A Call to Improve Breastfeeding Education and Counseling in South Africa

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Despite the immense body of evidence demonstrating that breastfeeding is a significant predictor of infant, child, and maternal health, rates of exclusive breastfeeding in South Africa remain suboptimal. This paper delves into the importance of breastfeeding, briefly highlights the historical context of breastfeeding in South Africa, explains the roles of the formula market and the HIV/AIDS epidemic in the disparate rates of breastfeeding, and recommends policies to address these issues.

Keywords

lactation consulting • South Africa • breastfeeding education • HIV epidemic • formula marketing • infant nutrition • nutrition policy

Breastmilk and Population Health

At both the population and the individual levels, breastfeeding is essential for the health and well-being of children across the lifespan. The World Health Organization recommends that infants consume breast milk, without adding solids or formula, until 6 months of age. This is known as exclusive breastfeeding (EBF) (2021). In infants, the short-term benefits of EBF include but are not limited to, reduced rates of GI infections/diarrheal diseases, necrotizing encephalitis, respiratory tract infections/pneumonia, malnutrition, and sudden infant death syndrome (Eidelman et al., 2012; West et al., 2019). Additionally, the protective effects of breastfeeding can extend into the long-term: improved outcomes for allergic disease, celiac disease, inflammatory bowel disease, diabetes types 1 and 2, and neurodevelopment are positively associated with initiation and duration of breastfeeding (Eidelman et al., 2012).

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Due to breastfeeding's protective effects against a wide variety of adverse infant outcomes, the Global Burden of Disease report rated suboptimal breastfeeding as the second most significant risk factor in children under 5 (Roberts et al., 2013). The burden of disease is measured with a statistic referred to as Disability-Adjusted Life Years, or "DALYs." DALYs are measured in years and consider both years of life lost due to premature death and years of life lived with impaired quality of life. The loss of one DALY symbolizes one year loss of optimal health (World Health Organization, n.d.). In 2010, suboptimal breastfeeding accounted for the loss of 47.5 million DALYs globally (Roberts et al., 2013). As a result, *The U.N. Decade of Nutrition* has made one of its targets to increase global rates of EBF to 50% by 2025 (Vitalis et al., 2021). Though the health benefits of breastfeeding are immense, so are the barriers. This paper will focus on the structural and health system factors that prevent parents from making fully informed decisions on infant feeding in South Africa.

Breastfeeding in the South African Context

In South Africa, subpar rates of breastfeeding impair the population's health. In 2018, the prevalence of EBF in all infants under 6 months in South Africa was around 32%, far from the target of 50% by 2025 (World Health Organization & United Nations Children's Fund, 2022). In addition, these rates may be deceivingly high, as only 23.7% of infants between four and five months are still being exclusively fed human milk (Nieuwoudt et al., 2019). Notably, formula sales have risen significantly, and companies have seen a 33% per capita increase in sales from 2004 to 2015 (Lake et al., 2019).

The low rates of EBF in South Africa negatively impact population health. As mentioned previously, breastfeeding can reduce the risk of a variety of adverse infant outcomes, including malnutrition and diarrheal disease. In low- and middle-income countries, including South Africa, malnutrition and diarrheal diseases are the leading causes of infant death (West et al., 2019). In fact, experts have been able to measure the burden of disease caused by insufficient breastfeeding rates at the population level in South Africa: a staggering 18% of child DALYs lost in South Africa were attributable to suboptimal breastfeeding in 2010. Comparatively, suboptimal breastfeeding accounted for 7.6% of child DALYs lost globally in the same period (Roberts et al., 2013).

There are many reasons for the low rates of EBF and the subsequent high burden of disease, however, the most concerning may be the continued inconsistent postnatal counseling by healthcare workers in South Africa. Explanations for this phenomenon include the legacy of changing breastfeeding recommendations through the HIV epidemic and the targeting of healthcare professionals by the formula market (Vitalis et al., 2021).

