ARTICLE



Social protection as a nutrition-sensitive instrument to address malnutrition in sub-Saharan Africa: Examining the utility of the UNICEF conceptual model of care for maternal and child nutrition

Wanga Zembe-Mkabile D

Health Systems Research Unit, South African Medical Research Council, Cape Town, South Africa and Archie Mafeje Research Institute, College of Graduate Studies, University of South Africa, Pretoria, South Africa Email: wanga.zembe@mrc.ac.za

(Received 11 May 2023; revised 21 January 2024; accepted 26 January 2024)

Abstract

Child nutrition, health and development are closely tied to maternal nutrition, health and well-being. The underlying drivers of poor maternal and child nutritional outcomes in sub-Saharan Africa are structural in nature. These risks include social, economic, and environmental factors that together compound vulnerability to poor outcomes. Poverty, as a driver of poor maternal and child health outcomes, is an important determinant that is both a cause and a consequence of malnutrition. The United Nations' Children's Fund (UNICEF)'s conceptual model for determinants of maternal and child nutrition outcomes released in 2020, is the agency's latest iteration of child nutrition frameworks. The model identifies the underlying causes of malnutrition as extending beyond food and diets, to include household level dynamics, maternal factors, and the external environment. The manuscript discusses UNICEF's conceptual model and its applicability in sub-Saharan Africa. It also considers the evidence on interventions aimed at addressing maternal and child nutrition in the region and the location of social protection among these policy tools, with a special focus on the extent to which these resonate with the conceptual model. It concludes by considering the conditions required for social protection instruments to work in the region and similar settings in the Global South. In this way, the manuscript provides a critical reflection about the role of social protection as a nutrition-sensitive instrument in sub-Saharan Africa, in the context of maternal and child nutrition outcomes.

Keywords: social protection; nutrition-sensitive interventions; maternal and child health; maternal and child nutrition; cash transfers; cash-plus-care

Introduction

Child nutrition, health, and development are closely tied to maternal nutrition, health, and well-being. The underlying drivers of poor maternal and child nutritional outcomes in sub-Saharan Africa are structural in nature. These risks include social, economic, and environmental factors that together compound vulnerability to poor outcomes. Poverty, as a driver of poor maternal and child health outcomes, is an important determinant that is both a cause and a consequence of malnutrition.

Within this context, monetary poverty and non-income poverty constrain the ability to purchase and access adequate nutritious food, and the living conditions that are a requirement of basic nutrition. In the absence of adequate living conditions, access to quality health services, and access to nutritious food, the risk of malnutrition increases.

© The Author(s), 2024. Published by Cambridge University Press on behalf of Social Policy Association. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

Malnutrition accounts for a significant proportion (33%) of the global disease burden, with millions of children worldwide experiencing stunting, wasting, or being overweight or obese. In this way, malnutrition is a major contributor to child mortality (Development Initiatives 2020). Malnutrition can result from two main factors: insufficient intake of essential nutrients and an inability to absorb nutrients from the food consumed. Food and income insecurity often underlie both causes. Stunting, a condition where children fail to achieve their expected height for age, is a prominent manifestation of malnutrition. Stunting can have both short-term and long-term consequences on physical and cognitive development. Individuals who experience stunting in childhood are more likely to face long-lasting effects, including delayed entry into school, poor educational outcomes, reduced economic productivity, and lower earnings in adulthood (De Sanctis et al., 2021; UNICEF / WHO / World Bank Group, 2023). In the most recent malnutrition estimates, the 2023 Joint Child Malnutrition Estimates produced by the UNICEF, WHO, World Bank collaboration, notes that most of the children who were diagnosed with malnutrition in 2022 lived in Africa and Asia, with two out five children under five experiencing stunting coming from Africa (UNICEF / WHO and The World Bank Group, 2023). Evidence from sub-Saharan African country contexts such as Ghana, Ethiopia, and South Africa shows that children who experience a combination of stunted growth and overweight, otherwise known as concurrent stunting and overweight or the "double burden" of malnutrition, face higher risks of obesity and chronic lifestyle diseases such as diabetes and hypertension in adulthood (Atsu et al., 2017; Farah et al., 2021; Modjadji et al., 2022), once again underscoring the long-term health impacts of childhood malnutrition. Additionally, women who were stunted as children are more likely to give birth to low-weight babies, who, in turn, face a higher risk of childhood illnesses such as pneumonia, diarrhoea, and malnutrition (Khatun et al., 2018). Maternal malnutrition is particularly rife in sub-Saharan Africa, where a significant percentage of women have low body mass index, anaemia, and deficiencies in essential nutrients (Lartey, 2008). This can result in poor pregnancy outcomes, including low weight gain during pregnancy and higher rates of infant and maternal morbidity and mortality (Lartey, 2008; Lindsay et al., 2012; Desyibelew and Dadi, 2019). These consequences can perpetuate the cycle of poverty and its intergenerational transmission (Black et al., 2008; Case and Paxson, 2010; Khatun et al., 2018).

