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Beyond Reproduction: The "First 1,000 Days" Approach to Nutrition through a Gendered Rights-Based Lens

MAI-LEI WOO KINSHELLA, SOPHIE E. MOORE, AND RAJAVEL ELANGO

Abstract

The First 1,000 Days approach highlights the importance of adequate nutrition in early life—from conception to a child's second birthday—for good development and growth throughout the child's life and potentially onto their own offspring. The approach has been highly influential in mobilizing policy attention and resources to improve maternal and infant nutrition in global health and development. This paper undertakes a critical review of this approach from a gendered human rights lens, finding that the theoretical underpinnings implicitly reflect and reproduce gender biases by conceptualizing women within a limited scope of reproduction and child care. We explore the processes of systemic neglect through Pierre Bourdieu's theories on how social structures are reproduced. Understanding theory is important to the governance of global health, how we frame priorities, and how we act on them. Revisiting influential theories is a means of accountability to ensure inclusiveness and to reduce gender and health inequities in research. We argue that a greater focus on women could increase the potential impact of nutrition interventions.

Mai-Lei Woo Kinshella is a PhD student at the Department of Obstetrics and Gynecology, BC Children's and Women's Hospital and University of British Columbia, and Global Health Research Coordinator at the University of British Columbia's PRE-EMPT, Vancouver, Canada.

Sophie E. Moore is a Reader in Global Women and Children's Health at King's College London and an Honorary Senior Research Fellow at the MRC Unit The Gambia at the London School of Hygiene and Tropical Medicine, UK.

Rajavel Elango is an Associate Professor at the School of Population and Public Health, Department of Pediatrics, BC Children's and Women's Hospital and University of British Columbia, Vancouver, Canada.

Please address correspondence to Mai-Lei Woo Kinshella. Email: maggie.kinshella@cw.bc.ca.

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Introduction

The First 1,000 Days approach to nutrition highlights the importance of adequate nutrition between conception and a child's second birthday as the most critical period of growth and development in a child's life, with far-reaching effects on capacities to work and learn and intergenerational effects on their own children.[1] While the emphasis on pregnancy and early life nutrition is not new, the First 1,000 Days movement represents a convergence of international development and health sectors, including nutrition, food security, maternal and child health, primary education, and poverty alleviation.[2] A powerful draw of the findings from the *Lancet's* 2008 series on maternal and child undernutrition was the idea that childhood malnutrition was knowledgeable and actionable, an idea that was taken up by the First 1,000 Days movement.[3] It provided systematic evidence of the problem of early-life undernutrition and its largely irreversible long-term effects, as well as the availability of high-impact and feasible interventions.[4] A study demonstrated that a package of 13 known interventions—including appropriate breastfeeding and infant feeding practices, the provision of micronutrients for young children and their mothers, salt iodization and iron fortification, and therapeutic feeding of malnourished children—could eliminate a million child deaths a year.[5] Beyond mortality reduction, adequate early nutrition could break the intergenerational cycle of malnutrition where stunted girls grow up to be stunted mothers who have a higher likelihood of giving birth to low-birthweight babies.[6] Additionally, with growing evidence that good nutrition in early life is essential for normal development and the prevention of life course health risks, including obesity, hypertension, and diabetes, reducing stunting in children was highlighted as foundational for poverty reduction and key in the development toolkit.[7]

Improved nutrition in the first 1,000 days of life is consequently seen as a discourse of hope, as a way to help break the intergenerational cycle of malnutrition and poverty in low- and middle-income countries (LMICs).[8] Though primary education attendance has long been a key development indicator, the findings of the 2008 *Lancet* series posited that good nutrition in early life was a fundamental prerequisite for individual human development and that early childhood malnutrition hindered a child's capacity to learn.[9] The subsequent 2013 *Lancet* series on maternal and child nutrition further highlighted the implications of early undernutrition for adult chronic diseases.[10] Framing the first 1,000 days as a "critical window of opportunity" highlights the urgency and temporal aspect of the approach, which has been described as a powerful anticipatory narrative that compresses the potential of global futures into a very specific time frame focused on the mother-child dyad, often exclusionary to those outside this window, such as men, adolescents, and women beyond childbirth.[11]

