Chapter 23

Cash Transfers and Child and Adolescent Development

Damien de Walque, Lia Fernald, Paul Gertler, Melissa Hidrobo

INTRODUCTION

Poverty has significant, detrimental, and long-ranging effects on child development (Walker and others 2011). Programs and policies around the world have attempted to address poverty to improve outcomes for children and adolescents, and one popular approach is to use cash transfer (CT) programs (Engle and others 2011). CT programs support vulnerable populations by distributing transfers to low-income households to prevent shocks; protect the chronically poor; promote capabilities and opportunities for vulnerable households; and transform systems of power that exclude certain marginalized groups, such as women or children (Devereux and Sabates-Wheeler 2004). The economic rationale for CT programs is that they can be an equitable and efficient way to address market failures and reach the most vulnerable populations (Fiszbein and others 2009).

When the provision of CTs is tied to mandatory behavioral requirements, they are conditional cash transfer (CCT) programs, which operate by giving cash payments to families only if they comply with a set of requirements (the "conditions" of the cash transfer), usually related to health and education (de Janvry and Sadoulet 2006). For example, many CCT programs distribute benefits conditional on the use of preventive health care services, attendance at health and nutrition education sessions designed to promote positive behavioral changes, or school attendance for school-age children (Barrientos and DeJong 2006; Lagarde, Haines, and Palmer 2007). Definitions of age groupings and age-specific terminology used in this volume can be found in chapter 1 (Bundy and others 2017).

Unconditional cash transfer (UCT) programs are those in which families receive cash benefits because the household falls below a certain income cutoff or lives within a geographically targeted region; however, no conditions are tied to the transfer (Barrientos and DeJong 2006). Given that UCTs do not monitor the behavior of households or require visits to health clinics, these programs are operationally less complex and easier for governments to implement because they do not require a well-functioning health care sector. Thus, administrative costs are often substantially lower for UCTs than for CCTs. School feeding is an example of a noncash transfer and is discussed in chapter 12 of this volume (Drake and others 2017).

Both CCTs and UCTs assume that parents are income constrained, and thus do not have the money to spend to meet the most pressing needs of their families (for example, nutritious food, medical treatment). Providing greater purchasing power allows parents to choose what goods to buy and in what quantity and of what quality. The economic rationale for conditioning transfers on certain behaviors is that individuals or households do not always behave rationally because they have imperfect information, they behave myopically, or there are conflicts of interest between parents and children (Fiszbein and others 2009). In addition, conditioning transfers on human capital creates positive externalities and usually

Corresponding author: Damien de Walque, Development Research Group, World Bank, Washington, DC, United States; ddewalque@worldbank.org.

has more political support. However, many argue that conditioning transfers is paternalistic and costly to monitor and that the neediest households might find it too costly to comply (Grimes and Wängnerud 2010; Handa and Davis 2006; Popay and others 2008; Shibuya 2008).

Mexico's Prospera (previously Progresa and Oportunidades) and Brazil's Bolsa Familia were among the first CCTs to be designed in the late 1990s and have been models for programs throughout Africa, Latin America, and the United States (Aber and Rawlings 2011; Fiszbein and others 2009). By 2011, CT programs covered an estimated 750 million to 1 billion people worldwide; India (48 million households), China (22 million households), Brazil (12 million households), and Mexico (5 million households) were among the countries with the largest programs (DFID 2011). In spite of the common features of many CTs, there is a large degree of heterogeneity across countries and programs with regard to program benefits, conditions, requirements, payments, and targets. For example, in Ecuador and Peru, the transfer is a fixed payment per family per month that does not vary by household size, whereas in Brazil, Malawi, and Mexico the benefits depend on the number, age, and gender of children in the household. In some programs (for example, Prospera in Mexico and Familias en Acción in Colombia), the payment is greater for secondary-school-age children than for primary-school-age children. Similarly, the average transfer amount varies greatly, ranging from 6 percent in Brazil to 22 percent to 29 percent in Mexico and Nicaragua to 200 percent of pretransfer consumption in Malawi (Fiszbein and others 2009; Miller, Tsoka, and Reichert 2010). The size of the transfer reflects the goal of the program, which can be to move households to a minimum level of consumption (Colombia, Jamaica, Mexico) or to base the size of the transfer on the opportunity cost of health care (Honduras) or on the transportation costs to the public health facility (Nepal) (Gaarder, Glassman, and Todd 2010).

This chapter first reviews the evidence from CT programs, both conditional and unconditional, throughout low- and middle-income countries (LMICs), focusing specifically on the direct effects on child and adolescent health and education outcomes. It then discusses the design of CT programs and why and how they could theoretically affect outcomes for young children and adolescents. Although there are other types of social safety net programs, such as voucher schemes, food transfers, and user fee removals, we focus on CTs because many countries are switching to such programs given that they are easier to distribute. In addition, the evidence for many other types of programs is too sparse for them to be included in the analysis.

CT programs are hypothesized to improve child and adolescent outcomes via the family investment model, according to which families have more money to spend on inputs (Guo and Harris 2000; Yeung, Linver, and Brooks-Gunn 2002) or more time to spend with children (Del Boca, Flinn, and Wiswall 2014), and the family stress model, according to which maternal depression and stress are lower because household resources are higher (Mistry and others 2004).

CCT and UCT programs can vary widely in their objectives, design, and context. While many programs have the broad goals of reducing poverty and improving human capital, some are more focused on decreasing poverty, some on improving education outcomes, some on improving health outcomes, and some on improving nutrition outcomes. Program designs reflect these differences in objectives with differences in conditions, targeting, transfer size, beneficiaries, and complementary components. Consequently, although CCT and UCT programs have the potential to effect multiple outcomes by lessening a household's budget constraints, some programs and contexts may be better suited to improving child and adolescent health and education outcomes. For example, programs in a handful of countries are beginning to experiment with the integration of parenting support or nutritional support—a direct intervention to promote child development—within CT programs (for example, in Colombia, see Attanasio and others 2014; in Mexico, see Fernald and others 2016).

The literature review proceeded as follows. We began by examining the conclusions in the 2011 *Lancet* series on early child development in LMICs (Engle and others 2011; Walker and others 2011) and in five systematic reviews addressing CCTs published since 2011 (Bassani and others 2013; Fernald, Gertler, and Hidrobo 2012; Glassman, Duran, and Koblinsky 2013; Manley, Gitter, and Slavchevska 2013; Ruel, Alderman, and Maternal and Child Nutrition Study Group 2013). We then conducted a literature search to find papers that had been published since those systematic reviews. The search used Google Scholar, JSTOR, and PubMed for peer-reviewed articles and websites of the International Food Policy Research Institute, United Nations Children's Fund, and the World Bank for gray papers. The search was restricted to studies that used experimental or quasi-experimental techniques such as randomization, regression discontinuity, propensity score matching, or difference-in-differences.

We found evidence from studies examining the effects of CTs on birth weight (3 studies); infant mortality (6 studies); height-for-age (or stunting) (23 studies); weight-for-age (or underweight) (12 studies); weight-for-height (or wasting) (10 studies); hemoglobin (or anemia) (10 studies); morbidity (16 studies); cognitive, language, and behavioral development (11 studies); and sexual and reproductive health (9 studies) (table 23.1).

Table 23.1 Summary of Cash Transfer Effects

Indicator	Significant effects of CT on outcome	Significant effects of CT only in subgroups or some measures	No effects or adverse effect of CT
Birth and neonatal outcomes			
Birth weight	Mexico (Barber and Gertler 2010) Uruguay (Amarante and others 2012)	Colombia, urban areas (Attanasio and others 2005)	
Perinatal, neonatal, or infant mortality	Brazil (Shei 2013) Brazil (Rasella and others 2013) India (Lim and others 2010)	Mexico, infant mortality, but not neonatal (Barham 2011)	Indonesia (World Bank 2011) Nepal (Powell-Jackson and others 2009)
Anthropometric measures			
Height, height-for-age, stunting (HAZ)	Mexico (Gertler 2004) Mexico, rural (Neufeld and others 2005) Mexico (Behrman and Hoddinott 2005) Mexico (Fernald, Gertler, and Neufeld 2008) Sri Lanka (Himaz 2008)	Burkina Faso, one-year impact (Akresh, de Walque, and Kazianga 2016) Colombia, children < age 24 months (Attanasio and others 2005) Malawi, children ages 5–18 years (Miller, Tsoka, and Reichert 2010) Mexico, rural, children < age 6 months (Rivera and others 2004) Mexico, urban, children < age 6 months (Leroy and others 2008) Mexico, rural, less-educated mothers (Fernald, Gertler, and Neufeld 2009) Nicaragua, stunting (Maluccio and Flores 2005) Nicaragua, one-year impact (Macours, Schady, and Vakis 2012) South Africa, exposed at age 0–35 months (Agüero, Carter, and Woolard 2009)	Bangladesh (Ahmed and others 2009) Brazil (Morris, Olinto, and others 2004) Ecuador (Paxson and Schady 2010) Ecuador (Fernald and Hidrobo 2011) Indonesia (World Bank 2011) Mexico, urban (Neufeld 2005) Peru (Perova and Vakis 2009) Tanzania (Evans, Holtemeyer, and Kosec 2015) Zambia (Seidenfeld and others 2014)
Weight-for-age, underweight (WAZ)	*Increased weight or decreased underweight:* Nicaragua (Maluccio and Flores 2005) *Decreased weight:* Brazil (Morris, Olinto, and others 2004) Indonesia (World Bank 2011)	Mexico, children < age 6 months (Leroy and others 2008) Mexico, rural, children ages 48–71 months (Neufeld and others 2005) Zambia, WAZ (Seidenfeld and others 2014)	Bangladesh (Ahmed and others 2009) Burkina Faso (Akresh, de Walque, and Kazianga 2016) Malawi (Miller, Tsoka, and Reichert 2010) Nicaragua (Macours, Schady, and Vakis 2012) Peru (Perova and Vakis 2009) Tanzania (Evans, Holtemeyer, and Kosec 2015)
Weight-for-height (wasting, WHZ), BMI	*Decreased BMI or overweight:* Mexico (Fernald, Gertler, and Neufeld 2008)	Mexico, children < age 6 months (Leroy and others 2008) Sri Lanka, children, ages 36–60 months (Himaz 2008) Zambia, WHZ (Seidenfeld and others 2014)	Bangladesh (Ahmed and others 2009) Indonesia (World Bank 2011) Mexico, urban (Neufeld 2005) Mexico (Fernald, Gertler, and Neufeld 2009) Nicaragua (Maluccio and Flores 2005) Tanzania (Evans, Holtemeyer, and Kosec 2015)

table continues next page

Table 23.1 Summary of Cash Transfer Effects (continued)

