**Abstract**

*The United Nations Sustainable Development Goals offer a framework to advance goals of alleviating poverty and upholding human rights. This exploratory study benchmarks progress on child food security, particularly in the critical geographies of Sub Saharan Africa. The study provides an overview of existing data to facilitate further exploration and offers theoretical and tactical considerations to tackle child food insecurity. A three-pronged approach to understand parallel and intersecting pathways to child food insecurity is proposed. Our evaluation points to the need for future assessments to examine child hunger and malnutrition using more comprehensive data and theoretical frameworks.*

**Keywords**: UN Sustainable Development Goals; Sub Saharan Africa; Global Social Work; Food Security.

**Introduction**

Implemented in 2015, the United Nations Sustainable Development Goals (SDGs) articulate a global agenda to end poverty and enhance welfare and human dignity (UN General Assembly, 2015). The goals succeeded the Millennium Development Goals (MDGs) that ended in 2015 (UN, 2015) with the aim of realizing milestones the MDGs agenda was not able to attain and to address the gaps therein. The SDGs provide a framework for countries to respond to urgent and emergent challenges facing the entire world. The SDGs contain 17 goals comprising 169 targets and 232 indicators that lend a more comprehensive framework for addressing global social problems (UN General Assembly, 2015). The SDGs highlight the integrated and indivisible balance of the three pillars of sustainable development: economic, social, and environmental (see Figure 1). The agenda underscores social work relevant people-centered approaches, human rights, environmental sustainability, equal access to resources, and prosperity sharing. This ambitious global agenda, which is scheduled to run until 2030, presents social actors and world governments with a blueprint and time sensitive targets on which to assess progress on wellbeing. Specifically, the goals demand that all United Nations member states commit resources toward realization of the targets outlined under each goal. Member states are also required to present quarterly reports on their performance.

Availability of data across a wide range of targets presents an opportunity for social commentators, including the profession of social work to embrace and move this discourse forward. Indeed, the elements highlighted in the SDGs are central and analogous to the tenets of the profession of social work, emphasizing social justice, human dignity, and the centrality of the human-environment relationships (Global Agenda for Social Work and Social Development, 2014). Moreover, the three global institutions of social work: (i) International Association of Schools of Social Work (IASSW), (ii) International Council on Social Welfare (ICSW), and (iii) International Federation of Social Workers (IFSW), have jointly contributed to the agenda of SDGs (IASSW, 2016; Jayasooria, 2016). Social work has an obligation to continue this dialogue, informing policy, scholarship, and practice (Global Agenda for Social Work and Social Development, 2014; Healy, 2017). We build upon this effort by benchmarking progress on SDG 2 - Zero Hunger.

**FIGURE 1. The Three Pillars of SDG **

Worldwide, hunger continues to be the leading cause of death (Webb *et al.*, 2018; WHO, 2018). This is especially alarming in the case of children under the age of five. Available data indicates that hunger and poor nutrition causes nearly half (45%) of all mortality in children under five - 3.1 million children each year (World Health Organization, 2019).With the implementation of the SDGs, global momentum and commitment to addressing the problem of food security, child hunger and its correlates has grown. Given this backdrop, our exploration focuses specifically on child hunger and undernutrition, particularly in sub-Saharan Africa. This focus is premised on the assumption that although food insecurity is a global challenge affecting approximately 815 million people, sub-Saharan Africa is one of the regions with the highest prevalence of hunger (FAO (Food and Agriculture Organization), 2017). These regions face the triple burden of malnutrition, undernutrition, and stunting in children under the age of five (FAO (Food and Agriculture Organization), 2017; WHO, 2017; FSIN, 2018). Early childhood is a critical stage of human development, which affects not only health outcomes, but also psychosocial functioning and overall well-being throughout the life course (Whitaker, Phillips and Orzol, 2006; Cook and Frank, 2008). Child undernutrition also compromises future productivity and life potential (Ke and Ford-Jones, 2015; Millimet and Roy, 2015). Addressing this phenomenon, a basic human right and key health issue, starts with understanding regional and country performance on Sustainable Development Goal 2 (UN, 2019).