While the approach is powerful for building momentum and partnership between diverse collaborators—including national governments, private donors, and international development organizations—researchers have previously argued that it may be oversimplified, paying inadequate attention to the complexity of social and ecological interaction and focusing narrowly on mothers as primary caregivers.[12] Additionally, the anticipatory narrative may take away from the position of the human right to health and food. "A primary challenge for nutrition policy in low-income settings is to position nutrition as an investment," nutritionist and economist Harold Alderman argues, "rather than simply as a form of social spending that governments grant poor people to the degree that governments prioritize equity."[13] Though the approach is effective in mobilizing donors and international support, what becomes lost in the messaging? By framing early nutrition as a key investment for developing nations, what does the approach mean for the agency and personhood of mothers and women more generally? This paper explores the First 1,000 Days approach through a human rights-based lens. Specifically, we evaluate the approach's gender responsiveness using the World Health Organization's (WHO) Gender Responsive Assessment Scale and understand the processes of systematic neglect using Pierre Bourdieu's theories on how social structures are

reproduced. Understanding the theoretical framework is important to the governance of global health because how we think about global health problems frames priorities and defines how we act on them. Critically examining influential theories is a means of accountability to ensure inclusiveness and reduce replications of gender and health inequities in evidence-based research.

Human-rights based approaches to health and gender-transformative health interventions

Background on rights-based approaches to health

Under a rights-based approach, health is a human right, and at the core of human rights is equal dignity for all, which means that each person is considered an "ends" in themselves, and not treated as a "means" to further another goal.[14] Global health human rights lawyer and advocate Alicia Ely Yamin writes that "[o]ne principal way in which women's ethical and legal subjectivity is diminished is through laws and practices that reduce them to mere means for reproduction and childrearing."[15] Conventional health programming often targets mothers in "efforts to reshape knowledge, attitudes and practices ..., not asking them about their needs but treating them as primarily instrumental, as caretakers for their children."[16] However, within the rights-based framework's conceptualization of the equal dignity of all human beings, to diminish a person to a tool to advance any other goals is to dehumanize them.[17] While there has been a proliferation of human rights-based approaches in international development and global health in recent decades, Yamin argues that not all of them are genuinely transformative:

> [A]pplying a transformative human rights framework to health calls on us to rethink the underlying causes of substantive inequalities among different people … It also causes us to rethink the nature of power … [I]t causes us to rethink what it means to be human, in a world where people are too often reduced to consumers or targets of programs.[18]

A genuine transformative human rights framework to health critically evaluates structures of power, how social inequalities may manifest as health disparities, and how people are conceptualized in programming.

WHO's Gender Responsive Assessment Scale

One approach to evaluating programming is WHO's Gender Responsive Assessment Scale, which describes a continuum of five categories: gender unequal, gender blind, gender sensitive, gender specific, and gender transformative.[19] Gender-unequal approaches exploit existing gender biases and roles, consequently perpetuating and reinforcing gender inequalities. Gender-blind approaches move from exploitative to accommodating, as they often ignore gender norms and differences in opportunities and resource capacities for men and women. Gender-blindness may seek to treat everyone the same on a principle of fairness but actually result in reinforcing gender-based and other forms of social and political discrimination.[20] Gender-sensitive approaches acknowledge and accommodate gender norms but do not address the inequalities generated. Meanwhile, gender-specific approaches acknowledge and consider women's and men's specific needs and may intentionally target a specific group of women or men to achieve certain goals or needs, often to make it easier for them to fulfill responsibilities and duties associated with their gender roles. Finally, gender-transformative approaches consider gender norms and their impact on access to services and resources, consider the specific needs of men and women, and work to address the causes of gender-based inequities. Within health promotion activities, this means "approaches that avoid reproducing harmful gender norms or stereotypes and instead empower women and men to reach their health potential."[21]

