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PERSPECTIVE

Adolescent Rights and the "First 1,000 days" Global Nutrition Movement: A View from Guatemala

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The field of global nutrition has coalesced around the "first 1,000 days" concept, which prioritizes pregnancy and the first two years of life as a critical window to improve child health and development. In this Perspective, we explore the child-centric orientation of 1,000 days programs, with particular emphasis on its implications for young mothers. Using Guatemala as a case study, we argue that 1,000 days interventions may view adolescent mothers as a means to improve child health, rather than as children themselves who have a right to nurturing protection. We conclude by offering a framework that connects the first 1,000 days to the complementary global movement to advance adolescent rights and reduce child marriage.

The first 1,000 days

The "first 1,000 days" is a conceptualization of child nutrition that has evolved into international policy consensus. The science underpinning the 1,000 days was propelled forward by the 2008 *Lancet* series on maternal and child undernutrition, which showed that the period from fetal conception to a child's second birthday is a "golden interval" to improve nutrition and development.[1]

The *Lancet* series provoked a vigorous response from international institutions, development organizations, and the private sector to scale up global nutrition interventions during the 1,000 days window. These efforts included the 2010 launch of the Scaling Up Nutrition (SUN) coalition.[2] SUN emphasizes four main elements: securing support at the country level, implementing evidence-based and cost-effective interventions, integrating nutrition with other social programs, and increasing global nutrition aid. More than 50 countries have joined SUN since its inception.

By definition, SUN focuses on the well-being of fetuses and young children, but pregnant women and mothers are incorporated into the 1,000 days rubric through "nutrition-sensitive" and "nutrition-specific" interventions.[3] Examples of nutrition-sensitive maternal interventions include parenting support; conditional

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cash transfers; family planning; and water, sanitation, and hygiene (WASH) programs. Examples of nutrition-specific maternal interventions include nutrition in pregnancy; micronutrient supplementation; breastfeeding promotion; and complementary feeding education.

Since the early 20th century, global health policy has oscillated between twin philosophies of the delivery of narrow, top-down technical programs and more integrated models that emphasize equity and community participation.[4] Global child health has followed a similar trajectory, including the role of UNICEF's disease control efforts after the Second World War, the rise of the primary health care movement as expressed at Alma-Ata, and the swing back towards the child-centric interventions of selective primary care such as GOBI (growth monitoring, oral rehydration, breastfeeding, and immunizations).[5] The child-oriented focus of SUN should be viewed through a history that—with certain exceptions such as the United Nations Decade for Women from 1976-1985, which overlapped with Alma-Ata—has tended to view women primarily through a reproductive, technically oriented lens.[6] In Guatemala and elsewhere, SUN is thus the most recent development in a history of infant and young child nutrition that has tended to pay limited attention to the rights of girls and women.

The first 1,000 days movement in Guatemala

Given its very high rate of child stunting and its history as a research setting for many foundational studies on early life nutrition, Guatemala was a compelling setting in which to scale up 1,000 days-aligned programs. In December 2010, the Central American nation of 16 million people became one of the first countries to join SUN formally.

In 2012, the SUN framework was officially integrated into Guatemala's nutrition policy with the release of then-President Otto Perez Molina's "Zero Hunger Plan."[7] A complementary private-sector organization emphasizing the economic repercussions of child malnutrition, the Alliance for Malnutrition, was also formed. Founding members of the Alliance for Nutrition included the foundations of prominent Guatemala businesses (including the best-known beer brand and fast-food chain), the social responsibility arms of major industry trade associations (including sugar, coffee, and non-traditional export sectors), and the country's powerful business association.[8] While the global SUN movement has attempted to address conflict of interest concerns, there has been limited critical analysis in Guatemala of the private sector's role in shaping government nutrition policy.[9] An example of such influence is that the former head of the Presidential Commission for the Reduction of Chronic Malnutrition has close family and business ties to the sugar industry.[10]

Guatemala's current president, Jimmy Morales, renewed essential elements of the Zero Hunger Plan for 2016–2020. An independent evaluation of the SUN movement in 2015 singled out Guatemala as a country that had made significant political progress in addressing malnutrition due to SUN's influence.[11] Overall, stunting rates have improved in recent years but remain among the highest in the world.[12]

The authors of this Perspective have experience in rural areas of Guatemala implementing nutrition programs, carrying out anthropologic studies of child malnutrition, and working to foster women's rights. We previously have critiqued 1,000 days programs in Guatemala for envisioning women primarily as instruments to deliver nutrients and services to their infants.[13] This mother-centric view of women manifests in several ways.

