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## THE PUBLIC POLICY HUB

### Policy Brief **10**

# Tackling Stunting and Anemia in Egypt

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Childhood stunting and anemia are significant hindrances to human development. Nationwide, about one in five children under the age of 5 (21%) is stunted or too short for his or her age<sup>(1)</sup>. Poor nutrition among children can lead to lifelong consequences both for the individual and also for the country. A child is considered stunted when he/she is unable to grow in height according to his/her full potential<sup>(2)</sup>. Stunting occurs over the first 1000 days of a child's life. Most stunted children also suffer from anemia, which is defined as low blood hemoglobin concentration or red blood cells with oxygen-carrying capacity that is insufficient to meet a child's physiological development needs<sup>(3)</sup>. One-quarter of Egyptian children between six to fifty-nine months in age have moderate anemia (27%)<sup>(5)</sup>. The estimated annual costs of child under-nutrition are 20.3 billion Egyptian pounds (EGP) or 1.9% of GDP<sup>(5)</sup>.

### Problem statement

This research identifies as a key cause of stunting and anemia in Egypt the lack of health awareness and education about appropriate Infant and Young Child Feeding (IYCF) practices. This includes knowledge about the importance of breastfeeding, the initiation of breastfeeding, exclusive breastfeeding and complementary feeding practices. Moreover, there are many negative cultural perceptions that magnify the issue and create negative effects for the surrounding environment. Additional contributing factors include inadequate health service provision to pregnant women and new mothers.

(1) EDHS. (2014). Egypt Demographic and Health Survey. (USAID, UNICEF, UNFPA, Ministry of health and Population, Al Zanaty Association) Retrieved from <https://dhsprogram.com/pubs/pdf/OF29/OF29.pdf>

(2) Kavle, J. (2014). Examining Factors Associated with Stunting in Lower Egypt in Comparison to Upper Egypt. USAID.

(3) WHO. (2011). Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, (WHO/NMH/NHD/MNM/11.1) <http://www.who.it/vmnis/indicators/haemoglobin.Pdf>

(4) EDHS. (2014). Egypt Demographic and Health Survey. (USAID, UNICEF, UNFPA, Ministry of health and Population, Al Zanaty Association) Retrieved from <https://dhsprogram.com/pubs/pdf/OF29/OF29.pdf>

(5) Taher, E. ElKoly, M, Zaghoul. S. & Mohammed, H. (2014). Predictors of Stunting among Children Attending the National Nutrition Institute in Egypt. Cairo University. Retrieved from [http://scholar.cu.edu.eg/?q=emantaher/files/6-\\_stunting\\_-\\_numbers.pdf](http://scholar.cu.edu.eg/?q=emantaher/files/6-_stunting_-_numbers.pdf)

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The opinions expressed in this paper are those of the authors and or editors and do not reflect UNICEF or AUC policies or views. They are published to stimulate further dialogue on issues affecting children in Egypt in an attempt to expose young graduates to practical policy solutions.

# Causes of Stunting and Anemia in Egypt

A number of interrelated factors cause the high prevalence of stunting and anemia among Egyptian children from the age of 0-23 months. These include childhood under-nutrition due to lack of awareness and training among health care providers and household caregivers<sup>(6)</sup>, as well as malnutrition, or "deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients"<sup>(7)</sup>. This results from lack of health awareness among mothers, lack of food diversity and inadequate complementary food practices, lack of enabling environment, inadequate healthcare services, and lack of an effective policy framework designed specifically to tackle the problems of anemia and stunting.

## 1. Lack of Health Awareness Among Mothers and Inappropriate Feeding Practices

The main reasons behind stunting and anemia in Egypt is lack of awareness among mothers about the importance of the proper nutrition during pregnancy. Most of the irreversible damage caused by malnutrition in Egypt happens during pregnancy and the first 24 months of life<sup>(8)</sup>. In addition, mothers do not have the appropriate knowledge about what is appropriate for a child to eat during his/her first 24 months, and about Infant and Young Child Feeding practices (IYCF).