We provide a comprehensive overview of progress or lack thereof, with respect to four of the nine indicators under SDG2 (Zero Hunger): 2.1.1 Prevalence of undernourishment, 2.2.1 Prevalence of stunting, 2.2.2 Prevalence of malnutrition, and 2.1.2 Prevalence of food insecurity. In particular, we seek to highlight the extent of food insecurity in SSA, pathways to food insecurity, and benchmark performance on undernourishment, child malnutrition (wasting and overweight) and stunting.

**A Review of the literature**

*Sustainable Development Goal 2*

SDG 2 (Zero Hunger) reaffirms the right of people everywhere to adequate safe and nutritious food. The goal is organized under five targets accompanied by nine indicators (see Table 1 below). Under SDG2, world governments are tasked with the mandate to end hunger, achieve food security, and improve nutrition by 2030 (Blesh *et al.*, 2019; UN, 2019). This goal further acknowledges the importance of the intersectionality of sustainable agriculture, gender equality, rural poverty alleviation, healthy lifestyles, and climate action with food security and wellbeing. This nexus underscores the right to adequate food and the fundamental right to be free from hunger, as articulated in Article 11 of the International Covenant on Economic Social and Cultural Rights (UNOHCHR, 1966).

Implementation of SDG2 is driven by governments with the support of multiple stakeholders. Monitoring and evaluation of progress occurs through an inclusive process at global, national, and regional levels overseen by the Committee on Food Security (CFS) under the jurisdiction of the Economic and Social Council (ECOSOC). Nation status on food security is reported at a High-Level Political Forum on Sustainable Development, held annually (IISD, no date; HLPF, 2019). Table 1 presents the five targets and nine indicators providing a roadmap and assessment mechanism for SDG2.

Table One: **Sustainable Development Goal #II and associated indicators**

|  |
| --- |
| Goal 2 Zero Hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture |
| Target | Indicators |
| 2:1 By 2030, end hunger.2:2 By 2030, end all  forms of malnutrition.2:3 By 2030, double the  agricultural productivity.2:4 By 2030, ensure  sustainable food  production systems.2:5 Enhance agricultural  Diversity by 2030. | 2.1.1 Prevalence of Undernourishment.2.1.2 Prevalence of moderate or severe food insecurity in the population.2.2.1 Prevalence of stunting2.2.2 Prevalence of malnutrition.2.3.1 Volume of production per labor unit by classes of farming/pastoral/forestry enterprise size.2.3.2 Average income of small-scale food producers.2.4.1 Proportion of agricultural area under productive and sustainable agriculture.2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities.2.5.2 Proportion of local breeds classified as being at risk, not at risk or at unknown level of risk of extinction. |

Source: (UNSDG and UN, 2020)

*The State of Food Security in sub-Saharan Africa: Extent of food security/insecurity*

Worldwide, advances in agriculture, lower food prices, and increased incomes suggest improved food security in the next decade (Thome *et al.*, 2018); however, the proportion of hungry and undernourished people has been on the rise with almost 820 million people hungry in 2018 (FAO *et al.*, 2019). According to the Global Report on Food Crises (2019), the number of food-insecure people needing urgent humanitarian action across the world stands at 113 million and covers 53 countries (FSIN, 2019). The number of women and children in need of nutritional support grew considerably between 2016 and 2018, mainly in areas affected by conflict, insecurity, climate crisis, or economic insecurity (FSIN, 2018, 2019).

In sub-Saharan Africa, a region characterized by rapid urbanization, slow income growth, and high population increases, the issue becomes even more complex. Despite gains recorded under the MDGs of 1995 (see (UN, 2015) for a comprehensive overview of MDG # I focusing on ‘eradicating extreme poverty and hunger’ (UN, 2015) and commitments to eradicate hunger by 2025, expressed under the Malabo Declaration, current estimates put the figure of food insecure people at 218 million people, making this one of the regions with the highest proportion of undernourishment (AUC, 2014; Mkonda and He, 2017; Thome *et al.*, 2018). Moreover, existing data reveal that five of the six most highly food insecure countries in the world (Nigeria, Sudan, Congo, Ethiopia, and Somalia) are in sub-Saharan Africa (FSP, no date; FSIN, 2018). Inextricably connected to food insecurity is the prevalence of malnutrition, stunting, and undernourishment. We review extant literature on this in the following subsections.