The HIV Epidemic, Formula Use, & Breastfeeding Recommendations in South Africa

As the HIV epidemic continues to change in South Africa–thanks to scientific advances and improved treatment access–-breastfeeding recommendations and policies have also evolved. For many years, due to the HIV epidemic, the government provided free formula (Vitalis et al., 2021). This decision was based on the risk of vertical transmission or the risk of transmitting HIV from mother to child through birth and breastfeeding. However, starting in 2004, the South African government has provided eligible citizens with free access to antiretroviral therapy (ART), the primary form of treatment for HIV (Burger et al., 2022). In individuals living with HIV, appropriate

use of ARTs can reduce their viral load to where the risk of passing HIV from the birthing parent to the child is reduced from a 15–40% risk to a 2% risk (Eke et al., 2023). In 2011, the Tshwane Declaration of Support for Breastfeeding was passed in South Africa. The Tshwane Declaration aligned South Africa's breastfeeding recommendations for individuals living with HIV to those outlined by the WHO and ended the provision of free formula (Vitalis et al., 2021). Now, given the low (less than 2%) risk of vertical transmission with adherence to ART regimens, recommendations for EBF are the same between HIV- and HIV+ parents on ART regimens (which are freely available in South Africa) (West et al., 2019).

However, even with the updated guidelines, there is evidence that HIV+ women, despite adherence to ART regimens, continue to be less likely to breastfeed. After the Tshwane Declaration, the odds of stopping breastfeeding by 14 weeks in HIV+ mothers were 2.1 times higher than the odds of stopping breastfeeding by 14 weeks in HIV- mothers, according to research from 2014 through 2017 (Horwood et al., 2020). While there are many factors contributing to this disparity, there is strong evidence that the policy changes have created confusion for families and healthcare workers alike (Nieuwoudt et al., 2019). Healthcare providers are not providing clear and consistent counseling on breastfeeding for HIV+ parents (Nieuwoudt et al., 2019). Current policies must be supplemented to improve children's health outcomes and reduce disparities for the children of HIV+ parents.

The Formula Market as a Barrier to Exclusive Breastfeeding

In addition to confusion on best-practice infant feeding as a result of the HIV epidemic, the formula market also introduces barriers to raising exclusive breastfeeding rates in South Africa. In 1981, the World Health Assembly passed the "International Code of Marketing of Breast-milk Substitutes" (often referred to as "the Code"), to protect families against predatory marketing of breast-milk substitutes (World Health Organization & United Nations Children's Fund, 2022). Despite the Code's regulations, formula marketing still represents one of the greatest challenges to improving rates of breastfeeding; in the last 20 years, rates of EBF have moderately improved globally, yet, concurrently, sales of formula milk have almost doubled (World Health Organization & United Nations Children's Fund, 2022).

South Africa has attempted to improve breastfeeding policy, though their success is debatable. In 2012, South Africa passed R991, which was legislation meant to enforce "the Code". However, since then, violations remain and marketing tactics have evolved (Doherty et al., 2022). While South Africa is considered to be "substantially aligned" with the code, violations are widespread, especially within private sector hospitals (World Health Organization & United Nations Children's Fund, 2022). The formula industry frequently sends representatives to contact healthcare workers. In addition, there are often educational talks and trainings for employees hosted by formula companies that ultimately promote their products. In a qualitative study on public and private sector employees, it was found that almost all of the employees studied from the private sector felt that formula companies were a crucial source of information for their practice (Doherty et al., 2022). The health professionals studied were all people identified as frequently caring for birthing parents, including pediatricians, lactation consultants, midwives, nurses, and others. Some participants reported that their hospitals have deals with certain commercial milk brands and are paid to promote them (Doherty et al., 2022). Worryingly, many employees in both sectors shared the false belief that commercial milk has become so advanced that it is equivalent to breastfeeding. They recited many of the

tactics that formula companies use to market their products back to the researchers to explain this stance (Doherty et al., 2022). In short, the formula companies continue to target healthcare professionals to push their products, despite the passing of R991, especially in the private sector hospitals.

It is important to understand that the population of South Africa is not equally affected by these predatory practices. The uninsured population makes significant use of the private sector on an out-of-pocket basis. South Africa is also implementing its new health insurance system (NHI), which will make greater use of the private sector for populations with lower socioeconomic status (Doherty et al., 2022). This means that the populations in which breastfeeding might be the most critical intervention to avoid future healthcare costs and loss of DALYs may soon receive lower-quality breastfeeding counseling from the private sector (Doherty et al., 2022).