## 2. Lack of Food Diversity and Inadequate Complementary Food Practices

The type of complementary food that children receive after the age of 6 months lacks diversity and is not nutritious. According to Kavle (2014), "less than one in four children age 6-23 months is fed the amount and diversity of foods recommended by infant and young child feeding practices." Lack of dietary diversity is more prominent in Upper Egypt than Lower Egypt, "in urban governorates, 19 percent of the population had poor dietary diversity compared to 56 percent in Upper Egypt<sup>(9)</sup>." For instance, children at 6 months of age in both upper and lower Egypt are not frequently provided with sufficient amounts of animal-source foods/protein<sup>(10)</sup>, grain, fruits and vegetables. Instead, children often consume small and infrequent amounts of light food that contain fewer calories for the first year of life.

## 3. Negative influence of surrounding environment and social norms

The surrounding environment of cultural perceptions and social norms affects parents' behaviors towards feeding practices. According to a UNICEF report (2010), mothers often face pressure from their husbands, family members, friends, and neighbors to follow social norms regarding feeding practices. Unfortunately, most of these cultural perceptions and beliefs about the right IYCF are inaccurate.

## 4. Inadequate healthcare services

An important bottleneck in improving maternal and child health is unavailability of required micronutrients in family care units (FCU). In addition, a shortage of trained specialists in FCUs and lack of knowledge about IYCF are other contributing factors.

(6) Mahmoud, A. Zayed, M. Arafa, N. Eid, A. (2016). Stunting among Children Attending a Pediatrics Outpatient Clinic in Cairo, Egypt. Retrieved from [http://ejcm.journals.ekb.eg/article\\_4091\\_345f8a463cece6f174fda58cde7f0f25.pdf](http://ejcm.journals.ekb.eg/article_4091_345f8a463cece6f174fda58cde7f0f25.pdf)

(7) WHO (2016). Malnutrition. Retrieved from <http://www.who.int/features/qa/malnutrition/en/>

(8) Handoussa, H. (2010). Situation Analysis: Key Development Challenges Facing Egypt. UNDP. Retrieved from [http://www.eg.undp.org/content/dam/egypt/docs/LegalFramework/2010\\_Sit%20Analysis\\_KDCFE\\_English.pdf](http://www.eg.undp.org/content/dam/egypt/docs/LegalFramework/2010_Sit%20Analysis_KDCFE_English.pdf)

(9) World Food Programme (WFP). (2018). Egypt country strategic plan (2018–2023). Retrieved from <https://docs.wfp.org/api/documents/WFP-0000071591/download/>

(10) Taher, E. ElKoly, M, Zaghoul, S. & Mohammed, H. (2014). Predictors of Stunting among Children Attending the National Nutrition Institute in Egypt. Cairo University. Retrieved from [http://scholar.cu.edu.eg/?q=emantaher/files/6-\\_stunting\\_-\\_numbers.pdf](http://scholar.cu.edu.eg/?q=emantaher/files/6-_stunting_-_numbers.pdf)



## Policy framework

According to the analysis of current nutrition policy, the problem of stunting and anemia is given a low priority within the nutrition agenda, which results in the absence of effective and comprehensive policies to tackle these pressing issues.



## Policy Options

### **1. Developing a new policy to tackle anemia and stunting**

The current nutrition policy is comprehensive in terms of policy areas, but provides no specific actions or assignment of responsibilities to tackle stunting and anemia. A new nutrition strategy tackling stunting and anemia should have an operational plan with definite timeline as well as targets matched with the health sector's indicators in the Sustainable Development Strategy for Egypt's 2030 vision.

### **2. Providing Education and Motivation for Mothers to Adopt IYCF Practices:**

#### **2.1 Mothers' education**

Comprehensive education about appropriate IYCF practices to pregnant women and mothers is strongly needed. The knowledge, skills, and support can be delivered through two main channels:

##### **a- Health Workers**

Health workers can directly contact pregnant women and mothers about appropriate IYCF particularly during a child's scheduled vaccination time. The national compulsory vaccinations are administered at time intervals 0, 2, 4, 6, 9, 18 and 24 months. These are all times where nutrition-related education is urgently needed.