Indicator	Significant effects of CT on outcome	Significant effects of CT only in subgroups or some measures	No effects or adverse effect of CT
Measures of morbidity and anemia			
Illness or sick days	Brazil (Reis 2010) Burkina Faso (Akresh, de Walque, and Kazianga 2016) Malawi (Miller, Tsoka, and Reichert 2010) Mexico (Gertler 2000) Mexico (Gertler 2004) Mexico (Gutiérrez and others 2006) Peru (Perova and Vakis 2009)	Mexico, rural areas (Gutiérrez and others 2004) Tanzania, two-year evaluation (Evans, Holtemeyer, and Kosec 2015)	Ghana (Handa, Park, and others 2014) Jamaica (Levy and Ohls 2007) Mexico (Fernald, Gertler, and Neufeld 2008) Peru (Perova and Vakis 2012)
Specific illnesses	Uganda (Gilligan and Roy 2014)	Colombia, rural areas, < age 48 months (Attanasio and others 2005)	Brazil (Reis 2010) Indonesia (World Bank 2011)
Hemoglobin, anemia	Mexico (Gertler 2004) Uganda (Gilligan and Roy 2014)	Ecuador, poorest quintile, rural (Paxson and Schady 2010) Mexico, urban, ages 6–23 months (Neufeld 2005) Mexico, rural, at one-year, not two-year evaluation (Rivera and others 2004)	Mexico (Neufeld and others 2005) Mexico (Fernald, Gertler, and Neufeld 2008) Ecuador (Fernald and Hidrobo 2011) Nicaragua (Maluccio and Flores 2005) Peru (Perova and Vakis 2009)
Developmental outcomes			
Cognition and language	Mexico (Fernald, Gertler, and Neufeld 2008) Nicaragua (Macours, Schady, and Vakis 2008, 2012) Nicaragua (Barham, Macours, and Maluccio 2013) Uganda (Gilligan and Roy 2014)	Ecuador, poorest quintile of rural population (Paxson and Schady 2010) Ecuador, children of rural mothers with no education (Fernald and Hidrobo 2011)	Mexico (Fernald, Gertler, and Neufeld 2009) Peru (Andersen and others 2015) Zambia (Seidenfeld and others 2014)
Behavior	Mexico (Ozer and others 2009) Mexico (Fernald, Gertler, and Neufeld 2009)		
Indirect effects of cash transfer programs			
Antenatal care	Bangladesh (Nguyen and others 2012) Honduras (Morris, Flores, and others 2004) India (Lim and others 2010) Indonesia (World Bank 2011) Uruguay (Amarante and others 2012)	Mexico, prenatal care quality (Barber and Gertler 2010) Mexico, urban and rural in 2000 (Hernández Prado and others 2004) Mexico, certain specifications only (Sosa-Rubí and others 2011)	El Salvador (De Brauw and Peterman 2011) Nepal (Powell-Jackson and others 2009) Peru (Perova and Vakis 2009) Zambia (Handa, Peterman, Seidenfeld, and others 2015)
Presence of skilled birth attendant at birth, in-facility birth	Bangladesh (Nguyen and others 2012) El Salvador (De Brauw and Peterman 2011) India (Lim and others 2010) Nepal (Powell-Jackson and others 2009) Nepal (Powell-Jackson and Hanson 2012)	Indonesia, certain specifications only (World Bank 2011) Mexico, rural (Hernández Prado and others 2004) Peru, certain specifications only (Perova and Vakis 2009)	Mexico (Urquieta and others 2009) Uruguay (Amarante and others 2012) Zambia (Handa, Peterman, Seidenfeld, and others 2015)

table continues next page

Table 23.1 Summary of Cash Transfer Effects (continued)

Indicator	Significant effects of CT on outcome	Significant effects of CT only in subgroups or some measures	No effects or adverse effect of CT
Growth monitoring	Colombia (Attanasio and others 2005) Honduras (Morris, Flores, and others 2004) Jamaica (Levy and Ohls 2007) Mexico (Gertler 2000) Mexico (Gutiérrez and others 2004, 2006) Nicaragua (Macours, Schady, and Vakis 2012) Peru (Perova and Vakis 2009) Peru (Perova and Vakis 2012)	Burkina Faso, CCT not UCT (Akresh, de Walque, and Kazianga 2012) Nicaragua, one-year evaluation (Maluccio and Flores 2005) Tanzania, one-year evaluation (Evans, Holtemeyer, and Kosec 2015)	Ecuador (Paxson and Schady 2010) Ecuador (Fernald and Hidrobo 2011) Ghana (Handa, Park, and others 2014)
Child food consumption	Colombia (Attanasio and Mesnard 2006) Nicaragua (Macours, Schady, and Vakis 2008) Uganda (Gilligan and Roy 2014)		Bangladesh (Ahmed and others 2009) Ecuador (Fernald and Hidrobo 2011)
Sexual and reproductive health			
HIV/AIDS	Malawi, UCT and CCT for education (Baird and others 2012) Lesotho, lottery incentives if STI-negative (Björkman Nyqvist and others 2015)		South Africa, CCT for education (Pettifor and others 2015) South Africa (Abdool Karim and others 2015) Malawi, CCT if HIV-negative (Kohler and Thornton 2012)
Sexually transmitted infections	Malawi, UCT and CCT for education (Baird and others 2012) Kenya, education subsidy combined *with* HIV/AIDS education, but not without (Duflo, Dupas, and Kremer 2015) South Africa, CCT for education (Abdool Karim and others 2015) Lesotho, lottery incentives if STI-negative (Björkman Nyqvist and others 2015)	Tanzania, CCT if STI-negative (de Walque and others 2012; de Walque, Dow, and Nathan 2014)	
Sexual behaviors		Malawi, UCT and CCT for education (Baird and others 2012) Kenya, UCT (Handa, Halpern, and others 2014) Kenya, education subsidy combined *with* HIV/AIDS education, but not without (Duflo, Dupas, and Kremer 2015) South Africa, UCT (Cluver and others 2013) South Africa, CCT for education (Pettifor and others 2015) Tanzania, CCT if STI negative (de Walque and others 2012; de Walque, Dow, and Nathan 2014) Lesotho, lottery incentives if STI-negative (Björkman Nyqvist and others 2015)	Malawi, CCT if HIV-negative (Kohler and Thornton 2012)

Note: BMI = body mass index; CT = cash transfer; CCT = conditional cash transfer; HAZ = height-for-age z score; HIV/AIDS = human immunodeficiency virus/acquired immune deficiency syndrome; STI = sexually transmitted infection; UCT = unconditional cash transfer; WAZ = weight-for-age z score; WHZ = weight-for-height.

IMPACT OF CASH TRANSFERS ON HEALTH OUTCOMES

Birth Weight

Low birth weight is a major determinant of health outcomes in childhood and later life. In Latin America, CCTs and UCTs have been found to increase birth weight (Amarante and others 2012; Attanasio and others 2005; Barber and Gertler 2010). In Colombia and Mexico, the effect of CCTs on birth weight was between 0.13 and 0.58 kilograms, although in Colombia, the effect was only significant in urban areas. CTs also decreased the incidence of low birth weight (defined as less than 2,500 grams) by 5 percent in Mexico and 15 percent to 17 percent in Uruguay. Neither the Mexico nor the Uruguay study found any changes in the use of antenatal care associated with participation in the CT programs. However, in Mexico, improvements in birth weight were attributed to improvements in quality of care. In Uruguay, improvements in birth weight were attributed to improvements in mothers' nutrition and a fall in mothers' labor supply and smoking.

Perinatal, Neonatal, or Infant Mortality

Three studies from the review in Fernald, Gertler, and Neufeld (2012) and three more-recent studies investigated the effect of CTs on perinatal mortality (stillbirth after 28 weeks of pregnancy or death of a child within the first week of birth), neonatal mortality (death of a child within the first month of birth), infant mortality (death of a child within the first year of birth), or under-five mortality. Four of the six studies found significant decreases in mortality rates in Brazil, India, and Mexico (Barham 2011; Lim and others 2010; Rasella and others 2013; Shei 2013). More than half of the decline in infant mortality in Mexico resulted from reductions in respiratory and intestinal infections and nutritional deficiencies (Barham 2011). However, studies in Indonesia (World Bank 2011) and Nepal (Powell-Jackson and others 2009) found no significant impact on neonatal or infant mortality.