Moving Forward: Policy Recommendations

The combination of years of free distribution of formula due to the HIV epidemic and formula companies violating the Code has led to insufficient postnatal counseling in South Africa, and subsequently, lower rates of EBF. To combat this, I outline three potential recommendations to improve rates of EBF through better breastfeeding counseling practices:

1) Creation of an Independent Monitoring System

Though R991 has been in action since 2012, there are some gaps in the legislation that the formula industry takes advantage of (Doherty et al., 2022). While there are legal provisions for formula companies' communication with the healthcare system, there are widespread violations, which undermine South Africa's true alignment with the Code (Doherty et al., 2022; Lake et al., 2019). These factors explain the lack of appropriate breastfeeding counseling and in part explain overall low rates of EBF.

To date, there has been no enforcement of violations of R991 (Doherty et al., 2022; Lake et al., 2019). This suggests that there is a need to create a monitoring system that investigates how formula companies interact with health professionals. This monitoring system could also have a system for families or other healthcare professionals to identify and report a violation of the code. While legislation identifies sanctions to be used in case of a violation, the lack of independence of the monitoring body has prevented any punishments from taking place. If an independent monitoring body was established, it could be a part of the National Department of Health (NDoH), the Department of Women, Youth, and Persons with Disabilities, or any other part of the government that is free of influence from the formula market.

2) Prohibition of Corporate Donations and Requirements for Disclosure

This recommendation is two-pronged. First, the South African government must prohibit donations of equipment or services from the formula industries, in order to better align legislation with the Code. This would severely limit conflicts of interest for health professionals and remove incentives to promote formula milk. This is especially important for the private sector. Second, since enforcement of this may be complicated, healthcare workers and researchers must also be required to disclose funding sources or personal conflicts of interest to their institutions. These institutions will have a requirement to disclose these to the NDoH, in order to improve enforcement of the current provisions of R991.

3) Investment in Ongoing Education for Health Professionals

As stated earlier, the legacy of changing policies due to the HIV epidemic has led to confusion among healthcare workers, and diminished quality of breastfeeding education for HIV+ parents (Nieuwoudt et al., 2019). Overall, healthcare professionals also have misconceptions about the quality of formula due to excessive marketing and targeting by the industry (Doherty et al., 2022; Lake et al., 2019). For these reasons, academics, health professionals, and others have called for an investment in ongoing education programs for healthcare workers. Formula companies aim to fill a gap in knowledge by hosting educational events for healthcare professionals (Doherty et al., 2022; Lake et al., 2019). To stop this predatory practice, there must be investments in the South African health infrastructure, in order to fill these gaps in a manner best aligned with the WHO guidelines. These investments should focus on educating healthcare workers on infant feeding best practices as well as how to identify conflicts of interest. This education must come from a source with no profit motivation. In short, due to a lack of investment in ongoing education for healthcare providers, formula companies step in, leading to insufficient and sometimes inaccurate counseling on infant nutrition. To solve this, there must be conscious efforts to fill these knowledge gaps with WHO-aligned education for healthcare professionals.

Conclusion

While promoting EBF is complicated, and many determinants influence infant feeding choices, it is clear that improving the health workforce's ability to promote breastfeeding is crucial in preventing excessive child DALYs lost. I recommend better enforcement of the Code and other WHO guidelines through a variety of policy initiatives, in order to ultimately improve EBF for all families, including those with HIV+ status. First, there must be improved enforcement of R991. The government should invest in creating an independent monitoring system to ensure that formula marketers do not engage in illegal practices. Second, there must be new legislation that prohibits monetary and equipment donations from the formula industry, and healthcare workers must also be held accountable for reporting such donations and/or contact attempts. Finally, the lack of understanding of best-practice infant feeding on the part of healthcare workers demonstrates the need for improved education of healthcare professionals. In summary, the substantial disease burden caused by suboptimal rates of breastfeeding in South Africa necessitates the creation and enforcement of policies that promote breastfeeding, in order to improve health across the lifespan.

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