In sum, malnutrition, particularly stunting, has profound and enduring effects on mothers, children, families, communities, and ultimately entire societies. Addressing maternal and child malnutrition requires comprehensive strategies that encompass both nutrition-specific and nutrition-sensitive interventions, along with efforts to break the intergenerational cycle of poor nutrition and poverty.

Cash transfers are considered to be nutrition-sensitive social protection instruments with a strong potential to address malnutrition effectively as they deal with the underlying drivers of poor nutritional outcomes (Ruel et al., 2013; Ramokolo et al., 2017). Nutrition-sensitive instruments include interventions that indirectly address nutritional outcomes such as income support programs, maternal education, and improved living conditions. Nutrition-specific interventions on the other hand, comprise programmes and interventions that directly impact on nutritional outcomes, such as school and community-based nutrition programmes, food fortification, micronutrient supplementation, and infant and young child feeding counselling and support.

In this paper, I consider the role of social protection in the form of social assistance or cash and in-kind transfers, in the context of the UNICEF conceptual model for the determinants of maternal and child nutrition outcomes, mediating poor maternal and child nutritional outcomes in sub-Saharan Africa. It is important to engage with this topic as social protection programmes have mushroomed all over the region, with 40 out of 48 countries in SSA having at least one type of social protection programme (Bastagli et al., 2019), and yet few studies have specifically reviewed and examined the role of social protection instruments in addressing maternal and child nutrition at a regional level. A number of publications have considered the role of social protection and its impact on nutritional outcomes; however, these have mainly focused on specific country settings outside sub-Saharan Africa. The few reviews that have included SSA countries (Bastagli et al., 2019; Manley et al., 2020) have small numbers of country cases coming from this region. For instance, in the Bastagli et al review, only 11 of the 41 studies reporting on health and nutrition indicators were from sub-Saharan Africa; and all 11 studies did not find

a statistically significant impact of social protection programmes on nutritional outcomes. Indeed, the authors state in a technical report on which the 2019 publication is based, that for the components of the review that focus on nutritional outcomes "...by far the largest number of studies (27 out of 41) cover cash transfer programmes in Latin America, with a disproportionate number of those (12) focusing on Mexico's PROGRESA/Oportunidades programme. Meanwhile, just 11 studies cover sub-Saharan Africa, and two cover South Asia and the Asia and Pacific region" (Bastagli et al., 2016: 3). Further, only a few of the 11 country cases had cash transfer programmes specifically targeting children (namely, Lesotho and Zambia's Child Grant Programmes, and Uganda's World Food Programme's Karamoja pilot), and none of them targeted mothers. More importantly, 6 of the 11 country cases were short-term pilots and not entrenched national programmes; and none of the studies considered *both* maternal and child nutrition. Bastagli et al. (2019) note that these differences are important as they impact on the observed variations in outcomes, making it difficult to have a coherent sense of the impact of social protection instruments on nutritional outcomes in the SSA region. Thus, the important contribution of this paper lies in its singular focus on and critical reflection about the role of social protection as a nutrition-sensitive instrument in sub-Saharan Africa in the context of maternal and child nutrition outcomes.

In this manuscript I first consider and discuss UNICEF's conceptual model for addressing the determinants of maternal and child nutrition as a way of framing the core arguments of the paper. In particular, I discuss the model's applicability in sub-Saharan Africa and the role of social protection within the model. I then consider the evidence on interventions aimed at addressing maternal and child nutrition in the region and the location of social protection among these policy tools, with a special focus on the extent to which these resonate with the conceptual model. I conclude by considering the conditions required for social protection instruments to work in this and similar settings in the Global South.

UNICEF's conceptual model for addressing the determinants of maternal and child nutrition

The determinants of child nutrition mainly exist outside health and nutrition systems. This is due to nutritional outcomes resulting from factors – namely poor dietary and micronutrient intake – that are directly linked to structural factors such as low socio-economic status, poor maternal health and education, and poor living conditions (Walker et al., 2007; UNICEF, 2020). The 2020 UNICEF extended model of care conceptual framework for child nutrition (Figure 1) identifies the underlying causes of malnutrition as extending beyond food and diets, to include household level dynamics, maternal factors, and the external environment (UNICEF, 2020). The framework is the latest iteration of child nutrition conceptual models from the UN agency, and unlike its predecessors, it is explicit in the importance of considering child nutrition alongside maternal nutrition, recognising the symbiotic relationship between the two.

Nutrition-specific interventions

The framework broadly presents a combination of factors and interventions that directly and indirectly determine and impact on child nutritional outcomes (Ruel et al., 2013; Khalid et al., 2019). In the framework, direct determinants, which can also be regarded as nutrition-specific interventions, refer to interventions directly aimed at improving maternal and child nutrition. Examples include micronutrient supplementation for pregnant women and infants, counselling and promotion of exclusive breastfeeding, growth monitoring, food fortification, and community and school-based nutrition programs. Community and school-based nutrition-specific social protection interventions. Within the context of nutrition-specific interventions, the framework identifies diets within households as playing a crucial role in ensuring food security, because access to a diverse and nutritious diet is essential for the health and well-being of mothers and children.



Figure 1. UNICEF conceptual framework on the determinants of maternal and child nutrition. *Source*: UNICEF (2020).