Self-Reported Child Health: Illness or Morbidity

Of the studies reviewed, 16 investigated the effects of CTs on reported illness or morbidity. Most programs found significant positive effects on measures of illness and morbidity, such as sick days, reported diarrhea, or reported respiratory problems. Studies in Brazil (Reis 2010), Burkina Faso (Akresh, de Walque, and Kazianga 2016), Malawi (Miller, Tsoka, and Reichert 2010), and Tanzania (Evans, Holtemeyer, and Kosec 2015) found that CTs significantly decreased the number of reported illnesses or sick days. In contrast, program participation had no significant effect on reported illness in Jamaica (Levy and Ohls 2007) and was associated with an increase in reported illness among children ages zero to five years in Ghana (Handa, Park, and others 2014). In Mexico, three evaluations reported a significant decrease in illness rates in the treatment groups (Gertler 2000, 2004; Gutiérrez and others 2006); one evaluation (Gutiérrez and others 2004) found a significant decrease in reported sick days in rural areas, but not urban; and one evaluation (Fernald, Gertler, and Neufeld 2008) found no significant association between the size of the CT received by the family and self-reported sick days of the child. In Peru, results were similarly mixed: a two-year evaluation reported that children in Juntos were less likely to be ill (Perova and Vakis 2009), but a five-year evaluation found no impact on self-reported illness (Perova and Vakis 2012).

Studies in Brazil (Reis 2010), Colombia (Attanasio and others 2005), Indonesia (World Bank 2011), and Uganda (Gilligan and Roy 2014) analyzed the effect of CCTs on specific reported illnesses, such as diarrhea, fever, respiratory conditions, and vomiting. In Uganda (Gilligan and Roy 2014), there was a significant decrease in reported diarrhea rates, while in Colombia, there was a significant decrease in reported diarrhea for rural children, but not for urban children, and there was no impact on respiratory conditions for children in rural or urban areas. In Brazil, although the CT program significantly improved children's morbidity, it had no significant impact on reported vomiting, diarrhea, respiratory conditions, and bed days. Contrary to expectations, in Indonesia, the program significantly increased reports of fever and diarrhea.

Anthropometric Measures

Anthropometric indicators are widely used to assess children's nutritional status. Persistent or severe poor nutrition has direct effects on linear growth and the ability to accumulate muscle mass and fat (Hoddinott and Bassett 2008). Height-for-age z score (HAZ) is a measure of chronic malnutrition, with stunting (HAZ lower than −2 standard deviations) representing an internationally recognized cutoff (WHO 1986). Weight-for-height z score (WHZ) is a measure of acute malnutrition, with wasting (WHZ lower than −2 standard deviations) reflecting a deficit in tissue and fat mass. Weight-for-age z score (WAZ) is a composite indicator of HAZ and WHZ and thus captures both transitory and chronic aspects of malnutrition (Hoddinott and Bassett 2008).

Height-for-Age

The evidence linking CCTs to improvements in child height was mixed, both across and within countries. In Mexico alone, four studies found a significant effect of the program on height (Behrman and Hoddinott 2005; Fernald, Gertler, and Neufeld 2008; Gertler 2004; Neufeld and others 2005), three found significant improvements only for specific subpopulations such as children ages zero to six months (Leroy and others 2008; Rivera and others 2004) or children of mothers with no education (Fernald, Gertler, and Neufeld 2009), and one study found no significant effects in urban areas (Neufeld 2005).

Evaluations of other CCT programs were also inconclusive: in Bangladesh (Ahmed and others 2009), Brazil (Morris, Olinto, and others 2004), Indonesia (World Bank 2011), Peru (Perova and Vakis 2009), and Tanzania (Evans, Holtemeyer, and Kosec 2015), there were no significant effects on children's height. In Nicaragua, a study of the Red de Protección Social Program (Maluccio and Flores 2005) found no impact on HAZ, but a significant decrease in stunting, while a study of the Atención a Crisis Program (Macours, Schady, and Vakis 2012) found a significant improvement in HAZ after adding extended controls, but these impacts had faded two years after the program ended. Similarly, in Burkina Faso, CCTs led to significant improvements in HAZ after one year, but no significant impacts were detected after two years (Akresh, de Walque, and Kazianga 2016). In Colombia, there was a significant improvement in children's HAZ, but only for children younger than age 24 months (Attanasio and others 2005).

The evidence for UCTs was also inconclusive. There was a significant improvement in children's HAZ in Sri Lanka (Himaz 2008), but no effect on young children's HAZ in Ecuador and Zambia (Fernald and Hidrobo 2011; Paxson and Schady 2010; Seidenfeld and others 2014). In South Africa, there was a significant improvement in height for children who had been exposed to the CT program more than 50 percent of the time when they were age 0–35 months (Agüero, Carter, and Woolard 2009). In Malawi, there was a significant improvement in height for children ages 5–18 years, but no significant effect on the prevalence of stunting for children younger than age 5 years, although the sample size for this subpopulation was quite small (Miller, Tsoka, and Reichert 2010).

These mixed findings are consistent with a meta-analysis showing small and nonsignificant impacts of CTs on child HAZ across 17 programs (Manley, Gitter, and Slavchevska 2013). Because of limitations in the study designs, it is not possible to determine whether the lack of significant effects on height in some studies was due to small sample sizes, to children being older and thus less sensitive to nutritional inputs (Victora and others 2010), to a lack of improvement in children's nutritional intake, or to delays and errors in program implementation. Although many studies show improvements in food consumption and health service use, many factors could limit the effectiveness of CTs in improving nutritional status, such as the quality of children's diet and health services, knowledge of adequate feeding practices, and environmental risks such as contaminated water and malaria (Bassett 2008; Manley, Gitter, and Slavchevska 2013).

Weight-for-Height

The evidence of the impact of CTs on WHZ or wasting in general reveals little to no impact. Studies of CTs in Bangladesh (Ahmed and others 2009), Indonesia (World Bank 2011), Nicaragua (Maluccio and Flores 2005), and Tanzania (Evans, Holtemeyer, and Kosec 2015) found no impact on wasting or WHZ. However, a study of a UCT in Zambia (Seidenfeld and others 2014) found an increase in WHZ, but no impact on wasting, and a study of a UCT in Sri Lanka (Himaz 2008) found a significant increase in WHZ, but only among children ages 36–60 months. In Mexico, Neufeld and others (2005) found no effect of the program on WHZ, while Leroy and others (2008) found a significant increase in WHZ, but only for children younger than age 6 months. Also in Mexico, Fernald, Gertler, and Neufeld (2008) found that receiving a greater amount of cash from Oportunidades was associated with lower body mass index– (BMI-) for-age in children ages 3–5 years and a lower prevalence of overweight, but the effect on BMI had disappeared after 10 years (Fernald, Gertler, and Neufeld 2009).

Weight-for-Age

The effects of CCT and UCT programs on WAZ or the prevalence of underweight are mixed, although the majority of studies found no significant effects or only found effects in subgroups. CCT studies in Bangladesh (Ahmed and others 2009), Nicaragua (Macours, Schady, and Vakis 2012), Peru (Perova and Vakis 2009), and Tanzania (Evans, Holtemeyer, and Kosec 2015) found no impact on WAZ or underweight; a different study in Nicaragua (Maluccio and Flores 2005) found a significant reduction in the prevalence of underweight. CCT studies in Brazil (Morris, Olinto, and others 2004) and Indonesia (World Bank 2011) found a decrease in weight. Findings regarding the impacts of UCTs on weight are also inconclusive; a study in Malawi (Miller, Tsoka, and Reichert 2010) found no impact on weight or the prevalence of underweight, and a study in Zambia

(Seidenfeld and others 2014) found an increase in WAZ but no impact on the prevalence of underweight. In Burkina Faso, neither CCTs nor UCTs had an impact on WAZ (Akresh, de Walque, and Kazianga 2016).

In Mexico, results for the effect of Oportunidades on weight outcomes were also mixed. Neufeld and others (2005) found that the prevalence of underweight in rural areas increased in response to the program for children age 48 months and older, but not for younger children and that the program had no significant impact on the prevalence of overweight or on WAZ. A study by Leroy and others (2008), however, found a significant increase in weight for children younger than age six months.

Hemoglobin

Of the nine studies reviewed in Fernald, Gertler, and Hidrobo (2012) and one more-recent study, five found no effects of CT programs on hemoglobin levels or anemia (Fernald, Gertler, and Neufeld 2008; Fernald and Hidrobo 2011; Maluccio and Flores 2005; Neufeld and others 2005; Perova and Vakis 2009). Two studies (one in Ecuador and one in Mexico) found improvements in hemoglobin levels, but only for subgroups (Neufeld 2005; Paxson and Schady 2010). Two studies (one in Mexico and one in Uganda) found that CTs led to significant improvements in hemoglobin or anemia rates (Gertler 2004; Gilligan and Roy 2014); one study (Rivera and others 2004) found significant improvements only in the one-year evaluation, but not in the two-year evaluation, when the late intervention group began receiving the CCT.

Intermediate Pathways

CT programs could affect children's development through several intermediate pathways, such as increased use of health services by pregnant mothers and young children, increased parasite treatments and vitamin supplements, increased food consumption, and improved physical and psychological well-being of mothers. Given space limitations, this chapter provides an overview only of the findings related to the conditions present in many CT programs—health service use for pregnant women and young children and food consumption of individual children.

Health Service Use: Pregnant Women

The programs reviewed varied widely in scope. Programs in Bangladesh, India (Janani Suraksha Yojana Program), and Nepal (Nepal's Safe Delivery Incentive Program) focused on pregnant women with the aim of encouraging antenatal care and professional care at childbirth, while programs in El Salvador, Honduras, Indonesia, Mexico, and Peru were broader in their outreach, but still required pregnant women to seek prenatal care. UCT programs in Uruguay and Zambia had no antenatal care requirements. A systematic review showed that CCTs increased antenatal care, skilled attendance at birth, and births at clinics (Glassman, Duran, and Koblinsky 2013). However, the results were mixed, generally depending on the focus of the program.