**Prevalence of stunting.** Stunting, conceptualized as *too short for one’s age, a result of chronic malnutrition*, has been on the decline globally (falling from 33 per cent in 2000 to 23 per cent in 2016), however, it continues to affect an estimated 155 million children under the age of five worldwide. The noted decline has been attributed to improved socioeconomic conditions, enhanced access to healthcare, and nutrition and behavioral changes such as increased breastfeeding and reduced fertility(Headey *et al.*, 2015; Smith and Haddad, 2015). Nonetheless, the stunting rates in sub-Saharan Africa and South Asia remain relatively high (Bredenkamp, Buisman and Van de Poel, 2014; UNICEF, WHO and World Bank Group, 2017). Within Sub Saharan Africa, data suggest that rates of stunting continue to be stubbornly high in Malawi, Mozambique, and Sierra Leone (Bredenkamp, Buisman and Van de Poel, 2014; *World Development Indicators*, 2017; Mariama Sow, 2017).

**Prevalence of Malnutrition.** Wasting, or low weight for height, is a strong predictor of mortality among children under the age of five and usually results from acute food insecurity and/or disease. Despite global declines in the proportion of children suffering from wasting/undernutrition, an estimated 49 million children under five years of age suffer from wasting (WHO, 2019). Moreover, the prevalence of wasting is significantly high across sub-Saharan Africa and South Asia (greater than 15 percent). Within sub-Saharan Africa, the prevalence of child undernutrition is associated with political instability and conflict among other crises. High levels of wasting were reported in the Democratic Republic of Congo from the late 1990s to early 2000s, a period of the Second Congo War. Similarly, South Sudan reports the highest prevalence of wasting with nearly 2.2 million children suffering from wasting every year (WHO, 2017).

**Prevalence of undernutrition.** This indicator captures the proportion of the population whose daily food consumption is insufficient for the dietary energy levels needed to maintain a normal active and healthy life and is generally expressed in percentages. Globally, the prevalence of undernourishment continues to be stubborn - 10.6% in 2015 to 10.8% in 2018 (FAO, 2019; FSIN, 2019). The situation for sub-Saharan Africa, has in fact worsened; the proportion of undernourished people increased from 20.7% in 2014 to 23.2% in 2017. Reasons connected to this include poor infrastructure, resource constraints, and conflict (FAO *et al.*, 2019).

*Pathways to food insecurity and adverse health outcomes for children in sub-Saharan Africa*

Several factors contribute to the problem of food insecurity and inimical health outcomes among children in sub-Saharan Africa. To help frame our review of the literature, we focus on three key pathways: (i) Nutritional, (ii) Caregiver, and (iii) Contextual/environmental (see figure Two). This characterization is informed by the Food and Agriculture Organization (FAO), and the previous literature which has attempted to frame child malnutrition using a two pathways model(Black, 2012; FAO *et al.*, 2018). The FAO model connects inadequate access to food to multiple forms of malnutrition through undernutrition and obesogenic pathways (FAO *et al.*, 2018). Another explication adds a caregiver factor to the nutritional pathway (Black, 2012). Our adaptation includes the nutrition, caregiver, and contextual/environmental factors. This conceptualization is premised on the assumption that the frame of reference within which food insecurity and malnutrition occurs matters; it shapes and impacts experiences of food insecurity and health outcomes. We posit that collectively, these pathways influence household food security, child food security and may negatively/positively impact health outcomes.

**Nutritional Pathway.** Nutritional pathway is defined by deficits in the quantity and quality of food. Research has acknowledged the complexity of the link between poor access to adequate food and malnutrition. Multiple passages connect child malnutrition to inadequate access to healthy food, insufficient breastfeeding, and inadequate complementary foods providing protein and nutrients (Bhutta *et al.*, 2013; Kinyoki *et al.*, 2015; Speirs, Fiese and STRONG Kids Research Team, 2016). Access to food, or the lack thereof, has been highlighted as the primary driver of child malnutrition mainly because it symbolizes anxiety and uncertainty about the availability of food as well as insufficient food intake (Kinyoki *et al.*, 2015). Another conduit of child malnutrition is micronutrient (vitamin and mineral) deficiencies, referred to as hidden hunger (Gödecke, Stein and Qaim, 2018).