Nutrition-sensitive interventions

As stated earlier in this article, indirect determinants, also known as nutrition-sensitive interventions, concern interventions that indirectly influence maternal and child nutrition. They address broader issues that impact on maternal and child nutrition outcomes such as maternal health status and education, maternity protection (combining cash transfers with antenatal care and paid maternity leave), child cash transfers, care practices, and living conditions. Income security through cash transfers enables the purchasing of nutritious foods and diets. In terms of care practices, primary caregivers' behaviours, including what, how, and when they feed and care for a child, have a significant impact on child development, nutrient intake, and overall health. Care practices are critical for the psychosocial and cognitive development of children (Smith and Haddad, 2000; de Groot et al., 2015, 2017). Within this context the primary caregiver's or the mother's status in the household plays an important role (Natali et al., 2016). The extent to which primary caregivers and mothers have control over household resources, their independence, physical and psychological health, education level, beliefs, and preferences all influence the care provided to children, and its translation into nutritional outcomes (de Groot et al., 2015). Other key underlying determinants of maternal and child nutrition include the environments in which children are nurtured and raised. Among these, living conditions such as access to safe water, sanitation, housing, and healthcare services are some of the most important determinants. Living conditions directly affect the well-being of both mothers and children.

UNICEF's conceptual model of care: How far does it go in providing a framework for maternal and child nutrition?

Within the framework an integrated, multisectoral approach to child nutrition is adopted. The framework recognises that maternal health and nutrition are closely intertwined with child nutrition and development. Maternal health during and after pregnancy significantly impacts child health and developmental outcomes, including growth and stunting. Thus, this framework emphasises the interconnectedness of maternal health and nutrition, child nutrition, and overall well-being. It highlights the importance of both nutrition-specific and nutrition-sensitive interventions to ensure the health and development of mothers and children, starting from preconception and extending throughout the early years of a child's life. It also emphasises the importance of broader macro-level factors and determinants that create an enabling environment for maternal and child nutrition; such as governance and political will, fiscal space and institutional capacity; the creation of healthy food environments, as well as the promotion of healthy lifestyles. These macro-level determinants create an enabling environment that can support and improve the underlying determinants and immediate determinants of maternal and child nutrition. In turn, these improvements contribute to better nutritional outcomes for mothers and children. This comprehensive approach recognises that addressing maternal and child nutrition require a combination of policy, economic, environmental, social, and healthcare factors to create and sustain positive change and impact.

This framework has gone the furthest in unpacking and accentuating the underlying causes and determinants of malnutrition, as well as the conditions, enabling factors and actions necessary to address maternal and child nutrition outcomes at the individual, household, local and macro-levels. Its twin focus on both maternal and child health and nutrition sets it apart from normative frameworks on child health and nutrition, which are characterised by a singular focus on children apart from their mothers and caregivers.

One limitation of the conceptual model is that, similar to its predecessors, and other conceptual frameworks that focus on maternal and child health, the role of fathers is not mentioned at all. This omission may have important implications for child nutritional outcomes, as recent studies suggest that the assumed positive impact of targeting mothers with child-focused interventions, including cash transfers, relative to fathers and men, is not unambiguous as previously thought (Akresh et al., 2016; Bonilla et al., 2017; Natali et al., 2016; Cherchye et al., 2021), with recent studies suggesting that money in the hands of fathers may confer equal or greater nutritional and health benefits on children, compared to mothers (Cherchye et al., 2021).