There was no significant impact on the number of antenatal visits in El Salvador (De Brauw and Peterman 2011), Nepal (Powell-Jackson and others 2009), or Zambia (Handa, Peterman, Seidenfeld, and others 2015). However, the programs in Bangladesh, Honduras, India, Indonesia, and Uruguay significantly increased either the probability or the number of antenatal visits (Amarante and others 2012; Lim and others 2010; Morris, Flores, and others 2004; Nguyen and others 2012; World Bank 2011), while the CCT in Peru decreased the probability of prenatal visits (Perova and Vakis 2009). In Mexico, prenatal care increased approximately 6 percent in urban areas, but the results for rural areas were mixed and depended on the evaluation method used (Barber and Gertler 2010; Hernández Prado and others 2004; Sosa-Rubí and others 2011). Even though the study by Barber and Gertler (2010) did not find a significant impact on the use of prenatal care, it did find a significant impact on the quality of prenatal care, with beneficiary women receiving, on average, more of the recommended procedures during their prenatal appointments.

The CCT programs in Bangladesh, India, and Nepal had a specific goal of increasing professional care at childbirth, and indeed these programs significantly increased both the probability of having an in-facility birth and the probability of having a skilled birth attendant (Lim and others 2010; Nguyen and others 2012; Powell-Jackson and Hanson 2012; Powell-Jackson and others 2009). CCT programs in El Salvador, Indonesia, and Peru also led to an increase in the probability of having a skilled attendant at birth (De Brauw and Peterman 2011; Perova and Vakis 2012; Triyana 2014; World Bank 2011); however, the impacts in Indonesia and Peru depended on the empirical specification (Perova and Vakis 2009; World Bank 2011). UCT programs in Uruguay and Zambia had no impact on having a skilled attendant present at birth (Amarante and others 2012; Handa, Peterman, Seidenfeld, and others 2015). In Mexico, Hernández Prado and others (2004) found that Oportunidades increased the probability of having a doctor present at birth in rural areas, but decreased the probability in urban areas, while Urquieta and others (2009) found no significant impact on the probability of having a skilled attendant present at birth.

Health Service Use: Young Children

Although a large majority of the studies reviewed found significantly positive effects of CTs on the probability that a child had received growth monitoring or health checkups, the impact depended on whether the transfer was conditional. Of the studies reviewed, 11 (10 from Latin America and the Caribbean and 1 from Africa) examined transfer programs that were conditional on parents taking their children to health visits (Attanasio and others 2005; Evans, Holtemeyer, and Kosec 2015; Gertler 2000; Gutiérrez and others 2004, 2006; Levy and Ohls 2007; Macours, Schady, and Vakis 2012; Maluccio and Flores 2005; Morris, Flores, and others 2004; Perova and Vakis 2009, 2012), 3 examined UCTs either in Ecuador (Fernald and Hidrobo 2011; Paxson and Schady 2010) or in Ghana (Handa, Park, and others 2014), and 1 experimentally varied whether the transfer was conditional on preventive health care of children in Burkina Faso (Akresh, de Walque, and Kazianga 2012). Whereas the studies on conditional programs revealed a significant increase in the percentage of children being taken to health facilities for growth monitoring or preventive care, the studies on UCTs did not find a significant increase.

Food Consumption

Given that CTs increase a household's purchasing power, CT programs could be expected to increase a household's food consumption. Indeed, review studies showed that both UCTs and CCTs had a large positive impact on the quality and quantity of households' food consumption (Fernald, Gertler, and Hidrobo 2012; Hidrobo, Hoddinott, Kumar, and others 2014; Hidrobo, Hoddinott, Peterman, and others 2014). Although households' food consumption improved, these improvements did not necessarily translate into improved nutrition for children. A potential reason for the weak impacts on nutrition may be the intrahousehold allocation of food, such that children did not benefit from the household's increased food consumption, with regard to either quantity or quality. Studies investigating the impacts on food consumption at the level of the individual child found no impacts on children's food consumption in Bangladesh (Ahmed and others 2009) and Ecuador (Fernald and Hidrobo 2011). However, in Colombia (Attanasio and others 2005), Nicaragua (Macours, Schady, and Vakis 2008), and Uganda (Gilligan and Roy 2014), CTs significantly increased the number of days children consumed foods rich in protein and other micronutrients.

Sexual and Reproductive Health

The impact of UCTs on sexual and reproductive health has been assessed, in particular in Sub-Saharan Africa, where the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic makes this issue highly relevant. Baird and others (2012) evaluated an intervention targeting human capital formation as an alternative HIV/AIDS prevention strategy in Malawi. They found that a CT, both conditional and unconditional, of, on average, US$10 per household per month (US$40 every four months) had various impacts on the prevalence of HIV/AIDS and herpes simplex virus-2 (HSV-2) together with pregnancies and sexual relations of girls with men older than age 25 years. They further documented that CTs improved the mental health of the girls, unless the cash was given conditionally to the parents (Baird, de Hoop, and Özler 2013). However, an evaluation of the medium-term impacts of this intervention, two years after it stopped, indicated that most of the impacts were no longer present (Baird and others 2015).

In Kenya, a national CT program for orphans and vulnerable children reduced the risk of sexual debut among young people ages 15–25 years and also reduced the likelihood of pregnancy among women ages 12–24 years by 5 percentage points (Handa, Halpern, and others 2014; Handa, Peterman, Huang, and others 2015). Schooling and peer influences have been found to be the main mediators for the reduction in sexual debut (Brugh and others 2014). Also in Kenya, Duflo, Dupas, and Kremer (2015) found that an education subsidy program had no impact (including in the longer term) on the HSV-2 infection rate. However, an education subsidy combined with HIV/AIDS prevention education focusing on abstinence until marriage resulted in a significant reduction in the HSV-2 infection rate in the intervention compared with the control group.

In a propensity-score-matched case-control study, a child-focused state CT in South Africa was shown to reduce transactional sex and age-disparate sex (Cluver and others 2013). Results from two South African randomized controlled trials suggest that CTs conditional on schooling have mixed results. An individually randomized study of young women conditioned on school attendance with an HIV/AIDS incidence endpoint found no impact on HIV/AIDS incidence, even though the young women who received CTs reported engaging in significantly fewer risk behaviors (Pettifor and others 2015). Another study found that cash incentives conditional on schooling led to a 30 percent reduction in HSV-2 incidence, but could not establish the impact of cash incentives on HIV/AIDS incidence (Abdool Karim and others 2015). Both studies might not have had enough statistical power to detect impacts on HIV/AIDS incidence.

A few randomized field trials have explored the use of financial incentives to encourage safe sexual behavior by making payments contingent on, for example, testing for HIV/AIDS, sexually transmitted infection (STI) status, or school enrollment. These experiments have focused mainly on young adults ages 18–29 years; however, the results are also relevant for adolescents' sexual and reproductive health outcomes. Kohler and Thornton (2012) assessed an experiment in Malawi that offered a single cash reward after one year to individuals who remained HIV-negative. The intervention had no measurable effect on HIV/AIDS status. De Walque and others (2012) and de Walque, Dow, and Nathan (2014) evaluated a conditional cash grant program in Tanzania in which the cash awards of US$10 or US$20 every four months were conditional on receiving negative test results for a set of curable STIs. After one year, the group eligible to receive the US$20 CTs showed a significant reduction in STI prevalence, while the group eligible for the US$10 CT showed no measurable effect. The study was not powered to measure impact on HIV/AIDS incidence.

Björkman Nyqvist and others (2015) assessed the effect on HIV/AIDS incidence of a lottery program in Lesotho with low expected payments but a chance to win a high prize conditional on receiving negative test results for STIs (the expected payment per testing round was about three times lower than in the Tanzania trial discussed above). The intervention resulted in a 21.4 percent reduction in HIV/AIDS incidence over two years. Lottery incentives appear to be particularly effective for individuals willing to take risks. In both the Lesotho and Tanzania studies, the effects were shown to be sustained in one-year postintervention follow-up studies.

IMPACT OF CASH TRANSFERS ON CHILD DEVELOPMENT AND EDUCATION

Early Child Development Outcomes

Evidence from studies examining the effects of CCTs and UCTs on cognitive, language, motor, or socioemotional development was also reviewed (six studies reviewed in Fernald, Gertler, and Hidrobo 2012 and five more-recent studies). The majority of studies from the 2012 review reported small, but significant, positive effects of CCTs on developmental outcomes in children (Fernald, Gertler, and Neufeld 2008, 2009; Fernald and Hidrobo 2011; Macours, Schady, and Vakis 2008; Ozer and others 2009; Paxson and Schady 2010). The studies published since the 2012 review showed mixed results. In Uganda, food and CTs were linked directly to preschool participation, and cash, but not food, was found to increase children's cognitive scores significantly (Gilligan and Roy 2014). In Zambia, the UCT had no impact on a highly abbreviated language and cognition scale (Seidenfeld and others 2014). Evidence from Peru showed no effects of the Juntos CCT on language outcomes in children (Andersen and others 2015), but two studies in Nicaragua showed benefits to cognitive development from participation in two different CT programs (Barham, Macours, and Maluccio 2013; Macours, Schady, and Vakis 2012).

Two Latin American countries have tried to improve child development outcomes using the existing structure of CCTs to deliver parenting support, including stimulation and nutrition supplementation. In Colombia, the home-visiting program included as part of a CCT had positive effects on child development (Attanasio and others 2014), as did the integration of Mexico's CCT Prospera with Educación Inicial, a large-scale, group-based, parenting-support program (Fernald and others 2016).

Education Outcomes

Beyond health, CT programs can have broad impacts on the overall development of children and adolescents and their households (Handa, Seidenfeld, and others 2014). In their systematic review, Baird and others (2014) used data from 75 reports covering 35 studies to complement the evidence on the effectiveness of CT programs in improving schooling outcomes and to inform the debate surrounding the design of such programs. They found that both CCTs and UCTs improve the odds of being enrolled in and attending school compared with no CT program.