First, the 1,000 days interventions highlighted in Guatemala—breastfeeding promotion, complementary feeding education, micronutrients in pregnancy, growth monitoring, WASH, and others—engage women solely in their reproductive and child-rearing roles. Founding documents of the Zero Hunger Plan paid limited attention to gender-based topics like sex education, reproductive rights, general women's health, adolescent pregnancy, or child marriage. The most recent national Strategic Plan for Food Security and Nutrition (PE-

SAN) describes maternal age as a risk factor for chronic malnutrition and calls for increased reproductive health services; however, there is no integration between PESAN and the National Plan to Prevent Adolescent Pregnancies (PLANEA).[14]

Second, the implementation of the Zero Hunger Plan has been complicated by political scandals, fiscal deficits, and discrepancies between actual and planned nutrition spending.[15] Services and products pledged under the 1,000 days rubric and related social programs, such as conditional cash transfer mechanisms, are not always available on the ground.[16] In practice, rural Guatemalan mothers who wish to receive highly desirable resources such as complementary foods and cash transfers are typically required to fulfill laborious prerequisites such as attendance at prenatal visits, participation in growth monitoring campaigns, and completion of child vaccinations.

Third, the high-level support of the 1,000 days agenda influences the priorities of the public health system, which already suffers from chronic underfunding and allegations of abuse toward rural and indigenous people. As an example, in some areas, women or girls who present to health care facilities are only attended if they are pregnant.[17]

Finally, in our experience, maternal education, the core of many 1,000 days interventions, can be insensitive and impractical. Mothers are often scolded and blamed if their child's growth is suboptimal. Nutrition workers may demand that mothers breastfeed more, preferentially invest scarce family resources to nourish younger children over older children, and buy more expensive food. Such educational messages belie the realities of rural mothers: that breastfeeding is physically and emotionally exhausting, that they often lack power to make family food purchasing decisions, and that meeting dietary minimums is not possible in many situations.[18]

In summary, in rural Guatemala, 1,000 days programs make onerous demands on the lives and bodies of very poor and vulnerable mothers for the benefit of their children. Complicating matters, these mothers themselves are often children.

Adolescent health, marriage, and pregnancy

The mother-centric view of 1,000 days nutrition programs in Guatemala fails adolescent girls by overlooking the commonplace nature of adolescent pregnancies, by asking that adolescent mothers subsume their rights and privileges as children for their infants, by perpetuating the notion that motherhood is voluntary, and by minimizing the immense consequences of adolescent mothering on the mother herself.

Adolescent marriage and pregnancy are common in Guatemala. A 2015 national survey reported that 19.8% of girls aged 17 years had given birth or were pregnant.[19] In the first six months of 2017, there were nearly 17,000 births to girls under 18 years of age; approximately 1,100 births were to girls aged 14 or younger.[20] Recent Guatemalan law prohibits marriage before age 18 without exceptions, but de facto unions are likely to continue for some time.

The underlying causes of adolescent unions and pregnancies in Guatemala are multifactorial and include limited access to sexual education, poverty, and entrenched cultural practices.[21] Sexual violence against girls and women plays a central role in Guatemalan history, continues to be highly prevalent, and is a well-defined pathway to adolescent pregnancy.[22]

In Guatemala and other low- and middle-income countries (LMICs), adolescent marriage and pregnancies are associated with negative effects for both child and mother. Short-term health outcomes include higher rates of preterm birth, maternal mortality, and neonatal mortality.[23] In the long term, children born to adolescent mothers are more likely to be stunted, leading to shorter stature, worse educational attainment, and risk of adult-onset chronic diseases.[24]

The impact of adolescent unions and pregnancies on long-term outcomes for girls are less established, but evidence points to worse physical and mental health, higher risk of violence, and increased school dropout.[25] Adolescent girls stop growing when they become pregnant, so an ado-

lescent pregnancy confers stunting risk on two children: mother and infant.[26] According to the Global Burden of Disease Study, maternal disorders are one of the most frequent causes of death in teenage girls.[27]

A global movement for adolescents

Historically, adolescents have been a neglected population within global health. However, there has been a recent groundswell of support for adolescent health, as epitomized by the inclusion of adolescents within the UN Secretary General's "Every Woman, Every Child" global strategy and the publication of the Lancet commission on adolescent health and wellbeing in 2016.[28] Adolescent health has emerged as a global health priority due to increased understanding of the role of adolescence within the multi-generational life course, new evidence pointing to the benefits of adolescent health investments, and the success of civil advocacy groups such as Girls Not Brides and the Population Council.