Notwithstanding this limitation, in considering the extent to which the conceptual model has been and can be applied in sub-Saharan Africa, it is necessary to first reflect on current policy responses to maternal and child nutrition in the region. These responses mainly comprise infant and young child feeding counselling and support, cash and in-kind transfers such as school and community-based supplementary feeding programmes and nutritional supplements (Barrientos and Dejong, 2006, p. 538; Samson et al., 2006; Bastagli et al., 2019). These interventions and programmes often target either mothers or children, and never both, and are rarely implemented in combination. Infant and young child feeding counselling and support programmes generally comprise the main policy response targeting mothers and primary caregivers. Tellingly, such interventions mainly focus on nutrition education, with the promotion of exclusive breastfeeding in the first 6 months after a baby is born, along with counselling on complimentary feeding after 6 months, being the main pillars of the interventions. Cash transfers and supplementary feeding programmes such as school feeding schemes in the region on the other hand, mainly target children, in isolation from their mothers and primary caregivers, although governments and implementing partners usually rely on these same mothers and primary caregivers to be the main conduits for delivering the programmes to child beneficiaries, something that one feminist critic of social protection termed as placing "Mothers at the Service of the New Poverty Agenda" (Molyneux 2006). There are no cash transfer programmes in sub-Saharan Africa that solely target and recognise the unpaid reproductive labour of low-income mothers and the very legitimate needs they have for nutrition, health and wellbeing. Maternity protection measures, where present in some of the countries in the region, do not include income support for low-income pregnant, and postpartum mothers who are outside the formal labour market, but rather focus on promoting paid and unpaid maternity leave benefits and breastfeeding-friendly labour laws for women in formal employment. In this regard, all countries in East and Southern Africa are said to have some type of [partial or fully] paid maternity leave policy for pregnant women in formal employment, in place (ILO 2020). Countries within the region differ in the allowable duration of paid maternity leave, with paid leave ranging from 2 weeks in Swaziland, to 8 weeks in Malawi, and 16 weeks in South Africa (ILO, 2020). In contrast, 40 of the 48 countries in the sub-Saharan African region now have at least one unconditional cash transfer programme targeting children or low-income households (Bastagli et al., 2019). The very low exclusive breastfeeding rates in the region (37%) (Otim et al., 2022) are mainly attributed to mothers' inadequate nutrition education about the importance of this intervention for child health, nutrition and wellbeing outcomes, sociocultural barriers, workplace environments that do not support lactating mothers who need to express, and corporate interference through aggressive marketing of breast milk substitutes (Lartey, 2008; Oyelana et al., 2021; Vitalis et al., 2021). Thus, interventions that aim to promote and increase breastfeeding rates mainly focus on nutrition education and breastfeeding counselling, industry regulation, and the education and training of health workers on said regulations, and on the importance of breastfeeding and exclusive breastfeeding. Yet, recent studies have begun to highlight maternal hunger and poverty as key determinants of, and therefore barriers to successful breastfeeding in countries like South Africa (Witten et al., 2020). In the Witten et al. (2020) study, mothers shared harrowing stories of hunger and poverty which affected breast milk supply and made them distrust their bodies' ability to provide adequate sustenance for their infants. Another study in Ghana showed that nutrition education interventions targeting mothers of young children only worked when they were combined with interventions that addressed barriers to accessing adequate nutritious diets (Bimpong et al., 2020).

In South Africa, COVID-19 presented a rare window of opportunity for the country to implement a Caregivers' Allowance for primary caregivers of children in receipt of the country's child cash transfer programme, namely, the Child Support Grant (CSG). However, the implementation of this cash transfer programme, which formed part of the country's COVID-19 social relief package, was temporary and only lasted for 5 months (Zembe-Mkabile et al., 2023; Senona et al., 2021). Many mothers and primary caregivers of CSG recipients who received the temporary caregivers' allowance, which was valued at US \$26 per primary caregiver per month, noted that the period during which they received this transfer, constituted the only time in their journey of motherhood where they experienced the acknowledgement and validation of their needs as South African citizens, and as mothers, and for some, it was also the only period in which they experienced a greater sense of food security (Zembe-Mkabile et al., 2023).

Apart from nutrition-sensitive social protection responses that fail to consider the importance of maternal nutrition, health, and wellbeing in policy responses that seek to address child nutrition, many of the cash transfer programmes targeting low-income children in the region are implemented as small (in value) standalone interventions that are not based on an objective measure of need, nor well integrated with other services and interventions designed for child nutrition, health, and wellbeing (Molyneux et al., 2016). The largest systematic review of cash transfer programmes across the Global South to date, was conducted by Bastagli et al. in 2016 (Bastagli 2016; 2019). It covered a total of 56 cash transfer programmes, with 38% of the programmes coming from sub-Saharan Africa, 54% from Latin America, and 8% from Asia, Middle East and North Africa. All of them unconditional. From the 38% of programmes coming out of SSA, only 11 specifically focused on health service utilisation and/or child nutrition. The 11 programmes came from 8 SSA countries, namely Burkina Faso; Niger; Kenya; Lesotho, Malawi, Tanzania, Uganda, and Zambia. Of these, only studies from Zambia, Lesotho, and Kenya reported nutrition outcomes in the form of dietary diversity, and in all three cases, the CT programmes evaluated did not find a statistically significant association with improvements in dietary diversity (Bastagli et al., 2019). The evidence from the review linked cash transfers to reductions in monetary poverty, with an increase in total and food expenditure and reduction in poverty measures; however, the

impact was not found to be big enough to have a subsequent effect on aggregate poverty (Bastagli et al., 2019). The evidence also correlated CT programmes with improvements in health service utilization and dietary diversity, but the evidence for improvements in child nutritional status, particularly as this related to anthropometric or child growth measures, was less consistent. This suggested an overall lack of effect of cash transfers on child growth outcomes, especially stunting (child height-for-age) and wasting (weight-for-age), and the lack of effect was indistinguishable by type of cash transfer (conditional or unconditional) (Bastagli et al., 2019).

Some of the factors that have been identified as key mediators of the effectiveness of CT impact on child nutritional outcomes include the size of the transfer, the age of recipients, the length of exposure to the transfer programme, and nutritional supplements (Natali et al., 2016; Bastagli et al., 2019; Manley et al., 2020). SSA cash transfer programmes typically transfer small amounts of money, ranging from US \$4.30 per person in Malawi¹ to US\$20 per household in Kenya, US\$25 per child in South Africa (Bastagli et al., 2019), and US\$18.40 per child in Nambia (UNICEF, 2022). The frequency of receipt may be quarterly (Lesotho's Child Grant Program), or monthly (Kenya's Orphaned and Vulnerable Children [OVC] program; Namibia's CSG; Ghana's Livelihood Empowerment Against Poverty Programme (LEAP) programme; and South Africa's CSG).

