# Integrating Maternal, Neonatal and Child Health and Nutrition, and Family Planning:

**A Systematic Literature Review** 

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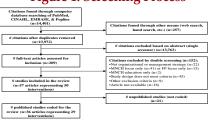
## **Background**

- ❖The Global Health Initiative places emphasis on integration of programs to address broad development challenges and providing a comprehensive package of services. The importance of integrating maternal, neonatal and child health and nutrition (MNCHN) with family planning (FP) is recognized as a key strategy.
- ❖Limited information and evidence exists to guide policy action and program efforts on MNCHN-FP service integration.
- ♦ This systematic literature review examines the efficacy and outcomes of MNCHN-FP service integration, and explores ways to effectively design and implement integrated MNCHN-FP programs

#### Methods

- ❖Search strategy using standardized Cochrane protocol
  - Electronic databases, hand searching of topic-relevant journals, online search of websites, cross- referencing, communication with experts
- Study inclusion criteria:
  - Published in peer-reviewed journal between January 1, 1990 - April 30, 2010
  - Rigorous evaluation design (pre-post or multi-arm comparison) to assess quantitative outcomes of interest
  - Intervention is an organizational strategy or change, process modification, or introduction of technologies aimed at integrating MNCHN-FP services

# **Figure 1. Screening Process**



## **Study Characteristics**

- ❖29 interventions identified from sub-Saharan Africa (n=10), South Asia (n=9), Latin America (n=3), East Asia (n=2), Russia, Syria, Italy, Australia and the US (n=1 in each country)
- ❖7 were randomized controlled trials (RCTs)
- ❖ Average study rigor score was 3.2 out of 9 (range: 1-8)
- ❖16 studies integrated FP services into existing MNCHN programs,
- 2 studies integrated MNCHN services into existing FP programs, 13 studies integrated services simultaneously
- ❖ All interventions targeted women, 2 also targeted men
- ❖Study outcomes most commonly reported were: contraceptive use, quality of MNCHN or FP services, use of MNCHN or FP services

#### Table 1. Matrix of MNCHN-FP Integration Models

|                     | MNCHN-FP                        | Family Planning Interventions |  |
|---------------------|---------------------------------|-------------------------------|--|
| Interventions       |                                 | Education and counseling      | Contraceptive service/ commodity provision |
| MNCHN Interventions | Antenatal Services              | 10                            | 4  |
|                     | Post-Abortion Care              | 10                            | 7  |
|                     | Intrapartum/Childbirth Services | 3                             | 2  |
|                     | Postnatal Care                  | 11                            | 7  |
|                     | Infant/Child Services           | 16                            | 10   |
| Σ                   | Nutrition Services              | 5                             | 3  |

*Note:* Number in each box represents the number of studies that fall into each category. The total number exceeds the number of studies because of overlap across categories.

# Table 2. Promoting and Inhibiting Factors for

| Promoting Factors   | Inhibiting Factors  |
|---|---|
| Provider-related factors  | Cultural factors  |
| Effective provider training and supervision     High retention of staff and manageable workload | <ul> <li>Social constraints and cultural barriers to adoption of contraception</li> </ul> |
| Provider interest in providing better services to clients                                       | Male involvement in some settings considered culturally unacceptable                      |
| Supply-level factors  | <ul> <li>Education and services are not culturally appropriate</li> </ul>                 |
| <ul> <li>Large selection and continuous supply of</li> </ul>                                    |   |
| contraceptives  | Financial factors   |
| <ul> <li>Promotion of informed free choice of contraceptives</li> </ul>                         | <ul> <li>High cost of provider training</li> </ul>  |
| <ul> <li>Free contraceptives</li> </ul>   | <ul> <li>Challenges in recovering costs of services</li> </ul>                            |
|   | <ul> <li>Funding limitations to provide sufficient services</li> </ul>                    |
| Intervention-level factors  |   |
| <ul> <li>Outreach to community decision-makers and</li> </ul>                                   | Logistical factors  |
| stakeholders  | <ul> <li>Lack of coordination between providers and clinics</li> </ul>                    |
| · Patient-centered model and emphasis on quality of care  | <ul> <li>Lack of provider checklist of services to offer</li> </ul>                       |
| <ul> <li>Involvement of men and male endorsement of FP</li> </ul>                               | Time-consuming administrative forms   |
| <ul> <li>Involvement of traditional health workers and home visits</li> </ul>                   | Complicated referral messages   |

# **Results by Models of Integration**

Model 1: FP Integrated with ANC, Delivery Services, and Postpartum Care (15 interventions)

- ❖4 RCTs were all home visit interventions and showed mixed effects on breastfeeding and immunization coverage
- Other studies showed improvements in coverage, quality, service use and cost

Model 2: FP Integrated with Post-Abortion Care (10 interventions)

- ❖2 RCTs showed increased use of condoms and contraceptives
- ♦Other studies indicated improvement in quality of care, service use, and lowered cost per visit

Model 3: FP Integrated with Well Baby Care and Immunization Services (16 interventions)

- ❖5 RCTs (mostly home visit interventions) showed mixed effects on breastfeeding, immunization coverage, and health outcomes
- Other studies showed improved quality, service use and cost

Model 4: FP Integrated with Nutrition Services (5 interventions)

- ❖1 RCT showed increased contraceptive use but mixed effects on breastfeeding, infant growth and immunization coverage
- ❖Other studies found improved coverage, quality, service use, cost

# Gaps in MNCHN-FP Integration Research

- ❖ Few studies (n=4) compared co-located services to referrals
- ❖Low rigor study designs used to evaluate the interventions
- ❖Key outcomes (e.g. cost and cost-effectiveness, unplanned pregnancy, immunization coverage) often not reported
- ❖Few studies (n=5) examined FP integrated with nutrition services
- ❖Few studies (n=2) targeted men or couples

## Conclusions

- ❖Integration of MNCHN-FP services shows promise in improving various outcomes, but significant evidence gaps remain
- \*Rigorous research comparing outcomes of integrated vs nonintegrated services, including cost, mortality, and pregnancy-related outcomes, is greatly needed to inform programs and policies