While the positive impact of CTs on human capital accumulation suggests that those improvements would also translate into better labor market outcomes, such as employment and wages, such long-term impacts have not yet been documented, probably because of the length of the study period required to make such assessments. However, CTs have been shown to improve household productivity by being invested in agricultural assets, reducing participation in low-skilled labor, and limiting child labor outside the home (Covarrubias, Davis, and Winters 2012).

COMPARING CASH TRANSFER DESIGNS, INCLUDING COST AND COST-EFFECTIVENESS

Conditional versus Unconditional

An important question is whether and how the conditions attached to CCTs affect the outcomes they seek to improve. CCT programs represent a top-down approach in which individuals or organizations decide what is best for poor children and provide incentives to their parents to achieve these objectives. In contrast, UCT programs assume that, once a budget constraint is relaxed, parents are in a better position to make appropriate decisions regarding their child's human capital. CCT programs are more costly per recipient to administer than UCT programs because of the costs associated with monitoring conditions.

In their systematic review, Baird and others (2014) specifically examined the role of conditions. They found that the effects for enrollment and attendance are always larger for CCTs than for UCTs, but the difference is not statistically significant. When programs are categorized as having no schooling conditions, having some conditions with minimal monitoring and enforcement, and having explicit conditions that are monitored and enforced, a much clearer pattern emerges: programs that are explicitly conditional, monitor compliance, and penalize noncompliance have substantively larger effects (60 percent improvement in odds of enrollment). Unlike enrollment and attendance, the effectiveness of CT programs for improving test scores is small at best.

Few studies have explicitly compared CCTs and UCTs in the same context. One experiment (Baird, McIntosh, and Özler 2011) examined the impact of CCTs and UCTs on adolescent girls' schooling and health outcomes in Malawi, concluding that CCTs outperformed UCTs for schooling outcomes, but UCTs outperformed CCTs for several other outcomes—for example, delaying marriage and childbearing. Benhassine and others (2015) used a randomized experiment in Morocco to estimate the impact of a labeled CT program: a small cash transfer made to fathers of school-age children in poor rural communities, not conditional on school attendance but explicitly labeled as an education support program. They documented large gains in school participation and concluded that adding conditionality and targeting mothers made almost no difference in that context.

A pilot program in rural Burkina Faso incorporated a random experimental design to evaluate the relative effectiveness of four social protection programs targeting poor households: CCTs given to fathers, CCTs given to mothers, UCTs given to fathers, and UCTs given to mothers (Akresh, de Walque, and Kazianga 2016). In the same context, this study also investigated the role of conditionality and the gender of the recipient in a CT program targeting all children—boys and girls up to age 15 years—and the impact of different CT modalities on a broad range of education, health, and household welfare outcomes. The results indicated that CTs improved the education and health of children as well as the socioeconomic conditions of households and adults. They substantially increased school enrollment, unconditional attendance, and grade progression, but they had a more limited impact on learning outcomes as measured by standardized tests. They also improved the health outcomes of children ages zero to five years, leading to more preventive visits to health clinics, fewer illnesses (both as reported by parents and as measured by a biomarker for inflammation), and better nutritional outcomes (as indicated by anthropometric measurements). However, the conditionality led to differentiated impacts. For school enrollment and several health outcomes, CCTs outperformed UCTs.

The results from Burkina Faso further indicated that CCTs were more effective than UCTs in improving the enrollment of "marginal" children—those who were not enrolled in school or were less likely to go to school, including girls, younger children, and lower-ability children (Akresh, de Walque, and Kazianga 2013). These results shed new light on the role of conditionality in CT programs. In resource-poor settings, both UCTs and CCTs relax the budget constraint and allow households to enroll more children than they would traditionally prioritize for human capital investments. But the conditions attached to CCTs play a critical role in improving the outcomes of children in whom parents are less likely to invest.

Role of the CT Recipient

Another important question is whether the gender of the CT recipient matters. Numerous intrahousehold bargaining research papers indicate that resources under the mother's control have a stronger positive impact on a child's health and schooling than resources controlled by the father (Lundberg, Pollak, and Wales 1997; Schultz 1990; Thomas 1990, 1993). However, almost all current CT programs give resources to the mother, so it is not possible to disentangle how much of any impact is due to the recipient's gender, how much is due to the income effect, and how much is due to the change in relative prices associated with the conditionality. Furthermore, the recipient's gender might affect outcomes differently for conditional as opposed to unconditional CTs. While Benhassine and others (2015) and Haushofer and Shapiro (2016) found no important differences in measured impacts depending on the recipient's gender, Akresh, de Walque, and Kazianga (2016) found more contrasting results when they explicitly investigated the gender of the transfer recipient in Burkina Faso.

While giving cash to mothers seems slightly, but not significantly, better for education outcomes, giving cash to fathers leads to significantly better nutritional outcomes during years when the harvest has been poor.

In the context of a CCT program, another interesting question is the role of parental and child returns to schooling or health decisions regarding school attendance or safe sexual behaviors, especially with adolescents who can more easily make their own decisions. Parents and children may have different views about when it is optimal for a child to invest in human capital. In addition, the actions of children are unlikely to be perfectly observed by their parents, which potentially leads to a moral hazard problem that may prevent investments in schooling or health even when such investments would be optimal from the point of view of the parent-child pair under perfect information (Bursztyn and Coffman 2012).

Bursztyn and Coffman (2012) found that parents attach a value to the monitoring of attendance provided by CCTs in Brazil. However, Baird, McIntosh, and Özler (2011) obtained inconclusive results when comparing the effectiveness of giving one extra dollar to children with the effectiveness of giving one extra dollar to parents in the context of joint transfers to parents and children in Malawi.

CONCLUSIONS

This chapter reviews the evidence from CT programs throughout LMICs and their direct effects on the health and education outcomes of children and adolescents. It also discusses the design of CT programs and why and how they could theoretically affect the outcomes of young children and adolescents. It is very difficult to compare results across countries and contexts, because, as illustrated in table 23.1, UCTs and CCTs have heterogeneous objectives, targeting, conditions applied to the transfer, amount of the transfer, and complementary services. CCT programs also differ because of country-level differences in the supply of health services. For example, even if households comply with the specified conditions, increased use of health services may not result in improved health outcomes if health services have poor infrastructure, high absenteeism, or inadequate supplies. Policy makers should not assume that CT programs will be the most efficient intervention for improving the health outcomes of children and adolescents. The specific context, design, and objectives of each successful experience should be carefully considered before it is replicated and implemented in other settings. Our review shows mostly positive effects of CT programs on some child outcomes, including birth weight; infant mortality; illness or morbidity; and cognitive, language, and behavioral development. Outcomes with large mixed or subgroup effects included HAZ or stunting. Outcomes with large null results included WAZ or underweight, WHZ or wasting, and hemoglobin or anemia. With regard to indirect effects of CTs, results were strong and significant for participation in prenatal care, presence of a skilled birth attendant, and growth monitoring.

CTs may not show clear and consistent effects on anthropometric results or anemia for several reasons. CT programs try to address many issues at multiple levels (parental, community) that influence child development, but they do not directly work to change the broader factors that have previously been linked with improving nutrition and decreasing stunting and anemia, such as safe water and sanitation, infant and young child feeding practices, and country-level food availability (Smith and Haddad 2014). Similarly, programs promoting child development that have an educational or stimulation component have shown larger cognitive effects than cash-only or nutrition-only programs, both in the United States (Nores and Barnett 2010) and in Latin America (Attanasio and others 2014; Fernald and others 2016). In spite of this evidence, there are clear cost constraints—for example, the estimated annual unit cost of an early child development or child care intervention including nutrition supplementation has been estimated to be three to four times the cost of a conditional CT program (Shekar, Heaver, and Lee 2006).

Strong evidence indicates that CT programs keep adolescent students enrolled in school longer. Some of these programs, but not all, have also been effective in controlling the spread of HIV/AIDS among adolescents, primarily by keeping them in school. Some experiments with direct incentives to stay free of STIs have also been promising. However, further experiments with CCT programs and their implementation on a larger scale are needed before it can be concluded that they offer an efficient, scalable, and sustainable HIV/AIDS-prevention strategy.

In our review, CCTs generally showed greater effects than UCTs, although there were still far fewer UCTs than CCTs, so it is difficult to generalize. Moreover, UCTs are more common in Sub-Saharan Africa, while CCTs are more common in Latin America, so it is difficult to disentangle the conditionalities from regional differences. In a large review of studies examining CCTs versus UCTs, the largest effects on education outcomes were found for programs that were explicitly conditional, had a clear system for monitoring compliance, and had penalties for noncompliance (Baird and others 2014). Thus, CT programs appear to be most effective when the receipt of cash is linked with a specific intervention that can maximize the potential impact of the transfer. However, there may be a limit to the number of conditions that households can handle because of the possibilities for misunderstanding (Gaarder, Glassman, and Todd 2010). Moreover, programs with multiple objectives may find that conditionality leads to greater improvements in some outcomes than in others.

CCTs and UCTs attempt to break the cycle of poverty, but there are still many questions relating to how CCTs and UCTs function, how CCTs and UCTs differ in effectiveness, what can be done to improve the effectiveness of CT programs in general, and whether the CCT model can be used throughout the world. Future research relating to CTs could focus on a wide range of topics: for example, examining the CT "black box" to understand mechanisms and pathways linking program participation to child development outcomes; testing potential additions to CT programs (intensive parenting education, child care availability) that could make the programs more effective, particularly for child development; varying the CT amount or program requirements to understand and identify potential threshold effects; understanding the contextual factors (community or household characteristics) that could maximize the effectiveness of CTs; and modifying existing CT programs to have a greater focus on obesity and chronic disease prevention in countries experiencing the nutrition transition, such as many Latin America countries. With a greater understanding of how and why CTs function, their effectiveness can be improved for children and adolescents throughout the world.