**Caregiver Pathway.** The caregiver pathway ischaracterized by caregiver attributes, such as parental depression and food-related anxieties (Whitaker, Phillips and Orzol, 2006; Black *et al.*, 2012). This often starts with maternal perinatal nutrition. Food insecurity among other stressors during this period is linked to adverse impacts on a child’s health, development, and overall welfare (Whitaker, Phillips and Orzol, 2006; Black, 2012). Closely connected to this is the willingness and capacity of the maternal caregiver to provide for the child. Another caregiver pathway to child undernutrition is mother’s mental health status (e.g., depression, anxiety and stress, etc.). Maternal mental health may, in fact, stem from worry and/or shame related to the household’s lack of food and other means (Knowles *et al.*, 2016). Consequently, a mother may exhibit ineffective infant feeding strategies and behaviors. The economic status of the household is also connected to the caregiver pathway and may correlate with feelings of anxiety and stress (Bredenkamp, Buisman and Van de Poel, 2014).

**Contextual Pathway.** Multiple contextual links have been identified with respect to food insecurity and child malnutrition. Prominent among these are climate variability, including extreme weather events, poor farming methods, absence of comprehensive policy responses, and distribution obstacles (Richter *et al.*, 2017; Dureab *et al.*, 2019; FAO *et al.*, 2019; FSIN, 2019). For sub-Saharan Africa, the situation is often compounded by civil unrest and population displacements (FSIN, 2018, 2019). The elements of this pathway are briefly highlighted below.

*Conflict and Civil Unrest.*Conflict, civil unrest, and insecurity continue to be the primary drivers of food insecurity affecting about two billion people across the world, with one in four children in the world living in a country impacted by conflict or disaster (FAO *et al.*, 2019; UNOCHA, 2019). In the year 2017, the 18 countries with the most food insecure people were ones that experienced conflict and more than half of these countries were in Africa including Nigeria (northern region), Democratic Republic of Congo, Somalia, and South Sudan (FSIN, 2018). The situation in countries experiencing protracted civil unrest is further exacerbated by a breakdown of social order, disrupted farming, compromised infrastructure, and outbreaks of diseases such as cholera, diarrhea, and malaria (FSIN, 2019).

*Natural Disasters and Climate Change.* Climate change has been linked to intensified disasters such as droughts, floods, and tropical cyclones. In 2018, almost 29 million people were propelled into food insecurity due to climate change induced natural disasters with the most numbers being in Africa, where an estimated 32 million people faced acute food insecurity (FSIN, 2019). Women and children are especially susceptible to food insecurity. Furthermore, the 2018 Intergovernmental Panel on Climate Change (IPCC) special report warned of medium to high risk of global warming impact in southern Africa (IPCC, 2018). The effects of climate change on food security in the region are exacerbated by desertification and rapid depletion of arable land. About 70% of the inhabitants of sub-Saharan Africa continue to rely on land for their basic livelihood, exerting pressures on an already strained land base. Closely related to this is prevalence of droughts and famines as the primary triggers of food crises in sub-Saharan Africa (FSIN, 2018). Furthermore, floods and other climate related disasters have been linked to the displacement of roughly 230,000 people in Malawi, 50,000 in Mozambique, and 39,000 in Madagascar, exacerbating challenges to livelihood. In the case of north-east Kenya and southern Somalia, persistent dry conditions have been reported (Kinyoki *et al.*, 2015) potentially affecting pastoralist resources.