Gender- and nutrition-sensitive programs

Gender discrimination and malnutrition

Gender discrimination across the lifespan contributes to mortality and morbidity in women and girls. According to a recent estimate, up to 126

million women are demographically "missing" across LMICs.[22] Though women tend to live longer than men when given similar economic and health resources, places where men's life expectancy is longer than that of women reveal systemic gender inequities that contribute to the concentration of adverse health outcomes.[23] Gender discrimination is acknowledged to play an important role in the undernutrition of women and girls, which leads to higher rates of both acute and chronic illnesses, as well as increased risk of adverse pregnancy outcomes for mothers and infants.[24] Women are doubly burdened with higher nutritional requirements during pregnancy and lactation, as well as gender inequalities in poverty.[25] A review using a human rights approach to health implications of food and nutritional insecurity found that women's access to food is significantly hindered by gender discrimination, despite women being key players in food production.[26] Women are found to lack control of and access to agricultural resources, land, credit, and educational resources.[27] This is reflected in a report by the Food and Agricultural Organization that found that in sub-Saharan Africa, twice as many women suffer from malnutrition than men, even though women constitute up to 80% of the agricultural workforce.[28]

Women's empowerment through a limiting lens

Nutrition programs include nutrition-specific interventions—such as supplementation—that directly affect nutritional status, while nutrition-sensitive interventions work with underlying factors that indirectly affect maternal and child nutrition and include agriculture and food security, water and sanitation, family planning, and gender empowerment.[29] Though women's empowerment is considered a part of nutrition-sensitive interventions, discussions on empowering women are often expressed as helping women better care for their children.[30] This underlying sentiment is found even in literature highlighting the need to mitigate gender inequality. Before the 2008 *Lancet* series, economists Siddiq Osmani and Amartya Sen reported that maternal deprivation adversely affects the health of the fetus. Like the 2008 *Lancet* series, they highlighted that high maternal undernutrition is associated with low-birthweight infants, which increases rates of child undernutrition and adult ailments.[31] While they start the causal chain with gender bias and strongly recommend eliminating gender inequalities, the authors still see women within the scope of reproduction:

> [W]omen's deprivation in terms of nutrition and healthcare rebounds on the society in the form of ill-health of their offspring—males and females alike. Given the uniquely critical role of women in the reproductive process, it would be hard to imagine that the deprivation to which women are subjected would not have some adverse impact on the lives of all—children as well as adults—who are "born of a woman."[32]

In the wake of the two *Lancet* series, the literature focused on the first 1,000 days embraces a strong awareness that gender inequalities are both a cause and an effect of malnutrition and that the empowerment of women and girls is needed in efforts to improve nutrition. Additionally, a Scaling Up Nutrition report, *Empowering Women and Girls to Improve Nutrition: Building a Sisterhood of Success*, states that "[n]utrition justice will only be achieved when women are empowered and when policies and programmes are gender responsive."[33] However, as evident in the following statement from the same report, women's empowerment is expressed in limiting terms as fulfilling better outcomes for their children: "Higher female earnings and bargaining power translate into greater investment in children's education, health and nutrition, which leads to economic growth in the long term."[34] Though nutrition-sensitive programming often highlights the need to empower women, its underpinnings implicitly reflect and reproduce gender biases by conceptualizing women within a limited scope of reproduction and child care.

Motherhood as a site of intervention

Underlying gender assumptions

According to the Gender Responsive Assessment

Scale, the First 1,000 Days approach involves a continuation of the assumption that mothers are the primary caregivers and are subsequently the natural facilitators of health care interventions for their families.[35] Consequently, though the primary objective of the First 1,000 Days approach to nutrition is the reduction of childhood malnutrition, the primary target of intervention is the mother. This includes health education and counseling for mothers that promotes the value of exclusive and complementary breastfeeding practices, as well as the importance of maternal nutrition during pregnancy and early infancy. Such educational efforts acknowledge that within the first half of the thousand days, "the infant is entirely dependent for its nutrition on the mother: via the placenta and then ideally via exclusive breastfeeding."[36] Additionally, they note that maternal undernutrition can cause intrauterine growth restriction in infants and affect a mother's lactation, which may compromise the ability to exclusively breastfeed.[37]