Another limitation of CT programmes in SSA is the fact that they are not implemented as part of a "Cash Plus Care" framework (Cluver et al., 2014). The Cash Plus Care model is a systems strengthening approach, and supports the building of complementary services and community-based care, while addressing structural drivers of adverse child health and wellbeing outcomes, and promoting crosssectoral linkages (Cluver et al., 2014; Pettifor et al., 2019). In the South African context, the CSG, at least on paper, is meant to be implemented as part of a basket of nutrition-specific and nutrition-sensitive services targeting children from low-income households. These complementary child-focused services and interventions include: the national school nutrition programme which provides up to two meals a day to children in schools; free primary health care services; and the integrated school health programme which includes school-based medical, health and psychosocial support services that involve screening, diagnosis, treatment and referral (where necessary) of children by a multidisciplinary team of health and allied professionals. Complimentary services also include school learner transport policy that provides free school transport, school-fee waivers, and free school uniforms (Zembe-Mkabile, 2021). Even though many of these services and concessions already exist in policy form in South Africa, most of them are not fully operational or accessible. Some of the challenges include incomplete, uneven, inconsistent implementation; limited capacity to implement and monitor policies; lack of compliance; poor linkage of the services to children receiving the CSG, and lack of integration with social work services targeting children and families (Zembe-Mkabile, 2021).

Similar lack of integrated policy programming and planning is reported in Lesotho, where the school feeding scheme targeting primary school-age children is meant to be implemented alongside the country's Child Grant Program which transfers small amounts of cash (M360/US\$19) to poor households with children under the age of 18 on a quarterly basis (that translates to about US\$6.30 per household per month); and the OVC program which targets secondary school children with sick or disabled parents (International Monetary Fund 2022). There is also no explicit linkage of children in receipt of the Child Grant Program, with for instance, the school feeding scheme; nor are child recipients of any of the Lesotho Government's social protection schemes intentionally linked to the Government's bursary scheme, even though it is acknowledged that secondary and tertiary education in Lesotho are extremely expensive (International Monetary Fund 2022). Despite a relatively large package of social protection interventions, which amount to seven different programmes, the IMF observes that "while [the social protection programmes are] progressive, [they] do not provide large enough transfers to significantly reduce poverty.....Transfers are too small, and the coverage is too low" (International Monetary Fund 2022: 74-76). In Namibia, a large proportion of children (51.3%)

¹In 2015.

experience high rates of multidimensional poverty (UNICEF 2022). This is largely attributed to inadequate coverage of child grants, with the country's child cash transfer programme failing to keep up with inflation, and a lack of synergy and linkage between the child grant and other child-focused interventions (UNICEF 2022).

Ghana, despite its celebrated cash transfer programme for low-income households, orphaned and vulnerable children, and pregnant and lactating mothers, which is called the LEAP, continues to have a large proportion (73.4%) of its children categorised as multidimensionally poor (UNICEF 2020). The low value of the LEAP cash transfer programme, the absence of a multisectoral approach to child poverty and the poor linkage of the cash transfer programme with complementary interventions, are some of the factors responsible for the observed high levels of child poverty in this country setting (UNICEF 2020).

Other components of the framework that relate to addressing underlying determinants of maternal and child nutrition, such as living conditions and maternal education, are either absent or poorly implemented in the region. A 2019 study by Tusting et al. reported that nearly half (47%) of the urban population in sub-Saharan Africa still lived in "slum-like housing," characterised by overcrowding, lack of access to clean water and sanitation, and poorly constructed shelter (Tuting et al 2019). As discussed in earlier sections of this manuscript, such poor living conditions are antithetical to positive maternal and child nutrition outcomes.. While maternal education and female adult literacy have improved in sub-Saharan Africa, both indicators are still well below global levels, and continue to be lower than that of men in the region, with 43% of girls and 46.1% of boys having completed lower secondary school; and a wide gap between the adult literacy rates of men and women (World Bank 2020). This makes sub-Saharan Africa the only region in the world where completion of lower secondary school is higher among men than women, and where adult literacy rates are higher among men compared to women (World Bank 2020). Low maternal education and literacy rates do not bode well for maternal and child nutrition outcomes in sub-Saharan given the established importance of maternal education levels in addressing child malnutrition.

Altogether, as discussed above, in the sub-Saharan African context, the comprehensive, integrated, multisectoral approaches advocated by the UNICEF conceptual framework for determinants of maternal and child nutrition are largely lacking. As discussed above, this is in part, a result of the centring of children and child health and wellbeing outcomes apart from maternal health and wellbeing; cash transfer programmes that transfer inadequate amounts of money whose value is not linked to an objective measure of need; the lack of a systems strengthening model such as the Cash Plus Care approach, macro-level factors such as governance and political will, limited fiscal space, unregulated food environments, and lack of institutional capacity to implement and monitor programmes and interventions.

Addressing maternal and child nutrition in sub-Saharan Africa: What role for social protection?