NOTE

World Bank Income Classifications as of July 2014 are as follows, based on estimates of gross national income (GNI) per capita for 2013:

- Low-income countries (LICs) = US$1,045 or less
- Middle-income countries (MICs) are subdivided:
  a) lower-middle-income = US$1,046 to US$4,125
  b) upper-middle-income (UMICs) = US$4,126 to US$12,745
- High-income countries (HICs) = US$12,746 or more.

REFERENCES

Abdool Karim, Q., K. Leask, A. Kharsany, H. Humphries, F. Ntombela, and others. 2015. "Impact of Conditional Cash Incentives on HSV-2 and HIV Prevention in Rural South African High School Students: Results of the CAPRISA 007 Cluster Randomized Controlled Trial." Abstract presented at the 2015 International AIDS Society Conference, Vancouver, Canada, July 18–22.

Aber, L., and L. B. Rawlings. 2011. "North-South Knowledge Sharing on Incentive-Based Conditional Cash Transfer Programs." Social Protection Discussion Paper No. 1101, World Bank, Washington, DC. http://ejournal.narotama.ac.id/files/North-South%20knowledge%20sharing%20on%20incentive-based%20conditional%20cash%20transfer%20programs.pdf.

Agüero, J. M., M. R. Carter, and I. Woolard. 2009. "The Impact of Unconditional Cash Transfers on Nutrition: The South African Child Support Grant." Paper prepared for the North American Summer Meetings, Econometric Society, Boston, MA, June 4–7.

Ahmed, A. U., A. R. Quisumbing, M. Nasreen, J. Hoddinott, and E. Bryan. 2009. *Comparing Food and Cash Transfers to the Ultra Poor in Bangladesh.* Washington, DC: International Food Policy Research Institute.

Akresh, R., D. de Walque, and H. Kazianga. 2012. "Alternative Cash Transfer Delivery Mechanisms: Impacts on Routine Preventative Health Clinic Visits in Burkina Faso." Working Paper 17785, National Bureau of Economic Research, Cambridge, MA.

———. 2013. "Cash Transfers and Child Schooling: Evidence from a Randomized Evaluation of the Role of Conditionality." Policy Research Working Paper 6340, World Bank, Washington, DC.

———. 2016. "Evidence from a Randomized Evaluation of the Household Welfare Impacts of Conditional and Unconditional Cash Transfers Given to Mothers or Fathers." Policy Research Working Paper 7730, World Bank, Washington, DC.

Amarante, V., M. Manacorda, E. Miguel, and A. Vigorito. 2012. "Do Cash Transfers Improve Birth Outcomes? Evidence from Matched Vital Statistics, Program, and Social Security Data." Working Paper 17690, National Bureau of Economic Research, Cambridge, MA.

Andersen, C. T., S. A. Reynolds, J. R. Behrman, B. T. Crookston, K. A. Dearden, and others. 2015. "Participation in the Juntos Conditional Cash Transfer Program in Peru Is Associated with Changes in Child Anthropometric Status but Not Language Development or School Achievement." *Journal of Nutrition* 145 (10): 2396–405.

Attanasio, O. P., E. Battistin, E. Fitzsimons, A. Mesnard, and M. Vera-Hernández. 2005. "How Effective Are Conditional Cash Transfers? Evidence from Colombia." Briefing Note 54, Institute for Fiscal Studies, London. http://www.ifs.org.uk/bns/bn54.pdf.

Attanasio, O. P., C. Fernandez, E. O. A. Fitzsimons, S. M. Grantham-McGregor, C. Meghir, and others. 2014. "Using the Infrastructure of a Conditional Cash Transfer Program to Deliver a Scalable Integrated Early Child Development Program in Colombia: Cluster Randomized Controlled Trial." *BMJ* 349 (September 29): g5785.

Attanasio, O. P., and A. Mesnard. 2006. "The Impact of a Conditional Cash Transfer Programme on Consumption in Colombia." Fiscal Studies 27 (4): 421–42.

Baird, S., E. Chirwa, C. McIntosh, and B. Özler. 2015. "What Happens Once the Intervention Ends? The Medium-Term Impacts of a Cash Transfer Programme in Malawi." 3ie Impact Evaluation Report 27.: International Initiative for Impact Evaluation (3ie), New Delhi.

Baird, S., J. de Hoop, and B. Özler. 2013. "Income Shocks and Adolescent Mental Health." *Journal of Human Resources* 48 (2): 370–403.

Baird, S., F. H. G. Ferreira, B. Özler, and M. Woolcock. 2014. "Conditional, Unconditional, and Everything in Between: A Systematic Review of the Effects of Cash Transfer Programmes on Schooling Outcomes." *Journal of Development Effectiveness* 6 (1): 1–43.

Baird, S., R. S. Garfein, C. McIntosh, and B. Özler. 2012. "Effect of a Cash Transfer Programme for Schooling on Prevalence of HIV and Herpes Simplex Type 2 in Malawi: A Cluster Randomized Trial." *The Lancet* 379 (9823): 1320–29.

Baird, S., C. McIntosh, and B. Özler. 2011. "Cash or Condition? Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics* 126 (4): 1709–53.

Barber, S., and P. J. Gertler. 2010. "Empowering Women: How Mexico's Conditional Cash Transfer Programme Raised Prenatal Care Quality and Birth Weight." *Journal of Development Effectiveness* 2 (1): 51–73.

Barham, T. 2011. "A Healthier Start: The Effect of Conditional Cash Transfers on Neonatal and Infant Mortality in Rural Mexico." *Journal of Development Economics* 94 (1): 74–85.

Barham, T., K. Macours, and J. A. Maluccio. 2013. "Boys' Cognitive Skill Formation and Physical Growth: Long-Term Experimental Evidence on Critical Ages for Early Childhood Interventions." *American Economic Review Papers and Proceedings* 103 (3): 467–71.

Barrientos, A., and J. DeJong. 2006. "Reducing Child Poverty with Cash Transfers: A Sure Thing?" *Development Policy Review* 24 (5): 537–52.

Bassani, D. G., P. Arora, K. Wazny, M. F. Gaffey, L. Lenters, and others. 2013. "Financial Incentives and Coverage of Child Health Interventions: A Systematic Review and Meta-Analysis." *BMC Public Health* 13 (Suppl 3): S30.

Bassett, L. 2008. "Can Conditional Cash Transfer Programs Play a Greater Role in Reducing Child Undernutrition?" Social Protection Discussion Paper 0835, World Bank, Washington, DC.

Behrman, J. R., and J. Hoddinott. 2005. "Program Evaluation with Unobserved Heterogeneity and Selective Implementation: The Mexican Progresa Impact on Child Nutrition." *Oxford Bulletin of Economics and Statistics* 67 (4): 547–69.

Benhassine, N., F. Devoto, E. Duflo, P. Dupas, and V. Pouliquen. 2015. "Turning a Shove into a Nudge: A Labeled Cash Transfer for Education." *American Economic Journal: Economic Policy* 7 (3): 86–125.

Björkman Nyqvist, M., L. Corno, D. de Walque, and J. Svensson. 2015. "Using Lotteries to Incentivize Safer Sexual Behavior: Evidence from a Randomized Controlled Trial on HIV Prevention." Policy Research Working Paper 7215, World Bank, Washington, DC.

Brugh, K., C. T. Halpern, A. Pettifor, H. Thirumurty, and S. Handa. 2014. "Do Schooling and Peer Influences Mediate the Impact of Cash Transfer on Adolescent Sexual Debut in Kenya?" Unpublished, University of North Carolina at Chapel Hill.

Bundy, D. A. P., N. de Silva, S. Horton, G. C. Patton, L. Schultz, and D. T. Jamison. 2017. "Child and Adolescent Health and Development: Realizing Neglected Potential." In *Disease Control Priorities* (third edition): Volume 8, *Child and Adolescent Health and Development*, edited by D. A. P. Bundy, N. de Silva, S. Horton, D. T. Jamison, and G. C. Patton. Washington, DC: World Bank.

Bursztyn, L., and L. C. Coffman. 2012. "The Schooling Decision: Family Preferences, Intergenerational Conflict, and Moral Hazard in the Brazilian Favelas." *Journal of Political Economy* 120 (3): 359–97.

Cluver, L., M. Boyes, M. Orkin, M. Pantelic, M. Thembela, and others. 2013. "Child-Focused State Cash Transfers and Adolescent Risk of HIV Infection in South Africa: A Propensity-Score-Matched Case Control Study." *The Lancet* 1 (6): e362–70.

Covarrubias, K., B. Davis, and P. Winters. 2012. "From Protection to Production; Productive Impacts of the Malawi Social Cash Transfer Scheme." *Journal of Development Effectiveness* 4 (1): 50–77.

De Brauw, A., and A. Peterman. 2011. "Can Conditional Cash Transfers Improve Maternal Health and Birth Outcomes? Evidence from El Salvador's Comunidades Solidarias Rurales Program." IFPRI Discussion Paper 01080, International Food Policy Research Institute, Washington, DC.

de Janvry, A., and E. Sadoulet. 2006. "Making Conditional Cash Transfer Programs More Efficient: Designing for Maximum Effect of the Conditionality." *World Bank Economic Review* 20 (1): 1–29.

de Walque, D., W. H. Dow, and R. Nathan. 2014. "Rewarding Safer Sex: Conditional Cash Transfers for HIV/STI Prevention." Policy Research Working Paper 7099, World Bank, Washington, DC.

de Walque, D., W. H. Dow, R. Nathan, R. Abdul, F. Abilahi, and others. 2012. "Incentivising Safe Sex: A Randomised Trial of Conditional Cash Transfers for HIV and Sexually Transmitted Infection Prevention in Rural Tanzania." *BMJ Open* 2 (February 8): e000747. doi:10.1136/bmjopen-2011-000747.