Others within the First 1,000 Days literature have also argued that adequate nutrition is important for women not only during pregnancy and lactation but also during adolescence. Girls will become future mothers; thus, ensuring that they enter their reproductive years with adequate nutrition is essential.[38] The need to reach adolescents—and the preconception period more generally—was introduced in the 2013 *Lancet* series by Zulfiqar Bhutta and colleagues, who argued that this was especially important in countries with high rates of undernutrition and teenage pregnancies.[39] Rates of adolescent pregnancy remain high in many LMICs, and adverse pregnancy outcomes are seen when adolescent girls are unable to meet the nutritional needs for their own growth and the growth of their unborn infants.[40] Using the case of Guatemala, where almost one in every five seventeen-year-olds had given birth or was pregnant, David Flood and colleagues highlight that targeting mothers in general for nutrition programs based on the First 1,000 Days neglects the unique situation of adolescent pregnancies and the need to address adolescent sexual and reproductive rights.[41] However, while Flood and colleagues critique that teenage mothers give up their own rights as children themselves, subsumed under the rights of their infants, this speaks to a larger issue in First 1,000 Days policies in which women are seen through a maternal lens as current or future mothers.

A means but not an ends

While highlighting the importance of women and girls during pregnancy, lactation, and pre-conception expands the focus of the First 1,000 Days approach, it does not yet escape the encompassing categorization of what anthropologists Michelle Pentecost and Fiona Ross term "the *maternal*." Drawing on ethnographic research on the implementation of a First 1,000 Days policy in the Western Cape, South Africa, the authors conceptualize "the *maternal*" as a key time frame for a wide range of health interventions.[42] They note that the policy's focus on categories of persons means that there is a lack of adequate consideration of women themselves and their social conditions. Conceptualizing women in nutrition programs as mothers or mothers-to-be reduces motherhood to a site of intervention that in turn reduces women's personhood to their bodies, seen as an environment to strengthen future health.[43]

In another example from South Africa, a study found that the narrow time frame of the First 1,000 Days approach limits the support that women receive. While women may be well supported during pregnancy, their access to food and other support is withdrawn after birth, when the focus is transferred to infants.[44] In this way, the approach conceptualizes maternal nutrition as a means to affect child health outcomes, while overlooking the value of women's own well-being.

Consequently, while the First 1,000 Days approach has been critiqued as "mother centric," an important caveat is that motherhood is expressed as a site of intervention rather than personhood. The *maternal* is a time frame of opportunity, a category of persons, a target of programming, and a resource to support the scaling of nutrition interventions—but not necessarily a person with her

own intrinsic worth. Thus, on the Gender Responsive Assessment Scale's continuum of approaches that exploit, accommodate, and transform gender norms, roles, and relations, nutritional initiatives that target mothers primarily to measure child health outcomes are arguably gender exploitative since their involvement is primarily instrumental.

Reproducing social inequalities

A priority gap

Challenges standing in the way of the development of genuinely gender-transformative nutrition interventions and research stem in part from processes of systemic neglect and the naturalness of conceptualizing the mother-infant dyad in global health and development. This neglect is systematic rather than necessarily intentional. Within a vicious cycle of the research-advocacy gap, the current emphasis on evidence-based medicine and interventions means that an area with limited evidence regarding maternal outcomes leads to a lower prioritization of that area within the field of international development and global health, and subsequently less funding for and less research on that area.[45] Though its explicit application to global nutrition agendas is recent, the concept of the measurement trap dates back to the early 1990s as part of the Safe Motherhood Initiative.[46] Based on an observation that maternal health priorities were often subsumed under child health within primary health care programs, the measurement trap describes how poor tracking of maternal deaths compromised the capacity to develop and evaluate maternal interventions and contributed to the neglect of maternal health as a priority topic.[47] As explained by obstetrician Mahmoud Fathalla:

> *Failure to address the preventable causes of maternal death is a violation of women's human rights … Women are not dying during pregnancy and childbirth because of conditions that are difficult to manage. They are dying because the societies in which they live did not see fit to invest what is needed to save their lives. It is a question of how much the life of a woman is considered to be worth … Even with the tragedy of maternal mortality, a justification sometimes put forward for investment in keeping mothers alive is that their survival is critical for the survival of the children. Resources allocated for maternal health are generally grouped together with resources for child health in a "mother and child health (MCH)" package. The "M" in MCH has often been seen as a means and not an end, as a means for child health.*[48]

Arguing that safe motherhood is a human right, Safe Motherhood Initiative proponents highlighted maternal survival as intrinsically valuable beyond its associations with child health.[49] Within the global nutrition agenda described by the First 1,000 Days approach, there is likewise a similar concern that maternal nutrition interventions are seen as investments in child health, but women's health outcomes tend to be systematically neglected and remain invisible in assessments and prioritization.