To effectively combat malnutrition, it is crucial to recognise that no single approach – whether nutritionspecific or nutrition-sensitive – can work in isolation. Nutrition-specific interventions, such as infant and young child feeding counselling, food fortification, school and community-based nutrition programs, and nutrition supplementation, need to be complemented by nutrition-sensitive interventions that address broader social and economic determinants such as cash and in-kind transfers, promotion of maternal education, maternal health and income support, and improvement of living conditions. As argued in this manuscript, having nutrition-specific interventions that target mothers focusing mainly on nutrition education, with no complementary nutrition support that takes into consideration mothers' own hunger and legitimate need for adequate nutritious food, limits the potential of social protection interventions to disrupt the drivers of maternal and child malnutrition. Cash transfer programmes that are too small, and that are introduced in contexts of high levels of poverty and unemployment, where pre-transfer household income and assets are small or non-existent, while useful, will limit their impact on maternal and child nutritional status (Bastagli et al., 2019). Thus, lessons from social protection programmes in SSA underscore the importance of implementing cash transfer programs that have both child and caregiver components, that transfer adequate amounts of money, and which are implemented as part of an integrated, multisectoral response to maternal and child nutrition, as espoused in the Cash Plus Care framework.

As discussed in this paper, while cash transfers increase household resources, they do not fully address the pathways critical for better nutritional outcomes. Beyond cash transfers, addressing structural determinants of malnutrition is essential. Policy planning and programming within the region needs to address "the causes of the causes" of poor maternal and child health and nutrition outcomes – such as the political economy of many countries within sub-Saharan Africa, health inequity, poverty, inequality, and the status of women in many African societies.

Conclusion

In conclusion, maternal and child malnutrition is a complex and persistent challenge with varied manifestations in sub-Saharan Africa, but it is not insurmountable. As discussed in this paper, there are clear pathways to prevention and improvement, and these pathways require nuanced, multifaceted approaches. The UNICEF extended conceptual model of care outlined in this paper underscores the importance of a multisectoral and multipronged approach to tackling malnutrition. It recognises that addressing malnutrition necessitates a combination of strategies that address both maternal and child health and well-being, and encompass both nutrition-specific and nutrition-sensitive social protection interventions. When strategically combined, these interventions can work together to enhance maternal and child nutritional outcomes, break the cycle of malnutrition and poverty, and improve the overall well-being of mothers and children. This comprehensive approach holds the potential to bring about meaningful and sustainable improvements in maternal and child nutrition and the overall health and development of future generations within the sub-Saharan Africa region.

Financial support. This study did not require funding support.

Disclosure statement. The author declares none.

References

- Akresh R, de Walque D and Kazianga H (2016) Evidence from a randomized evaluation of the household welfare impacts of conditional and unconditional cash transfers given to mothers or fathers, World Bank Policy Research Working Paper No. 7730. Available at https://ssrn.com/abstract=2811378.
- Atsu BK, Guure C and Laar AK (2017) Determinants of overweight with concurrent stunting among Ghanaian children. *BMC Pediatrics 17*, 177. https://doi.org/10.1186/s12887-017-0928-3.
- **Barrientos A** and **DeJong J** (2006) Reducing child poverty with cash transfers: A sure thing? *Development Policy Review 24*(5), 537–552.
- Bastagli F, Hagen-Zanker J, Harman L, Barca V, Sturge G and Schmidt T (2019) The impact of cash transfers: A review of the evidence from low- and middle-income countries. *Journal of Social Policy* 48(3), 569–594. https://doi.org/10.1017/S0047279418000715.
- Bastagli F, Hagen-Zanker J, Harman L, Barca V, Sturge G, Schmidt T and Pellerano L (2016) Cash Transfers: What Does the Evidence Say. A Rigorous Review of Programme Impact and the Role of Design and Implementation Features. London: Overseas Development Institute. Available at https://cdn.odi.org/media/documents/11316.pdf.
- Bimpong KA, Cheyuo EKE, Abdul-Mumin A, *et al.* (2020) Mothers' knowledge and attitudes regarding child feeding recommendations, complementary feeding practices and determinants of adequate diet. *BMC Nutrition 6*, 67. https://doi. org/10.1186/s40795-020-00393-0.
- Black RE, Allen LH, Bhutta ZA, Caulfield LE, De Onis M, Ezzati M, Mathers C, Rivera J and Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition: Global and regional exposures and health consequences. *The Lancet* 371(9608), 243–260.
- Bonilla J, Zarzur RC, Handa S, Nowlin C, Peterman A, Ring H and Seidenfeld D (2017) Cash for Women's Empowerment? A Mixed-Methods Evaluation of the Government of Zambia's Child Grant Program. World Development 95, 55–72. ISSN 0305-750X. Available at https://doi.org/10.1016/j.worlddev.2017.02.017.

Case A and Paxson C (2010) Causes and consequences of early-life health. Demography 47(1), S65–S85.