Del Boca, D., C. Flinn, and M. Wiswall. 2014. "Household Choices and Child Development." *Review of Economic Studies* 81 (1): 137–85.

Devereux, S., and R. Sabates-Wheeler. 2004. "Transformative Social Protection." IDS Working Paper 232, Institute of Development Studies, Brighton, U.K.

DFID (Department for International Development). 2011. "Cash Transfers: Evidence Paper." DFID, London.

Drake, L., M. Fernandes, E. Aurino, J. Kiamba, B. Giyosa, C. Burbano, H. Alderman, L. Mai, A. Mitchell, and A. Gelli. 2017. "School Feeding Programs in Middle Childhood and Adolescence." In *Disease Control Priorities* (third edition): Volume 8, *Child and Adolescent Health and Development*, edited by D. A. P. Bundy, N. de Silva, S. Horton, D. T. Jamison, and G. C. Patton. Washington, DC: World Bank.

Duflo, E., P. Dupas, and M. Kremer. 2015. "Education, HIV, and Early Fertility: Experimental Evidence from Kenya."

American Economic Review 105 (9): 2757–97. http://dx.doi.org/10.1257/aer.20121607.
Engle, P. E., L. C. H. Fernald, J. Alderman, J. Behrman, C. O'Gara, and others. 2011. "Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low- and Middle-Income Countries." *The Lancet* 378 (9799): 1339–53.
Evans, D., B. Holtemeyer, and K. Kosec. 2015. "Cash Transfers and Health: Mechanisms and Impacts." World Bank, Washington, DC.
Fernald L. C. H., P. J. Gertler, and M. Hidrobo. 2012. "Conditional Cash Transfer Programs: Effects on Growth, Health, and Development in Young Children." In *The Oxford Handbook of Poverty and Child Development,* edited by R. King and V. Maholmes. New York: Oxford University Press.
Fernald, L. C. H., P. J. Gertler, and L. M. Neufeld. 2008. "The Role of Cash in Conditional Cash Transfer Programmes for Child Health, Growth, and Development: An Analysis of Mexico's Oportunidades." *The Lancet* 371 (9615): 828–37.
———. 2009. "Ten-Year Impact of Oportunidades—Mexico's Conditional Cash Transfer Program—on Child Growth, Cognition, Language, and Behavior." *The Lancet* 374 (9706): 1997–2005.
Fernald, L. C. H., and M. Hidrobo. 2011. "Effect of Ecuador's Cash Transfer Program (Bono de Desarrollo Humano) on Child Development in Infants and Toddlers: A Randomized Effectiveness Trial." *Social Science and Medicine* 72 (9): 1437–46.
Fernald L. C., R. M. Kagawa, R. M. Knauer, L. Schnaas, A. G. Guerra, and L. M. Neufeld. 2016. "Promoting Child Development Through Group-Based Parent Support Within a Cash Transfer Program: Experimental Effects on Children's Outcomes." *Developmental Psychology.* Epub ahead of print October 17. https://www.ncbi.nlm.nih.gov/pubmed/?term=fernald+knauer.
Fiszbein, A., and N. Schady, with F. H. G. Ferreira, M. Grosh, N. Kelleher, and others. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. Washington, DC: World Bank.
Gaarder, M. M., A. Glassman, and J. E. Todd. 2010. "Conditional Cash Transfers and Health: Unpacking the Causal Chain." *Journal of Development Effectiveness* 2 (1): 6–50.
Gertler, P. J. 2000. "Final Report: The Impact of Progresa on Health." International Food Policy Research Institute, Washington, DC.
———. 2004. "Do Conditional Cash Transfers Improve Child Health? Evidence from Progresa's Controlled Randomized Experiment." *American Economic Review* 94 (2): 336–41.
Gilligan, D., and S. Roy. 2014. "Resources, Stimulation, and Cognition: How Transfer Programs and Preschool Shape Cognitive Development in Uganda." International Food Policy Research Institute, Washington, DC.
Glassman, A., D. Duran, and M. Koblinsky. 2013. "Impact of Conditional Cash Transfers on Maternal and Newborn Health." *Journal of Health, Population, and Nutrition* 31 (4, Suppl 2): S48–66.
Grimes, M., and L. Wängnerud. 2010. "Curbing Corruption through Social Welfare Reform? The Effects of Mexico's Conditional Cash Transfer Program on Good Government." *American Review of Public Administration* 40 (6): 671–90.
Guo, G., and K. M. Harris. 2000. "The Mechanisms Mediating the Effects of Poverty on Children's Intellectual Development." *Demography* 37 (4): 431–47.
Gutiérrez, J. P., S. Bautista, P. J. Gertler, M. Hernandez Avila, and S. M. Bertozzi. 2004. "Impacto de Oportunidades en la morbilidad y el estado de salud de la población beneficiana y en la utilización de los servicios de salud: Resultados de corto plazo en zonas urbanas y de mediano plazo en zonas rurales." In *Evaluación externa de impacto del Programa Oportunidades 2004*, edited by B. H. Prado and M. H. Avila. Mexico, DF: Instituto Nacional de Salud Pública.
———. 2006. "Impacto de Oportunidades en el estado de salud, morbilidad y utilización de servicios de salud de la población beneficiaria en zonas urbanas." In *Evaluación externa de impacto del Programa Oportunidades 2006*, edited by M. H. Ávila, B. H. Prado, and J. E. U. Salomón. Mexico, DF: Instituto Nacional de Salud Pública.
Handa, S., and B. Davis. 2006. "The Experience of Conditional Cash Transfers in Latin America and the Caribbean." *Development Policy Review* 24 (5): 513–36.
Handa, S., C. T. Halpern, A. Pettifor, and H. Thirumurthy. 2014. "The Government of Kenya's Cash Transfer Program Reduces the Risk of Sexual Debut among Young People Age 15–25." *PLoS One* 9 (1): e85473.
Handa, S., M. Park, R. Osei Darko, I. Osei-Akoto, B. Davis, and others. 2014. "Livelihood Empowerment against Poverty Program Impact Evaluation." University of North Carolina, Carolina Population Center, Chapel Hill, NC.
Handa, S., A. Peterman, C. Huang, C. T. Halpern, A. Pettifor, and others. 2015. "Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls." *Social Science and Medicine* 141 (September): 36–45.
Handa, S., A. Peterman, D. Seidenfeld, and G. Tembo. 2015. "Income Transfers and Maternal Health: Evidence from a National Randomized Social Cash Transfer Program in Zambia." *Health Economics* 25 (2): 225–36.
Handa, S., D. Seidenfeld, B. Davis, G. Tembo, and the Zambia Cash Transfer Evaluation Team. 2014. "Are Cash Transfers a Silver Bullet? Evidence from the Zambian Child Grant." Innocenti Working Paper 2014–08, United Nations Children's Fund Office of Research, Florence.
Haushofer, J., and J. Shapiro. 2016. "The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya." *Quarterly Journal of Economics*, July 19. doi: 10.1093/qje/qjw025.
Hernández Prado, B., J. Urquieta Salomon, M. Ramirez Cilalobos, and J. Figueroa. 2004. "Impacto de Oportunidades en la salud reproductiva de la poblacion beneficiaria." In *Evaluacion externa de impacto del Programa Oportunidades 2004*, edited by B. H. Prado and M. H. Avila. Mexico, DF: Instituto Nacional de Salud Pública.