 *Absence of Comprehensive Agricultural/Food and Distribution Policies.*

Many government-funded programs have been put in place to mitigate food insecurity and poverty in sub-Saharan Africa. Among these are Social Cash Transfer Programs (SCTP) that have been widely adopted to reduce food insecurity through increasing and maintaining purchasing power of food and agricultural products especially by vulnerable households with children (CPAN, 2012). Another example of an effective policy targeting food security is the Homestead Food Garden Program initiative introduced in 1997 in Nigeria. This initiative targets provision of training and resources for agriculture and nutrition among low-income women (Talukder *et al.*, 2010; Bahta, Owusu-Sekyere and Tlalang, 2019). The government of Malawi has also implemented policies to improve food security and nutrition through dissemination of improved cook-stoves. While these policies have resulted in increased food security, and a reduction in respiratory illnesses and greenhouse gas emissions (Lewis and Pattanayak, 2012), food insecurity continues to grow, suggesting the need for more cross cutting interventions (Schuenemann, Msangi and Zeller, 2018). Despite the observed progress, to date, policies to spur agricultural productivity, curb hunger and promote health in vulnerable households with children remain underutilized; calling attention to the need for a more comprehensive policy framework with greater potential to mitigate the negative impacts of natural disasters and economic crises.



 **Figure 2. Pathways to food insecurity**

**Methods**

This exploratory study set out to benchmark progress on SDG #2 (Zero Hunger) with respect to four of the nine indicators under SDG2: (i) 2.1.1 Prevalence of undernourishment, (ii) 2.1.2 Prevalence of food insecurity, (iii) 2.2.1 Prevalence of stunting and (iv) 2.2.2 Prevalence of malnutrition. In particular, we highlight the extent of food insecurity in SSA, and benchmark performance on undernourishment, child malnutrition (wasting and overweight) and stunting.

*Key Measures*

**Regional Groupings:** For the Sustainable Development Goals, country groupings are defined by the United Nations Statistics Division - [Standard Country code known as M49)](https://unstats.un.org/unsd/methodology/m49/) (United Nations, no date; *UN Stats Open SDG Data Hub*, 2019). Under this code, sub-Saharan Africa (SSA) is categorized under four regions, namely, Eastern, Middle, Southern, and Western Africa (SDG Indicators, n.d.). Table 2 presents a breakdown of these countries by sub-region.

**Table 2: Regional Groupings for the Sustainable Development Goals**

|  |  |
| --- | --- |
| **Sub-Saharan Africa**  | **Countries by Regional Grouping** |
| Eastern Africa  | British Indian Ocean Territory\*, Burundi, Comoros, Djibouti, Eritrea, Ethiopia, French Southern Territories\*, Kenya, Madagascar, Malawi, Mauritius, Mayotte\*, Mozambique, Réunion\*, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania, Zambia, Zimbabwe |
| Middle Africa  | Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe |
| Southern Africa  | Botswana, Eswatini, Lesotho, Namibia, South Africa |
| Western Africa  | Benin, Burkina Faso, Cabo Verde, Côte d’Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Saint Helena\*, Senegal, Sierra Leone, Togo |

Note: \* indicates a country that does not have data in the world bank database.

Source: (UN Statistical Division, not dated)

**Prevalence of undernourishment** (PoU) is an internationally recognized indicator defined by the FAO as “the percentage of the population whose food intake is insufficient to meet dietary energy requirements continuously” (FAO, no date). The measure takes into consideration demographic factors, including sex and age, and habitual food consumption (Cafiero, 2014; FAO, IFAD and WFP, 2015).

**Prevalence of Food Insecurity.** Typically, food security/insecurity at the household level is captured by a number of indicators highlighting elements, including (i) affordability/accessibility, (ii) availability, (iii) quality & safety, (iv) utilization, and (v) stability (FSIN, 2019).

**Prevalence of Stunting** (PoS) is a global indicator used to capture Low height-for-age (WHO, 2010). The indicator reflects failure to reach linear growth potential as a result of suboptimal health and/or nutritional conditions (WHO, 2010, 2014; De Onis *et al.*, 2019).The measure assesses the percentage of children under age 5 whose height for age is more than two standard deviations below the median for the international reference population ages 0-59 months.

