Iron-Folic Acid Distribution and Consumption through Antenatal Care: Identifying Barriers across Countries

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Iron Supplementation

Two considerations suggest that iron supplementation programs will be part of the solution to reducing the global prevalence of anemia among women of reproductive age by 50% by 2025:

1. Roughly half of the episodes of anemia that women of reproductive age suffer can be corrected by iron supplementation

2. Globally, the most common micronutrient supplementation program implemented at national scale is iron supplementation for pregnant or non-pregnant women
Rationale

- Antenatal care (ANC) coverage has improved dramatically over the past few decades.
- Although the majority of countries have iron-folic acid (IFA) supplementation policies for pregnant women, IFA coverage has not kept up.

What are the barriers to IFA distribution through ANC?
ANC Coverage (1+ ANC visits) According to Most Recent DHS

- < 30 %
- 30-49 %
- 50-69 %
- 70-89 %
- > 90 %
IFA Coverage (Consumption of 1+ IFA) According to Most Recent DHS

- < 30 %
- 30-49 %
- 50-69 %
- 70-89 %
- > 90 %
Analysis

Demographic and Health Survey data from 22 countries with high burdens of undernutrition were used to identify four sequential “falter points” that may inhibit women from obtaining and consuming an ideal of 180 IFA tablets during pregnancy.

Looking at:

- Women who received ANC
- Women who received IFA tablets (or syrup)
- Women who consumed IFA tablets
- The number of tablets consumed
Falter Point 1
Percentage of pregnant women who did not attend at least one ANC visit

Pregnant in Last Five Years
100% (n)

Attended at Least One ANC Visit

YES

% (n)

NO

% (n)

Falter Point 1

Attended at Least One ANC Visit

YES

% (n)

NO

% (n)

Trimester of First ANC Visit
1: % (n)
2: % (n)
3: % (n)

Number of ANC Visits
1: % (n)
2: % (n)
3: % (n)
4+: % (n)
Falter Point 2
Percentage of pregnant women who attended at least one ANC visit but did not receive or purchase IFA tablets

Iron Folic Acid Tablets Received or Purchased

Falter Point 2

YES

% (n)

NO

% (n)

421 During this pregnancy, were you given or did you buy any iron tablets?
YES .................... 1
NO .................... 2
(DON'T KNOW ...... 8)

SHOW TABLETS.

422 During the whole pregnancy, for how many days did you take the tablets?
NO. OF DAYS ...
DON'T KNOW ...... 998

IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.
Falter Point 3

Percentage of pregnant women who attended ANC, received or purchased IFA tablets, but did not consume at least one IFA tablet

Falter Point 3
Iron Folic Acid Tablets Taken

YES

% (n)

NO

% (n)

| 421 | During this pregnancy, were you given or did you buy any iron tablets?  
SHOW TABLETS.  
YES .................. 1  
NO .................. 2  
(DON'T KNOW .......... 8 |

| 422 | During the whole pregnancy, for how many days did you take the tablets?  
IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.  
NO. OF DAYS .......... | 1  
DON'T KNOW .......... 998 |
Falter Point 4
Percentage of pregnant women who attended ANC, received or purchased IFA tablets, consumed at least one, but did not consume 180+ tablets

**Falter Point 4**

**Proper Dosage (180+ Tablets)**

NO

**% (n)**

Mean: n
Median: n

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**Questionnaire**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Code</th>
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</table>
| 421      | During this pregnancy, were you given or did you buy any iron tablets? | YES ........................ 1  
NO .............. 2  
(SKIP TO 423)  
DONT KNOW ........ 8 |
| SHOW TABLETS. |  | |
| 422      | During the whole pregnancy, for how many days did you take the tablets? | NO. OF DAYS ...  
| IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.  | 998  |
| DONT KNOW ... 998 |  | |
The Relative Importance of the Four Falter Points among All Pregnant Women
Number of IFA Tablets Increases with the Number of ANC Visits

- Women w/ No ANC Visits
- Women w/ 1 ANC Visit
- Women w/ 2 ANC Visits
- Women w/ 3 ANC Visits
- Women w/ ≥ 4 ANC Visits

Legend:
- < 45
- 45-89
- 90-134
- 135-179
- ≥ 180
Conclusion

- IFA supplementation is recommended during pregnancy whether or not anemia remains a problem
  - Why is faltering so common, when ANC coverage is so high?
  - How do we determine the unique supply chain and/or demand side constraints within each country?

- Addressing these issues requires understanding:
  - How the ANC program functions within the health system
  - The knowledge, attitudes, motivations and behaviors of ANC providers and patients
Thank You

Questions or Comments?

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