Deconstructing "naturalness" as doxa

The process of systematic neglect can be further understood through theories of Bourdieu and others on relationships of power and how actors reproduce social structures through their daily interactions. French sociologist Bourdieu described how social structures are constantly being reproduced by people's actions, beliefs, and feelings.[50] The concept of "the field" is the space of social interaction where "habitus" refers to our internalized norms and values for interacting in a certain social space. Habitus is both structured by the norms, values, and expectations of a given community and also structuring in that it reproduces the community's norms through practice.[51] "Doxa" is when the established order becomes entrenched and subsequently viewed as self-evident and natural.[52] The global health and international development community may be considered a field where actors advocate for their specific area of interest while competing for resources and the legitimacy of their priority areas.

Toril Moi's critical feminist revisiting of Bourdieu highlights the social significance of what is prioritized and what becomes devaluated and notes that priority setting is a distinctly political practice.[53] The naturalness of targeting pregnant

and lactating mothers for nutrition interventions to help their children grow appeals to the biology of reproduction, which masks the arbitrary social constructions of gender divisions of care, individualizes maternal nutrition as a woman's concern, and hides socially produced power relations that reduce women's bodies to fertile environments for cultivating healthy children, grandchildren, and societies in LMICs at large. The role of motherhood for women is emphasized in development programs with a significance that is not seen with fatherhood for men.[54] It seems to make sense to policy makers, researchers, program implementers, and even the women themselves because it reproduces the same habitus in which the naturalness of women as the primary caretakers of children is unquestioned. What mother would not want her children to be healthy, successful in life, and part of developing a modern nation? The rhetorical question allows for only one legitimate response and reveals the naturalness of conceptualizing women only in relationship to their offspring. In order to remain relevant to the discussion, expansions to promote women's health within maternal health often claim legitimacy by connecting their arguments to motherhood. This can be seen, for example, in efforts to highlight the importance of maternal nutrition during pregnancy and exclusive breastfeeding, the need to work with adolescent girls as future mothers, and the importance of reducing maternal mortality to ensure child health and survival.[55] As Moi writes, "In a wholly doxic society, women as social agents will freely choose the social destiny which they cannot in any case expect to escape."[56]

Moi's feminist appropriation of Bourdiean theory speaks to Yamin's argument that human rights-based approaches to health must question the naturalness of disease disparities, explore the power relations that exacerbate risk, and understand how health systems reflect and reproduce power inequalities in a given society.[57] It thus makes sense that bodies of research likewise reflect and reproduce power inequities. Research and implementation projects often reflect the implicit priorities of our society and reproduce value in the selected topics.

Challenging doxa: Knowledge production and reproduction for change

Expanding the scope

In challenging doxa, the perceived naturalness of the established social order, and asking "What, then, does it take for critique—and thus for change—to enter the social space?," Moi quotes Bourdieu to highlight the need to "bring the undiscussed into discussion," which opens up the possibility for critical discourse to challenge the naturalness of power relations and assumptions of practice.[58] This provides insight into the power of critically informed research on marginalized topics to disrupt implicit gender inequities in health. As medical anthropologist Paul Farmer describes in his book *Pathologies of Power*, research has the value of "bearing witness" to injustices of health and human rights and bringing the two together.[59] Research as witness helps break the silence and consequently creates spaces to challenge doxa. As evident in the widely influential 2008 *Lancet* series on maternal and child undernutrition, research has an important role in shifting the field of prioritizations.