**Prevalence of malnutrition** is captured in terms of two indicators wasting and overweight. Prevalence of wasting refers to the proportion of children under the age of 5 whose weight for height is more than two standard deviations below the median for the WHO Child Growth Standards (World Bank, 2019). Prevalence of overweight is the percentage of children under age 5 whose weight for height is greater than 2 standard deviations above the median of the WHO Child Growth Standards (World Bank, 2019).

*Sources of the Data and Analysis Procedures*

**Sources of data.** The study uses data from two primary sources: The World Bank Sustainable Development Goals, and the Joint Malnutrition Estimates. Specifically, data on prevalence of undernourishment and prevalence of stunting come from the World Bank Sustainable Development Goals (World Bank, 2019). These data are available from 2015 to 2019. Data on child malnutrition are from the Joint Malnutrition Estimates (UNICEF, WHO and World Bank, 2019), which evaluates global child malnutrition annually. The estimates capture two aspects of malnutrition: overweight and wasting as well as data on stunting. The data provides estimates from 2015 to 2019 (*Malnutrition in Children - UNICEF DATA*, no date).

Given that SDGs were implemented in 2016, data used in this study cover the period to 2015 (baseline), 2016, and 2017. It is important to acknowledge that a number of countries in the region have not reported data on the indicators of interest during this timeframe; only countries reporting data on the three indicators under goal #2 Zero Hunger (2.1.1 Prevalence of undernourishment; 2.2.1 Prevalence of stunting; and 2.2.2 Prevalence of malnutrition - overweight and wasting) are considered for this assessment.

**Assessment Procedures.** The data on the prevalence of undernourishment were extracted from the World Bank Data Bank. Four available options were available, these are presented in table three. The World Bank Data Bank does not provide information on the sub-regions of sub-Saharan Africa (SSA). Hence, we selected study countries and organized them under sub-regions. Following this, we averaged estimates on a given indicator by the sub-region. As observed, UNICEF, WHO, and the World Bank Group jointly estimate the prevalence of malnutrition annually. These estimates include data at the following levels: world, regions, and country from 2015 to 2018. Relevant statistics were extracted from the database.

**Benchmarking Progress: Key Study Observations Prevalence of Undernourishment**

The data on undernourishment are not yet available for the period of 2018. Available data on the prevalence of undernourishment (% of population) covers the period 2015-2017. The data indicate a slight increase in the prevalence of undernourishment rates at both the world and regional levels (see Table 3). Globally, the prevalence of undernourishment was 10.60% in 2015, and increased to 10.80% in 2017. The prevalence of undernourishment in sub-Saharan Africa was 20.08% in 2015, which is two times the global rate.

**Table 3. Prevalence of Undernourishment (% of Population)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level** | 2015 | 2016 | 2017 |
| World Rate | 10.60 | 10.70 | 10.80 |
| Regional (SSA) | 20.08 | 20.71 | 21.35 |
| Eastern Africa | 29.74 | 30.43 | 30.98 |
| Middle Africa | 26.01 | 26.56 | 27.11 |
| Southern Africa | 19.42 | 19.22 | 18.72 |
| Western Africa | 15.53 | 15.86 | 16.17 |

Source: World Bank Data Bank-Sustainable Development Goals (2015-18) (World Bank, no date)

*Prevalence of Stunting.* Compared to 2015, the prevalence of stunting (height for age) among children under the age of 5 decreased in both sub-Saharan Africa and the World in 2016 (see Table 5). Although the rate of child stunting for sub-Saharan Africa has dipped from 35.1% in 2015 to 34.1% in 2017, stunting is still higher than the average world rate of 22.2%.

**Table 4. Prevalence of Stunting, height for age (% of children under 5)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Level | 2015 | 2016 | 2017 | 2018 |
| World Level | 23.30 | 22.80 | 22.40 | 21.9 |
| Regional (SSA) | 33.5 | 33.30 | 32.6 | 32.1 |
| Eastern Africa | 36.9 | 36.4 | 35.8 | 35.2 |
| Middle Africa | 33.3 | 32.9 | 32.5 | 32.1 |
| Southern Africa | 29.9 | 29.7 | 29.5 | 29.3 |
| Western Africa | 30.3 | 29.9 | 29.5 | 29.2 |

Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, March 2019 Edition. Stunting prevalence 1990-2018 (UNICEF, WHO and World Bank, 2019)

**Prevalence of Malnutrition (wasting, and overweight)**

*Prevalence of Wasting.* Data gaps are observed on the measure of wasting across regions. Available data for 2018 suggests that sub-Saharan Africa has a slightly lower average than the global average (6.9% compared to 7.3%). Within the region, higher rates are reported in Western and Middle Africa respectively (see table 5).