##### **b-Community Volunteers**

Conducting education and counseling at the community level gives support and motivation for mothers and creates a platform where mothers can be more motivated to discuss their challenges in reaching optimal practices.

The government can invest and support (NGOs) and Community Development Associations (CDAs) that work on health issues and develop partnerships with them to deliver community-based awareness sessions and counseling.

#### **2.2 Motivation: the need for continuous education**

There is a need for more sustained behavioral change that goes beyond education. Nudging families can be simply achieved through the continuous provision of information about the importance of appropriate IYCF using effective communication tools.

Information provision can take two different approaches. First, flyers, banners and short documentaries about the appropriate IYCF should be available in every health care unit and birth delivery hospital. Second, frequent phone messages should be sent to parents and grandparents. When a family registers the child at birth, they should be asked to provide the parents' and grandparents' phone numbers. The Ministry of Health can establish a communication committee in partnership with communication companies and easily reach families.



### **3. Providing Supportive and Enabling Environments:**

Any attempt to educate mothers about appropriate IYCF practices and work on changing their behavior can't be translated to effective outcomes without taking into consideration the surrounding environment and social norms. Thus, any IYCF intervention should address social norms and shouldn't be limited to targeting only mothers. It should be extended to include family members and the wider community.

Creating an enabling and supportive environment to enable mothers to adopt appropriate IYCF requires involving different stakeholders through using social marketing. Family members, community leaders, religious institutions, and health providers should also be addressed. Targeted audiences can be reached either through mass media channels such as television and radio or through separate channels developed by NGOs and CDAs.

### **4. Improving health care services**

Providing high quality healthcare services will significantly contribute to tackling the problems of stunting and anemia. The two most influential aspects of the healthcare system are ensuring the availability of vitamins and micronutrients, and building capacity. Improving the supply chain management system will enhance the availability of micronutrients. This can be achieved by providing training for pharmacists on supply chain management, and by establishing an automated supply chain information system. Moreover, building capacity for all healthcare providers will significantly influence the rates of stunting and anemia because healthcare providers are considered an important source of information for mothers. Capacity building requires firstly establishing comprehensive guidelines for maternal and child health, then developing operational manuals and providing training for healthcare providers based on these manuals. An incentive system based on base-line evaluation should be established to motivate healthcare providers who provide mothers with information. Healthcare providers are key actors: if they have the knowledge and can properly transfer this knowledge to mothers, then they can guide them toward the best feeding practices. The constraint to this solution is insufficiency of funds. To overcome this challenge, government may partner with the private sector and with international organizations.



## Conclusion

All Egyptian infants and young children have the right to benefit from optimal breastfeeding and complementary feeding and caring practices to protect them from stunting and anemia and their devastating consequences. Caregivers should have the knowledge, the skills, and the resources to adopt IYCF. The two recommendations advanced by this research are key to ensuring the right of children and their families to benefit from optimal IYCF practices.

The four approaches are complementary and need to be implemented in parallel since none of them alone can lead to sustained behavior. For instance, promotion of the IYCF can't be given high priority unless there is a specific designed policy for tackling stunting and anemia, which emphasizes the importance of IYCF. Moreover, improving IYCF practices through awareness and education can't be translated to a successful outcome without improving healthcare services and creating an enabling and supportive environment.

### The Public Policy HUB Where Rigour Meets Creativity

The Public Policy HUB is an initiative that was developed at the School of Global Affairs and Public Policy (GAPP) in October 2017. It was designed to fill in the policy research gap. It provides the mechanism by which the good ideas, plausible answers, and meaningful solutions to Egypt's chronic and acute policy dilemmas can be nurtured, discussed, debated, refined, tested and presented to policymakers in a format that is systematic, highly-visible and most likely to have a lasting impact.

The Public Policy HUB provides a processing unit where policy teams are formed on a regular basis, combining experienced policy scholars/mentors with young creative policy analysts, provide them with the needed resources, training, exposure, space, tools, networks, knowledge and contacts, to enable them to come up with sound, rigorous and yet creative policy solutions that have a greater potential to be effectively advocated and communicated to the relevant policy makers and to the general public.

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