A rights-based discourse has been central to the rise of the global adolescent agenda.[29] As *Lancet* editorialists write, "Wouldn't interventions that protect the basic human rights of adolescents be justifiable even if the benefit-to-cost ratios were less favourable?"[30] At the international level, a UN General Comment in 2016 on the Convention on the Rights of the Child was a powerful articulation of adolescent rights.[31] This Comment affirmed that adolescents, especially adolescent girls, are a vulnerable population requiring special protection; at the same time, they are persons with evolving capacities who have a right to influence decisions affecting their lives. At the country level, however, legal frameworks often fail to live up to the principles of the CRC.[32]

Toward an adolescent rights-oriented "first 1,000 days"

Since 2015, when we first wrote about the subordination of adolescent mothers within 1,000 days nutrition programs in Guatemala, we have witnessed the ascent of adolescent health—including adolescent sexual and reproductive rights—as a priority issue on the global stage.

This is a breakthrough. Even in settings where health and development resources are scarce, like in Guatemala, adolescent rights and child nutrition priorities are not necessarily in competition with each other. Scientific and human rights frameworks alike make evident the synergistic and complementary nature of child nutrition and adolescent efforts.

In our own work designing health programs and advocating for adolescent rights in Guatemala, we continue to ask ourselves what an adolescent rights-oriented "first 1,000 days" might look like in practice.

We support public and civil society actions to reduce child marriage and child unions. Such actions include enforcing existing child marriage laws, improving sexual education, and expanding access to quality reproductive health services for adolescents. For example, one of the authors directs *Abriendo Oportunidades* ("Opening Opportunities"), a group-based mentoring program for indigenous adolescent girls fostering community safety, knowledge of rights, and education. Program mentors, who come from the same communities as the girls they serve, work to help girls to exercise their rights and to challenge cultural norms that remain mother-centric.[33]

We believe that national planning bodies for the prevention of child nutrition and adolescent pregnancy should coordinate strategies. We also urge policymakers to take a comprehensive vision of adolescent nutrition that includes not only undernutrition in pregnant or prospective mothers, but also prevention of obesity. In Guatemala, the "double burden of malnutrition," consisting of the co-existence of both child stunting and female obesity is common and leads to a disproportionate burden of disease and disability for women.[34]

We call for innovative programs to help adolescent girls who are pregnant or have children. This is a vulnerable population that merits special consideration in their dual roles as children and mothers. While programs targeting adolescent mothers and their children are not commonly described in LMICs, one intervention that has at-

tracted our attention are home-based care models for young mothers. Such programs, including the Nurse Family Partnership and Minding the Baby, have proven effective in the US.[35] Indeed, one group is adapting such a program to poor and urban districts in São Paulo, Brazil.[36]

More broadly, we encourage further reflection on the implications of first 1,000 days policies on the lives of mothers, older children, and men. Aside from the work of a few scholars, there have been limited critical appraisals of this movement and its scientific underpinnings.[37] The fields of anthropology, ethics, and human rights have much to offer in fostering a more comprehensive and inclusive first 1000 days.

Postscript

As we finished drafting this Perspective, another political scandal racked Guatemala. Just two years after then-President Otto Perez Molina was arrested on corruption charges, an investigation into current President Jimmy Morales was opened for campaign finance abuses. The allegations led the Minister of Health, Lucrecia Hernández Mack, and her top deputies, to resign in protest. Massive street protests broke out after Congress voted to preserve Morales's immunity and to abrogate penalties for campaign finance crimes. In this explosive political climate, it is difficult to imagine the enactment of a robust national plan to foster adolescent rights. Yet the faces of so many young people in the crowds of peaceful protestors gives us hope of a future Guatemala that is fairer and more just. We remain optimistic that a health system premised on the rights of both young children and adolescent girls can be part of that future.

Competing interests

In the course of their professional responsibilities, the authors occasionally solicit funding to implement health programs for children and adolescents in Guatemala. Peter Rohloff has received support from Grand Challenges Canada, the National Institutes of Health, and the Charles Hood Foundation. Alejandra Colom is employed by the Population Council and the Universidad del Valle de Guatemala. David Flood, Anita Chary, and Peter Rohloff carry out child health programming and research with Wuqu' Kawoq in Guatemala. We declare that we have no other competing interests.

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