CTs work to tackle the root causes of poor health (social inequalities). They are a form of public policy that can address poverty, human capital development, nutrition and other important conditions of living, and therefore encompass the range of actions that Raphael (2013a,b) argues are required to improve the SDoH.

Getting the SDoH onto the CT policy agenda

The evidence gathered as part of the development of the framework indicates that there is limited recognition, knowledge and application of the SDoH concept in CT policy making, implementation and evaluation. A number of factors could explain this including the limited involvement of the health sector in CT programs as observed by Forde *et al.* (2011), as well as the limited recognition of the SDoH in non-health sectors (Koller et al., 2009; Collins, 2012; Lawless *et al.*, 2017). It has been observed that successful action on SDoH requires collaboration across policy domains and levels of governments (Exworthy, 2008; Lawless *et al.*, 2017). Therefore, from a health equity perspective, the limited attention to SDoH among CT policy makers is worrisome as this presents a barrier to collaborative action. However, the national level contextual factors which shape the design of CTs shown in the framework open a window of opportunity for health promotion practitioners and researchers to engage with policy makers by way of championing the SDoH concept to further inform CTs design, implementation and evaluation. This can for example, promote a better understanding among policy makers of how acting on the SDoH contributes not only to improved health outcomes but also other development goals such as economic growth and improved living conditions (Krech, 2011; WHO, 2011).

Implications for policy and practice

The framework points to an array of areas of policy and service domains to which CTs could be targeted to reduce health inequities, and thus contribute to health sector objectives. For instance, in addition to poverty reduction, education, improving the productive capacity of the poor, nutrition and women's empowerment, CTs can be used as health promotion strategies in the areas of HIV prevention (Thornton, 2008; Baird *et al.*, 2012; Yotebieng *et al.*, 2016), reproductive and sexual health (Cluver *et al.*, 2013; Handa *et al.*, 2014b; Adato *et al.*, 2016), maternal and newborn health (Glassman *et al.*, 2013), and adolescent empowerment against early marriage and teenage pregnancy (Baird *et al.*, 2010, 2011; Handa *et al.*, 2015; Heinrich *et al.*, 2017).

For instance, findings from the systematic review showed that the South African national CT reduced the incidence and prevalence of transactional and age-disparate sex among girls who were beneficiaries of the program (Cluver *et al.*, 2013). The Zomba CT Program in Malawi also significantly delayed early marriage and adolescent pregnancy among beneficiary adolescents (Baird *et al.* 2011). In Uganda, a pilot CT also increased the odds of pregnant women attending three or more antenatal care visits. CTs achieved these results through the education pathway, and by addressing material deprivation and income poverty (Baird *et al.*, 2010; Handa *et al.*, 2016). These suggest that CTs are useful tools for achieving direct health sector objectives, and hence the need for health promoters to be actively involved in their design, implementation and evaluation.

While the framework could lead to more conceptually driven program design that links CTs to the SDoH and health equity, to achieve this, there is the need to engage with the health sector and particularly, health promoters in the design, adaptation, implementation and evaluation of CTs. Several scholars (e.g. Irwin *et al.*, 2006; Marmot *et al.*, 2008, 2012; de Leeuw, 2017) have argued that the health sector should take a leadership role in championing action on SDoH by advocating for the development of healthy public policies and intersectoral collaboration. As can be seen in the framework, due to their cross-cutting nature, CTs should be supported by inter-sectoral collaboration among sectors including but not limited to education, health, agriculture and social development. The active involvement of health promoters in CTs in this regard can help push through reforms around intersectoral collaboration which is much needed to better shape CTs and to optimize the impacts that they may achieve. This kind of collaboration is in line with the 'whole of government approach' for health improvement which was a fundamental tenet of the Alma Ata Declaration, and a foundation of the recommendations of the Commission on Social Determinants of Health (Commission on Social Determinants of Health, 2008; de Leeuw, 2017). Further, it is consistent with the Health in All Policy concept which is an approach to public policies across sectors other than health that takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity (WHO, 2014, p. 3). The framework thus offers a useful tool to engage policy makers on how CTs can be used to operationalize these concepts through inter-sectoral action on the SDoH.

Program evaluators and researchers can use the framework to inform CT program evaluation. Specifically, the framework can aid the development of evaluation questions and conceptualization of the range of CT impacts upon SDoH and health inequities. For instance, it can be used to explore questions such as how, in what respect and for whom CTs impact on social capital (e.g. bonding, bridging or linking capital), and the extent to which the change in the stock of social capital influences health outcomes such as mental health. The selection of outcome indicators can be informed by the framework, which delineates the multiple streams of outcomes that CTs may achieve. Further, the complex nature of CTs and the broad range of outcomes that they impact upon necessitate the use of the judicial principle in gathering evidence—seeking evidence from multiple perspectives and stakeholders (Tones, 1997). Similarly, to use the framework for evaluation, it may be necessary to pay attention to understanding CTs contexts and mechanisms of change aside from examining outcome measures. The framework also points to the need to examine the effects of program grievance mechanisms and governance structures. This is particularly important as a recent review by Bastagli *et al.* (2016) covering 56 CT programs in low- and middle-income countries reported that no studies have been conducted to specifically examine the effects of CT grievance mechanisms on program outcomes. However, as shown in the framework, unresolved grievances particularly those relating to complaints from beneficiaries and program targeting concerns raised by communities, can negatively impact on social capital and social cohesion, and consequently erode the programs' positive impacts. The framework further indicates that from a SDoH perspective, CTs have implications for health equity, and therefore, their evaluations need to be planned for sub-group analyses ensuring that they are explicitly powered for

this, in order to examine the programs' impact on health equities.

CONCLUSION

There is substantial evidence of CTs' impacts on health systems and on the broader determinants of health, and therefore, they warrant greater attention from health promoters particularly given their high potential as a vehicle for health in-all policy and action. As CTs are largely developed and implemented by government sectors other than health, health promoters can use the framework to put on the agenda of politicians and CT policy makers the need to assign more substantive role to the health sector, and for inter-sectoral action on SDoH through CTs. The framework suggests that a number of factors at the national, local and household levels can influence the outcomes that CTs may achieve. Therefore, CTs evaluations should adopt approaches that can uncover the black-box between program inputs and the resulting complex pattern of outcomes. This framework highlights the importance of working closely with health promotion policy makers, practitioners and researchers in the design, implementation and evaluation of CTs to ensure that aside from their poverty reduction and human capital development, they can be utilized effectively to reduce health inequities. Notwithstanding these potential applications, it should be acknowledged that this study did not elicit views from the health sector regarding their role in CTs, and their perspectives on CTs as a potential strategy for tackling the SDoH. While this does not limit the utility of the framework within the health sector, it is recommended that future studies explore health promoters understanding of CTs, and their perspectives on CTs as a policy action to address the SDoH. Further relevant questions are whether health promoters are sufficiently skilled and have greater knowledge about the policy process to help operationalize CTs for this purpose.

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