Hidrobo, M., J. Hoddinott, N. Kumar, and M. Olivier. 2014. "Social Protection and Food Security." International Food Policy Research Institute, Washington, DC.
Hidrobo, M., J. Hoddinott, A. Peterman, A. Margolies, and V. Moreira. 2014. "Cash, Food, or Vouchers? Evidence from a Randomized Experiment in Northern Ecuador." *Journal of Development Economics* 107 (March): 144–56.
Himaz, R. 2008. "Welfare Grants and Their Impact on Child Health: The Case of Sri Lanka." *World Development* 36 (10): 1843–57.
Hoddinott, J., and L. Bassett. 2008. "Conditional Cash Transfer Programs and Nutrition in Latin America: Assessment of Impacts and Strategies for Improvement." International Food Policy Research Institute, Washington, DC.
Kohler, H. P., and R. Thornton. 2012. "Conditional Cash Transfers and HIV/AIDS Prevention: Unconditionally Promising?" *World Bank Economic Review* 26 (2): 165–90.
Lagarde, M., A. Haines, and N. Palmer. 2007. "Conditional Cash Transfers for Improving Uptake of Health Interventions in Low- and Middle-Income Countries: A Systematic Review." *JAMA* 298 (16): 1900–10.
Leroy, J. L., A. García-Guerra, R. García, C. Domínguez, J. Rivera, and others. 2008. "The Oportunidades Program Increases the Linear Growth of Children Enrolled at Young Ages in Urban Mexico." *Journal of Nutrition* 138 (4): 793–98.
Levy, D., and J. Ohls. 2007. "Evaluation of Jamaica's PATH Program: Final Report." Mathematica Policy Research, Princeton, NJ.
Lim, S. S., L. Dandona, J. A. Hoisington, S. L. James, M. C. Hogan, and others. 2010. "India's Janani Suraksha Yojana, a Conditional Cash Transfer Programme to Increase Births in Health Facilities: An Impact Evaluation." *The Lancet* 375 (9730): 2009–23.
Lundberg, S., R. Pollak, and T. Wales. 1997. "Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit." *Journal of Human Resources* 32 (3): 463–80.
Macours, K., N. Schady, and R. Vakis. 2008. "Cash Transfers, Behavioral Changes, and the Cognitive Development of Young Children: Evidence from a Randomized Experiment." World Bank, Washington, DC.
———. 2012. "Cash Transfers, Behavioral Changes, and Cognitive Development in Early Childhood: Evidence from a Randomized Experiment." *American Economic Journal: Applied Economics* 4 (2): 247–73.
Maluccio, J. A., and R. Flores. 2005. "Impact Evaluation of a Conditional Cash Transfer Program: The Nicaraguan Red de Protección Social." Research Report 141, International Food Policy Research Institute, Washington, DC.
Manley, J., S. Gitter, and V. Slavchevska. 2013. "How Effective Are Cash Transfers at Improving Nutritional Status?" *World Development* 48 (August): 133–55.
Miller, C., M. Tsoka, and K. Reichert. 2010. "Cash Transfers and Child Health in Malawi: Early Findings on the Impact of $14 per Month." University of York, York, UK.
Mistry, R. S., J. C. Biesanz, L. C. Taylor, M. Burchinal, and M. J. Cox. 2004. "Family Income and Its Relation to Preschool Children's Adjustment for Families in the NICHD Study of Early Child Care." *Developmental Psychology* 40 (5): 727–45.
Morris, S. S., R. Flores, P. Olinto, and J. M. Medina. 2004. "Monetary Incentives in Primary Health Care and Effects on Use and Coverage of Preventive Health Care Interventions in Rural Honduras: Cluster Randomised Trial." *The Lancet* 364 (9450): 2030–37.
Morris, S. S., P. Olinto, R. Velasquez Flores, E. A. Nilson, and A. C. Figueiró. 2004. "Conditional Cash Transfers Are Associated with a Small Reduction in the Rate of Weight Gain of Preschool Children in Northeast Brazil." *Journal of Nutrition* 134 (9): 2336–41.
Neufeld, L. 2005. "Estudio comparative sobre el estado nutricional y la adquisición de lenguage entre ninos de localidades urbana con y sin Oportunidades." In *Evaluación externa de impacto del Programa Oportunidades 2004.* Vol. III: *Salud,* edited by M. Hernandez Avila. Mexico, DF: Instituto Nacional de Salud Pública.
Neufeld, L., D. Sotres Alvarez, P. J. Gertler, L. Tolentino Mayo, J. Jimenez Ruiz, and others. 2005. "Impacto de Oportunidades en el crecimiento y estado nutricional de niños en zonas rurales." In *Evaluación externa de impacto del Programa Oportunidades 2004.* Vol. III: *Alimentación*, 17–52, edited by M. Hernandez Avila. Mexico, DF: Instituto Nacional de Salud Pública.
Nguyen, H. T., L. Hatt, M. Islam, N. L. Sloan, J. Chowdhury, and others. 2012. "Encouraging Maternal Health Service Utilization: An Evaluation of the Bangladesh Voucher Program." *Social Science and Medicine* 74 (7): 989–96.
Nores, M., and W. S. Barnett. 2010. "Benefits of Early Childhood Interventions across the World: (Under) Investing in the Very Young." *Economics of Education Review* 29 (2): 271–82.
Ozer, E. J., L. C. H. Fernald, J. G. Manley, and P. J. Gertler. 2009. "Effects of a Conditional Cash Transfer Program on Children's Behavior Problems." *Pediatrics* 123 (4): e630–377. doi:10.1542/peds.2008-2882.
Paxson, C., and N. Schady. 2010. "Does Money Matter? The Effects of Cash Transfers on Child Development in Rural Ecuador." *Economic Development and Cultural Change* 59 (1): 187–229.
Perova, E., and R. Vakis. 2009. "Welfare Impacts of the 'Juntos' Program in Peru: Evidence from a Non-Experimental Evaluation." World Bank, Washington, DC.
———. 2012. "5 Years in Juntos: New Evidence on the Program's Short and Long-Term Impacts." *Economía* 35 (69): 53–82.
Pettifor, A., C. MacPhail, A. Selin, X. Gomez-Olivé, J. Hughes, and others. 2015. "HPTN 068 Conditional Cash Transfer to Prevent HIV Infection among Young Women in South Africa: Results of a Randomized Controlled Trial." Abstract presented at the 2015 International AIDS Society conference, Vancouver, Canada, July 18–22.
Popay, J., S. Escorel, M. Hernández, H. Johnston, J. Mathieson, and L. Rispel. 2008. "Understanding and Tackling Social Exclusion." Final Report to the WHO

Commission on Social Determinants of Health from the Social Exclusion Knowledge Network. World Health Organization, Geneva.
Powell-Jackson, T., and K. Hanson. 2012. "Financial Incentives for Maternal Health: Impact of a National Programme in Nepal." *Journal of Health Economics* 31 (1): 271–84.
Powell-Jackson, T., B. Neupane, S. N. Tiwari, K. Tumbahangphe, D. Manandhar, and others. 2009. "The Impact of Nepal's National Incentive Programme to Promote Safe Delivery in the District of Makwanpur." In *Innovations in Health System Finance in Developing and Transitional Economies*, edited by D. Chernichovsky and K. Hanson, 221–49. Advances in Health Economics and Health Services Research 21. Bingley, U.K.: Emerald Group Publishing.
Rasella, D., R. Aquino, S. Tiwari, K. Tumbahangphe, D. Manandhar, and others. 2013. "Effect of a Conditional Cash Transfer Programme on Childhood Mortality: A Nationwide Analysis of Brazilian Municipalities." *The Lancet* 382 (9886): 57–64.
Reis, M. 2010. "Cash Transfer Programs and Child Health in Brazil." *Economics Letters* 108 (1): 22–25.
Rivera, J. A., D. Sotres-Alvarez, J. P. Habicht, T. Shamah, and S. Villalpando. 2004. "Impact of the Mexican Program for Education, Health, and Nutrition (Progresa) on Rates of Growth and Anemia in Infants and Young Children: A Randomized Effectiveness Study." *JAMA* 291 (21): 2563–70.
Ruel, M. T., H. Alderman, and Maternal and Child Nutrition Study Group. 2013. "Nutrition-Sensitive Interventions and Programmes: How Can They Help to Accelerate Progress in Improving Maternal and Child Nutrition?" *The Lancet* 382 (9891): 536–51.
Schultz, T. P. 1990. "Testing the Neoclassical Model of Family Labor Supply and Fertility." *Journal of Human Resources* 25 (4): 599–634.
Seidenfeld, D., S. Handa, G. Tembo, S. Michelo, C. H. Scott, and others. 2014. "The Impact of an Unconditional Cash Transfer on Food Security and Nutrition: The Zambia Child Grant Program." Institute of Development Studies, Brighton, U.K.
Shei, A. 2013. "Brazil's Conditional Cash Transfer Program Associated with Declines in Infant Mortality Rates." *Health Affairs (Millwood)* 32 (7): 1274–81.
Shekar, M., R. Heaver, and Y.-K. Lee. 2006. *Repositioning Nutrition as Central to Development: A Strategy for Large-Scale Action*. Washington, DC: World Bank.
Shibuya, K. 2008. "Conditional Cash Transfer: A Magic Bullet for Health?" *The Lancet* 371 (9615): 789–91. doi: 10.1016/S0140-6736(08)60356-6.
Smith, L., and L. Haddad. 2014. "Reducing Child Undernutrition: Past Drivers and Priorities for the Post-MDG Era." Institute of Development Studies, Brighton, U.K. http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/3816/Wp441R.pdf?sequence=4.
Sosa-Rubí, S. G., D. Walker, E. Serván, and S. Bautista-Arredondo. 2011. "Learning Effect of a Conditional Cash Transfer Programme on Poor Rural Women's Selection of Delivery Care in Mexico." *Health Policy and Planning* 26 (6): 496–507.
Thomas, D. 1990. "Intrahousehold Resource Allocation: An Inferential Approach." *Journal of Human Resources* 25 (4): 635–64.
———. 1993. "The Distribution of Income and Expenditure within the Household." *Annales de Economie et de Statistiques* 29 (January–March): 109–36.
Triyana, M. 2014. "Do Health Care Providers Respond to Demand-Side Incentives? Evidence from Indonesia." Stanford University, Stanford, CA.
Urquieta, J., G. Angeles, T. A. Mroz, H. Lamadrid-Figueroa, and B. Hernández. 2009. "Impact of Oportunidades on Skilled Attendance at Delivery in Rural Areas." *Economic Development and Cultural Change* 57 (3): 539–58.
Victora, C. G., M. de Onis, P. C. Hallal, M. Blössner, and R. Shrimpton. 2010. "Worldwide Timing of Growth Faltering: Revisiting Implications for Interventions." *Pediatrics* 125 (3): e473–80.
Walker, S. P., T. D. Wachs, S. Grantham-McGregor, M. M. Black, C. A. Nelson, and others. 2011. "Inequality Begins in Early Childhood: Risk and Protective Factors for Early Child Development." *The Lancet* 378 (9799): 1325–38.
WHO (World Health Organization). 1986. "Use and Interpretation of Anthropometric Indicators of Nutritional Status." *Bulletin of the World Health Organization* 64 (6): 929.
World Bank. 2011. "Program Keluarga Harapan: Main Findings from the Impact Evaluation of Indonesia's Pilot Household Conditional Cash Transfer Program." World Bank, Jakarta.
Yeung, W. J., M. R. Linver, and J. Brooks-Gunn. 2002. "How Money Matters for Young Children's Development: Parental Investment and Family Processes." *Child Development* 73 (6): 1861–79.