- Cherchye, L, Chiappori P, De Rock B, Ringdal C and Vermeulen F (2021) *Feed the Children*. CEPR Discussion Paper No. 16482. Paris and London: CEPR Press. Available at: https://cepr.org/publications/dp16482.
- Cluver LD, Orkin FM, Boyes ME and Sherr L (2014) Cash plus care: social protection cumulatively mitigates HIV-risk behaviour among adolescents in South Africa. AIDS 28, S389–S397. https://doi.org/10.1097/QAD.00000000000340.
- de Groot R, Palermo T, Handa S, Ragno LP and Peterman A (2015) Cash Transfers and Child Nutrition: What we Know and What we Need to Know, Innocenti Working Paper, no.2015-07, UNICEF Office of Research, Florence.
- de Groot R, Palermo T, Handa S, Ragno LP and Peterman A (2017) Cash transfers and child nutrition: Pathways and impacts. Development Policy Review 35(5), 621–643.
- De Sanctis V, Soliman A, Alaaraj N, Ahmed S, Alyafei F and Hamed N (2021) Early and long-term consequences of nutritional stunting: From childhood to adulthood. *Acta Bio-Medica* 92(1), e2021168. https://doi.org/10.23750/abm. v92i1.11346.
- Desyibelew HD and Dadi AF (2019) Burden and determinants of malnutrition among pregnant women in Africa: A systematic review and meta-analysis. *PLoS One 14*(9), e0221712. https://doi.org/10.1371/journal.pone.0221712.
- Development Initiatives (2020) 2020 Global Nutrition Report: Action on Equity to End Malnutrition. Bristol, UK: Development Initiatives.
- Farah AM, Nour TY, Endris BS and Gebreyesus SH (2021) Concurrence of stunting and overweight/obesity among children: Evidence from Ethiopia. PLoS One 16, e0245456. https://doi.org/10.1371/journal.pone.0245456.
- ILO (2020) Maternity income protection in Southern and Eastern Africa: From concept to practice. International Labour Organisation. Available at https://www.ilo.org/wcmsp5/groups/public/—ed_protect/—soc_sec/documents/publication/ wcms_733996.pdf.
- International Monetary Fund, African Dept. (2022). Kingdom of Lesotho: Selected issues. IMF Staff Country Reports (162), A007. Available at https://doi.org/10.5089/9798400212918.002.A007 (accessed March 7, 2024).
- Khalid H, Gill S and Fox AM (2019) Global aid for nutrition-specific and nutrition-sensitive interventions and proportion of stunted children across low-and middle-income countries: Does aid matter? *Health Policy and Planning 34*(2), ii18–ii27.
- Khalid S, Naseer A, Shahid M, Shah GM, Ullah MI, Waqar A, Abbas T, Imran M and Rehman F (2019) 'Assessment of nutritional loss with food waste and factors governing this waste at household level in Pakistan. *Journal of Cleaner Production* 206, 1015–1024.
- Khatun W, Alam A, Rasheed S, Huda TM and Dibley MJ (2018) 'Exploring the intergenerational effects of undernutrition: Association of maternal height with neonatal, infant and under-five mortality in Bangladesh. *BMJ Global Health 3*(6), e000881.
- Lartey A (2008) Maternal and child nutrition in sub-Saharan Africa: Challenges and interventions. Proceedings of the Nutrition Society 67(1), 105–108. https://doi.org/10.1017/S0029665108006083.
- Lindsay KL, Gibney ER and McAuliffe FM (2012) Maternal nutrition among women from sub-Saharan Africa, with a focus on Nigeria, and potential implications for pregnancy outcomes among immigrant populations in developed countries. *Journal* of Human Nutrition and Dietetics 25(6), 534–546. https://doi.org/10.1111/j.1365-277X.2012.01253.x.
- Manley J, Balarajan Y, Malm S, Harman L, Owens J, Murthy S, Stewart D, Winder-Rossi NE and Khurshid A (2020) Cash transfers and child nutritional outcomes: A systematic review and meta-analysis. *BMJ Global Health* 5(12), e003621.
- Modjadji P, Masilela LN, Cele L, Mathibe M and Mphekgwana PM (2022) Evidence of concurrent stunting and obesity among children under 2 years from socio-economically disadvantaged backgrounds in the era of the integrated nutrition Programme in South Africa. International Journal of Environmental Research and Public Health 19(19), 12501. https:// doi.org/10.3390/ijerph191912501.
- Molyneux M (2006) Mothers at the service of the new poverty agenda: Progresa/Oportunidades, Mexico's Conditional Transfer Programme. Social Policy & Administration 40, 425–449.
- Molyneux M, Jones N and Samuels F (2016) Can cash transfer programmes have 'transformative' effects? The Journal of Development Studies, 52(8), 1087–1098. https://doi.org/10.1080/00220388.2015.1134781.
- Natali L, Handa S, Peterman A, Seidenfeld D and Tembo G, on behalf of The Zambia Cash Transfer Evaluation Team (2016) Making money work: Unconditional cash transfers allow women to save and re-invest in rural Zambia, Innocenti Working Paper No. 2016-02. Florence: UNICEF Office of Research.
- Otim ME, Omagino EK, Almarzouqi A, Rahman SA and Asante AD (2022) Exclusive breast-feeding in the first six months: Findings from a cross-sectional survey in Mulago hospital, Uganda. *African Health Sciences 22(2)*, 535–544. https://doi. org/10.4314/ahs.v22i2.62.
- Oyelana O, Kamanzi K and Richter S (2021) A critical look at exclusive breastfeeding in Africa: Through the lens of diffusion of innovation theory. International Journal of Africa Nursing Sciences 14, 100267. ISSN 2214-1391. Available at https://doi.org/ 10.1016/j.ijans.2020.100267.
- Pettifor A, Wamoyi J, Balvanz P, Gichane MW and Maman S (2019) Cash plus: Exploring the mechanisms through which a cash transfer plus financial *education* programme in Tanzania reduced HIV risk for *adolescent* girls and young women. *J Int AIDS Soc 22* (Suppl 4), e25316. https://doi.org/10.1002/jia2.25316. PMID: 31328425. PMCID: PMC6643075.