Currently, only one of the six global nutrition targets in the World Health Organization's *Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition*, which has been incorporated into the Sustainable Development Goals, relates to outcomes among women.[60] This target aims to reduce anemia among women of reproductive age, as there is evidence that severe anemia increases the risk of maternal hemorrhage, the leading cause of maternal mortality.[61] To strengthen the focus on maternal nutrition and health indicators, additional risk factors (such as low maternal stature and other nutritional deficiencies in association with obstetric complications) could be further explored in research. Sustainable Development Goal 2.2 (end all forms of malnutrition) is currently child focused, using the prevalence of stunting and the prevalence of wasting and overweight in children under five as the key indicators. The policy implications of these global targets are important, for in LMICs whose national health budgets depend significantly on do-

nor contributions, the key targets and indicators of the Millennium Development Goals "quickly came to be used by donors and national governments as national planning targets, displacing any other priorities [national governments] may have had previously."[62] Further research should explore the implications of the First 1,000 Days movement for political landscapes and health systems, with their subsequent impacts on women's health.

While successful in building momentum for nutrition interventions to improve child growth, the First 1,000 Days approach frames nutritional policies as a high-impact development investment for LMICs rather than an issue of accountability that states have toward the health and well-being of their citizens. It speaks to an undervaluing of social, economic, and cultural rights as "programmic," where the rights to work, health, and education are aspirational but not necessarily legally actionable.[63] Consequently, health and gender research has an important role in shedding light on disparities, expanding the scope of neglected topics, and record keeping in order to strengthen the accountability of states and other actors involved. For the First 1,000 Days movement and the Scaling Up Nutrition movement, this means accountability toward the empowerment of women and girls in a genuinely gender transformative way.

Conducting women-centered research to inform nutrition-sensitive programs

To conduct women-centered research that is gender transformative and that reaches marginalized women in LMICs, we can learn from Ann Pederson and colleagues' discussion of gender-transformative health promotion for women.[64] They highlight the importance of explicitly women-centered interventions that acknowledge women's rights to control their own lives and that consider women's everyday lives and the multiple roles and identities they may hold.[65] Gender-transformative health promotion programming is strength based, which considers women's everyday lives and the social conditions in which they live.[66] This means being trauma informed and embracing harm reduction approaches that meet women where they are.[67] The agency of women involved is consequently expanded beyond adherence to healthy behavioral change recommendations and understood within the context of their lives, including existing constraints and their hopes and desires. These are valuable lessons to incorporate into global maternal and child health and nutrition research and interventions.

As part of the aim to conceptualize women not simply in terms of reproduction, there is also a need to reflect on why we should focus on maternal nutrition specifically rather than on women's nutrition in general. On the one hand, maternal nutrition is an important topic because women face higher nutritional requirements during pregnancy and lactation at the same time that they face gender inequalities in accessing health and economic resources.[68] However, we must acknowledge that such an emphasis is also influenced in part by convenience, as pregnancy may be a time when women are more engaged with medical systems.[69] Efforts to expand beyond the narrow time frame of pregnancy and postpartum can help reduce the withdrawal of support to women outside the maternity window and acknowledge the lifelong gender discrimination and disparities they may face in food and nutritional security and other dimensions of their lives.[70]

Conclusion

Though researchers, policy makers, and implementers following the First 1,000 Days approach advocate for women's empowerment and are sensitive to the ways that gender discrimination can affect women's ability to access food, limiting women's involvement to ensuring the well-being of her child perpetuates underlying gender stereotypes. Under the First 1,000 Days approach, the scope of women is both *limited* to their roles in reproduction and child care and also *limiting* in that it seems natural to all parties involved that women and women alone are found within this sphere. Mothers as targets of interventions rather than partners and beneficiaries dehumanizes women's bodies. To work with maternal and child nutrition in a genuinely gender-transformative

way, we have to acknowledge the delicate balance of working with maternal health as a unique area of vulnerability, priority, and celebration of women while also not limiting our conceptualization of women to the process of motherhood. Building on the works of Bourdieu and others regarding how social structures are constantly being reproduced through people's beliefs and practices, we find that there is potential for critically informed research on neglected topics as a part of modifying priorities and mobilizing for social justice. The 2008 *Lancet* series on maternal and child undernutrition was groundbreaking as an extremely influential piece of public scholarship that pushed the agenda for maternal and child nutrition forward. With the First 1,000 Days approach to nutrition revealing its systemic neglect of women's health beyond that of their children, it is time to push further. Without minimizing the importance of child health—since health is not a zero-sum game within human rights frameworks to health—there is a need to ground the future-looking narrative of hope to the present, to the life of the mother as a woman whose health and well-being has its own intrinsic worth.

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