**Table 5. Prevalence of Wasting, weight for height (% of children under 5**)

|  |  |  |
| --- | --- | --- |
| Level | 2015-2017 | 2018 |
| World Level | N/A | 7.3 |
| Regional (SSA) | N/A | 6.9 |
| Eastern Africa | N/A | 6.0 |
| Middle Africa | N/A | 7.2 |
| Southern Africa | N/A | 3.5 |
| Western Africa | N/A | 8.1 |

Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, March 2019 Edition. Wasting prevalence and numbers affected (millions) 2018 (UNICEF, WHO and World Bank, 2019)

*Prevalence of Overweight.* The prevalence of overweight tends to be lower for sub-Saharan Africa compared to the world average from 2015-2018 (3.9 compared to 5.90). Subregions of sub-Saharan Africa reporting higher rates of overweight among children under the age of five include southern, eastern and middle Africa (see table 6).

**Table 6. Prevalence of Overweight, weight for height (% of children under 5)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | 2015 | 2016 | 2017 | 2018 |
| World Level | 5.70 | 5.80 | 5.80 | 5.90 |
| Regional (SSA) | 3.9 | 3.9 | 3.9 | 3.9 |
| Eastern Africa | 4.4 | 4.3 | 4.3 | 4.3 |
| Middle Africa | 4.6 | 4.6 | 4.6 | 4.6 |
| Southern Africa | 12.5 | 12.7 | 12.8 | 13.0 |
| Western Africa | 2.2 | 2.2 | 2.1 | 2.1 |

Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, March 2019 Edition. Overweight prevalence 1990-2018. (UNICEF, WHO and World Bank, 2019)

**Limitations**

A number of limitations are acknowledged. First, although data on SDGs are available across a wide range of targets presents, gaps in trackable data have been acknowledged as a major challenge, limiting comprehensive assessment of regional/country performance and trajectory on SDG #2 (Dunning and Kalow, 2016; United Nations Economic Commission for Africa, 2017). Indeed, more than 40 percent of indicators under SDG #2 are not trackable in sub-Saharan Africa (United Nations Economic Commission for Africa, 2017). For example, we were not able to explicitly examine the relationship between the three pathways and child hunger and malnutrition because of data gaps. The observed data gaps often translate into policy decisions and interventions that are not guided by evidence. As a benchmarking exercise, the current study stops short of examining causal relationships or associations between the indicators and pathways and provides an overview of existing data and literature to facilitate such exercises. Observations made in this study point to the need for future assessments and research to examine child hunger and malnutrition using more comprehensive data and a theoretical framework.

**Discussion**

The prevalence of undernourishment continues to be high in sub-Saharan Africa. Within the region, Eastern Africa reports the highest rates and the rates for Middle Africa continue to be at alarming levels. Figures for Middle Africa may be driven by the Central African Republic where prevalence of undernutrition stands at 62%. As in previous studies, undernourishment in the region is more visible in conflict-affected countries and countries affected by drought and flood conditions, highlighting the compounding effects of conflict on climate-related incidents (FAO *et al.*, 2019). Furthermore, stunting, an indicator of severe malnutrition, caused by a range of intersecting factors such as a child’s nutritional intake, mother nutrition during pregnancy, and the recurrence of infectious diseases (WHO, 2014; Kinyoki *et al.*, 2015), continues to be of concern. Indeed, the rate of child stunting for sub-Saharan Africa has gone down, from 35.1% in 2015 to 34.1% in 2017. However, stunting is still higher than the average World level, which stands at 22.2%. Specifically, higher rates are observed in Eastern Africa compared to other subregions. The proportion of stunting in Middle Africa is also of concern. As was the case with undernourishment, stunting is especially prevalent in countries experiencing political instability. These data are concerning in that, unlike wasting, evidence indicates that the impacts of stunting on child development (cognitive and physical development) tend to be irreversible after the first 1000 days (about 2.7 years) of a child’s life.

