Where do Pregnant Women Miss Out on Nutrition? Analysis of Survey Data from 22 Countries

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Abstract: Background: Iron-folic acid (IFA) supplementation during antenatal care (ANC) has existed in many countries for decades. Despite this, low national coverage persists and women do not often consume appropriate amounts during pregnancy. USAID's SPRING Project investigated pregnant women's access to, and consumption of, IFA tablets through ANC. Crosscountry analysis provided a global picture of the state of IFA-supplementation, while country-specific results noted key contextual issues, including geography, wealth, and ANC attendance. The analysis can help countries prioritize strategies for systematic performance improvements within one of the most common micronutrient supplementation programs aimed at reducing maternal anemia. Methodology: Using falter point analysis on Demographic and Health Survey (DHS) data collected from 162,958 women across 22 countries, SPRING identified four sequential falter points (ANC attendance, IFA receipt or purchase, IFA consumption, and number of tablets taken) where pregnant women fell out of the IFA distribution structure. SPRING analyzed data on IFA intake from DHS surveys with women of reproductive age. SPRING disaggregated these data by ANC participation during the most recent pregnancy, residency, and women's socio-economic status. Results: Average sufficient IFA tablet use across all countries was only eight percent. Even in the best performing countries, only about onethird of pregnant women consumed 180 or more IFA tablets during their most recent pregnancy. ANC attendance was an important falter point for a quarter of women across all countries (with highest falter rates in Democratic Republic of the Congo, Nigeria, and Niger). Further analysis reveals patterns, with some countries having high ANC coverage but low IFA provision during ANC (DRC and Haiti), others having high ANC coverage and IFA provision but few women taking any tablets (Nigeria and Liberia), and countries that perform well in ANC, supplies, and initial consumption but where very few women consume the recommended 180 tablets (Malawi and Cambodia). Country-level analysis identifies further patterns of supplementation. In Indonesia, for example, only 62% of women in the poorest quintile took even one IFA tablet, while 86% of the wealthiest women did. This association between socioeconomic status and IFA intake held across nearly all countries where these data are available and was also visible in rural/urban comparisons. Analysis of ANC attendance data also suggests that higher numbers of ANC visits are associated with higher tablet intake. Conclusions: While it is difficult to disentangle which specific aspects of supply or demand cause the low rates of consumption, this tool allows policy-makers to identify major bottlenecks to scaling-up IFA supplementation during ANC. In turn, each falter point provides possible explanations of program performance and helps strategically identify areas for improved IFA supplementation. For example, improving the delivery of IFA supplementation in Ethiopia relies on increasing access to ANC, but also on identifying and addressing program gaps in IFA supply management and health workers' practices in order to provide quality ANC services. While every country requires a customized approach to improving IFA supplementation, the multi-country analysis conducted by SPRING is a helpful first step in identifying country bottlenecks and prioritizing interventions.

Keywords: iron and folic acid, supplementation, antenatal care, micronutrient

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