- Ramokolo V, Zembe-Mkabile W and Sanders D (2017) Undernutrition and its social determinants. In Quah SR and Cockerham WC (eds), *International Encyclopedia of Public Health*, 2nd Edn. Cambridge, MA: Academic Press, p. 776. https://doi.org/10.4337/9781839109119.
- Ruel MT, Alderman H 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), 536–551.
- Samson MJ, Van Niekerk J and Mac Quene K (2006) *Designing and Implementing Social Transfer Programmes*. Cape Town: EPRI Press.
- Senona E, Torkelson E and Zembe-Mkabile W (2021) Social protection in a time of COVID: Lesson for basic income support. A report commissioned by the Black Sash.
- Smith LC and Haddad LJ (2000) Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis. Washington, DC: International Food Policy Res Institute.
- Tusting LS, Bisanzio D, Alabaster G, et al. (2019) Mapping changes in housing in sub-Saharan Africa from 2000 to 2015. Nature 568, 391–394. https://doi.org/10.1038/s41586-019-1050-5.
- UNICEF (2020) Nutrition, for Every Child, UNICEF Nutrition Strategy 2020–2030. New York, NY: UNICEF. Available at https://www.unicef.org/media/91741/file/UNICEF-Nutrition-Strategy-2020-2030-Brief.pdf.
- UNICEF, WHO & World Bank Group (2023) Levels and trends in child malnutrition. Joint Child Malnutrition Estimates: Key findings of the 2021 edn. Available at https://www.who.int/news/item/06-05-2021-the-unicef-who-wb-joint-child-malnu trition-estimates-group-released-new-data-for-2021.
- UNICEF (2020) Ghana Country Office Annual Report 2020: Update on the context and situation of children. Available at https://www.unicef.org/media/100216/file/Ghana-2020-COAR.pdf.
- UNICEF (2022) Nambia Country Office Annual Report 2022: Update on the context and situation of children. Available at https://www.unicef.org/media/136236/file/Namibia-2022-COAR.pdf.
- UNICEF / WHO / World Bank Group (2023) Joint Child Malnutrition Estimates: Key findings of the 2023 edition. New York: UNICEF and WHO; 2023. CC BY-NC-SA 3.0 IGO.
- Vitalis D, Vilar-Compte M, Nyhan K and Pérez-Escamilla R (2021) Breastfeeding inequities in South Africa: Can enforcement of the WHO Code help address them? – A systematic scoping review. *Int J Equity Health 20*, 114. Available at https:// doi.org/10.1186/s12939-021-01441-2.
- Walker SP, Wachs TD, Gardner JM, Lozoff B, Wasserman GA, Pollitt E, Carter JA and International Child Development Steering Group (2007) Child development: Risk factors for adverse outcomes in developing countries. *The Lancet 369* (9556), 145–157.
- Witten C, Claasen N, Kruger HS, Coutsoudis A and Grobler H (2020) Psychosocial barriers and enablers of exclusive breastfeeding: Lived experiences of mothers in low-income townships, north West Province, South Africa. International Breastfeeding Journal 15, 76. https://doi.org/10.1186/s13006-020-00320-w.
- World Bank (2020) Gender Data Portal: Sub-Saharan Africa. Available at file:///C:/Users/wzembe/Downloads/sub-saharanafrica.pdf.
- Zembe-Mkabile W (2021) Cash plus school-based services. Community of Practice for social systems strengthening to improve child well-being outcomes, Working Paper Series 2. An Initiative of the DST/NRF South sub-Saharan African Research Chair in Welfare and Social Development in Collaboration with the CSDA. University of Johannesburg.
- Zembe-Mkabile W, Ramokolo V and Doherty T (2023) We should not have to choose between hunger and death': Exploring the experiences of primary caregivers of recipients of a South African child cash transfer programme during COVID-19 lockdown in Cape Town, South Africa. *Journal of Poverty and Social Justice* 31(2), 212–230. Available at https://doi.org/ 10.1332/175982721X16763892169334 (accessed March 7, 2024).

Cite this article: Zembe-Mkabile W (2023) Social protection as a nutrition-sensitive instrument to address malnutrition in sub-Saharan Africa: Examining the utility of the UNICEF conceptual model of care for maternal and child nutrition. *Journal of International and Comparative Social Policy* 39: 295–305. https://doi.org/10.1017/ics.2024.5