With regards to wasting, sub-Saharan Africa has a slightly lower average than the global average (6.9% compared to 7.3%). Within the region, higher rates are reported in Western and Middle Africa respectively. A similar picture is observed with respect to child overweight: sub-Saharan Africa reports lower than the world average (3.9 compared to 5.80) from 2015-2018. Eastern and Middle Africa report higher than the region’s average of overweight among children under the age of five. This observation is in line with previous research grouping the two indicators under child malnutrition (De Onis *et al.*, 2019). Furthermore, this can be connected to the high levels of undernutrition and stunting reported by Eastern and Middle Africa respectively.

**Implications: Policy, Practice andScholarship**

This study set out to highlight progress or lack thereof, with respect to four of the nine indicators under SDG2 (Zero Hunger) - Prevalence of undernourishment, Prevalence of stunting, Prevalence of malnutrition, and Prevalence of food insecurity - with respect to child hunger in sub-Saharan Africa. A number of implications are suggested to guide scholarship, practice and policy decisions. With regards to policy, one way to mitigate food insecurity and promote child wellbeing would be enactment of agric-friendly, pro poor policies that focus on food security and the promotion of human dignity such as weather based indexing and insurance, fisheries co-management, including programs such as the Homestead Food Production model in Nigeria might go a long way in advancing positive child outcomes (Talukder *et al.*, 2010; CPAN, 2012; Bahta, Owusu-Sekyere and Tlalang, 2019; FAO, 2019). Through the Malabo Declaration of 2014, the African Union Commission (AUC) reaffirmed their commitment to comprehensive agriculture reform articulated in the Comprehensive Africa Agriculture Development Programme (CAADP) a decade earlier. They also urged their countries to end hunger and halve poverty by 2025. Part of this commitment entails enhancing the resilience of livelihoods and food production systems to climate change and other political and economic shocks (AUC, 2014).

In terms of scholarship**,** there remains the need for urgent efforts to strengthen mechanisms for tracking the milestones realized within the SDG agenda using rigorous statistical procedures. This may involve looking beyond outcomes, to thinking broadly about the correlates of child hunger and malnutrition. The pathways framework may be useful in framing a contextual understanding of the issue. This framework may also be effective in highlighting critical intervention points at the contextual/environmental, caregiver or nutritional levels. For example, as suggested by the literature, improving maternal health may be an effective way of addressing child nutrition and other outcomes. Doing this effectively, requires creativity in working with limited data which is reflective of the social reality in sub-Saharan Africa. This observation underscores the need for research collaboration between government agencies and institutions of higher learning to enhance the rigor of research and support collection of comprehensive data. Generally,practitioners tend to focus on outcomes and interventions connected to these outcomes. However, the pathways framework to food insecurity suggest indirect leverage points. Overcoming child-level adverse outcomes may also require a reframing of mindsets at the community level - this may involve addressing the culture of vulnerability and dependence that characterize many communities in sub-Saharan Africa.

In closing, we acknowledge the modest scope of this exploratory descriptive study, to benchmark and highlight progress or lack thereof, with respect to four of the nine indicators under SDG2 (Zero Hunger) - Prevalence of undernourishment, Prevalence of stunting, Prevalence of malnutrition, and Prevalence of food insecurity in sub-Saharan Africa. Observations made in this study draw attention to the issue of hunger and malnutrition among children in sub-Saharan Africa; the leading cause of death among children under the age of five (Akombi *et al.*, 2017). Further, observations made in this study call to action social actors including civil society and particularly the profession of social work by drawing attention to time sensitive targets set by the SDGs agenda on amelioration of the problem of hunger and malnutrition especially among children under the age of five. Social Workers are well positioned to guide this effort through practice, scholarship and policy advocacy and reaffirming our professional commitment to social justice, dignity, and the worth of a person beginning with early childhood.

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