Bangladesh Experience in Expanding the Delivery of Injectable Contraception

A brief overview

Presentation at

Expanding Access to Injectable Contraception

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Acknowledgement
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Background

• Following successful results from the Matlab area pilot project in Bangladesh, injectable contraception was introduced in the country’s national family planning program -- Depo-Provera® (DMPA or Depo) in 1976 and NET-EN in 1980. Subsequently, for ease of implementation and to avoid confusion, DMPA was selected as the injectable method for the country.

• Up until 1990 or so, Depo was seen as a clinical method, to be made available at a clinic and upon clinical examination. Access to it was, therefore, restricted. Its use remained low -- less than 1% -- for the next 15 years or so.

• Beginning in 1990, the government took steps to take Depo outside the clinic walls. The scenario began to change quickly: prevalence gradually rose to 9.7% by 2004, averaging 7.5% during 1996-2007.
Trends in Current Use of Modern Contraceptive Methods, Currently Married Women (15-49), Bangladesh, 1975-2007

- Female sterilization
- Male sterilization
- Pill
- Injectable
- Condom
- Implant
- IUD
Prevalence of Depo among Currently Married Women (15-49), by Selected Characteristics, BDHS 2007

Age Group | Residence | Wealth Quintile | Women’s Education
---|---|---|---
15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | Rural | Urban | First Q | Second Q | Third Q | Fourth Q | Fifth Q | None | Pri Incom | Pri Com | Sec Incom | Sec or higher

- 15-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- Rural
- Urban
- First Q
- Second Q
- Third Q
- Fourth Q
- Fifth Q
- None
- Pri Incom
- Pri Com
- Sec Incom
- Sec or higher

World Health Organization | Department of Reproductive Health Research | USAID | Family Health International
Key questions

• What policy and programmatic factors led to the increase in DMPA use particularly after 1990 in Bangladesh?

• What lessons and conclusions can be drawn from Bangladesh’s experience over the past decades?
Roles of demand and supply

Demand side – gradual, sustained improvement in awareness of all methods, including DMPA

Supply side – strengthening and expansion of the supply side of service delivery

Not either / or – both sides have been critical. This presentation, however, focuses on supply-side issues.
Addressing the Supply-side Challenges: Mobilizing Paramedics in Communities

Public health sector
- Family Welfare Center
- Satellite and mobile services

NGOs
- Fieldworkers
- Health facilities
- Satellite and mobile services

Private / commercial sector
- Drugshops / pharmacies
Community-level Tier of the MoH Service Delivery System in Bangladesh


- N = 13,000 (1 per 6,000 population)
- Personnel
  - Health Assistant
  - Family Welfare Assistant – visit homes for delivery of contraceptives; 2^nd dose of Depo

Family Welfare Center (at the Union level, the lowest govt admin structure)

- N = 10,000 (1 per 25,000 population)
- Personnel
  - FWV (paramedic, female)
  - SACMO (Sub-assistant Community Medical Officer) (paramedic, male or female)
    » Support from Upzilla Health Complex (visit by MCH Med Officer)
Addressing the Supply-side Challenges: Public Health Sector

- In 1993, MoH piloted initiative to have Family Welfare Assistants (FWAs) provide Depo services in 15 sub-districts.

- Expanding Depo services through task-sharing

  FWAs -- females with no previous health technical background -- were given 5-day training on family planning, including administration of Depo; were only permitted to give 2nd and subsequent doses, following the 1st dose given by a Family Welfare Visitor (FWV).

  FVWs, a cadre of paramedics. received training on Depo during their 18-month-long in-service and were allowed to provide Depo either at a satellite clinic or health facility.

- In 2005-2006, the program was scaled up to the entire country

  FWAs were given 1-day orientation instead of 5-day training and only allowed to give the 2nd and subsequent doses after the 1st dose was given by an FWV.

- Currently, government is considering permitting FWAs to administer the 1st dose as well (i.e., from task-sharing to task-shifting).
Addressing the Supply-side Challenges: Nongovernmental Sector Through NGOs

- Paramedics working with NGOs, after receiving a 5-day training on contraceptives, were allowed to administer Depo in clinics.

- The biggest NGO service delivery program, Smiling Sun Franchise Program, built the 5-day training into its 2-week Reproductive Health Training.

- Deviation: Some NGO paramedics provided Depo in their satellite clinics.
Addressing the Supply-side Challenges: NGO Sector through Drugshops / Pharmacies

- Social Marketing Company (SMC), funded by USAID, has agreement with MoH to provide Depo through Village Doctors in communities. Village Doctors receive a 2-day training as part of SMC’s Blue Star Program

So how have these programmatic interventions aimed at reducing the supply-side constraints influenced program performance?
Sources of Contraceptive Methods Reported by Current Users of Depo, Currently Married Women (15-49), BDHS 2007

<table>
<thead>
<tr>
<th>Source</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public sector</strong></td>
<td>68.0</td>
</tr>
<tr>
<td>Family Welfare Center</td>
<td>30.4</td>
</tr>
<tr>
<td><em>Upazilla</em> health complex</td>
<td>8.2</td>
</tr>
<tr>
<td>Satellite clinic</td>
<td>16.8</td>
</tr>
<tr>
<td>Govt fieldworker</td>
<td>7.9</td>
</tr>
<tr>
<td>All other</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>NGOs</strong></td>
<td>10.8</td>
</tr>
<tr>
<td><strong>Private medical sector</strong></td>
<td>20.9</td>
</tr>
<tr>
<td>Pharmacy/Drug shop</td>
<td>13.2</td>
</tr>
<tr>
<td>Traditional doctor</td>
<td>4.5</td>
</tr>
<tr>
<td>Other</td>
<td>3.3</td>
</tr>
<tr>
<td>Other / missing</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>100</td>
</tr>
</tbody>
</table>
Addressing the Supply-side Challenges

The innovations introduced in the early 1990s resulted in:

- Expanded access to Depo, particularly through Family Welfare Centers, for people living in rural communities
- Expanded access to services through social marketing program by engaging private and commercial sectors that included doctors, nurses, paramedics, and drugshops / pharmacies
- Expanded access to Depo, through NGO satellite and mobile services, by engaging paramedics
Prevalence of Depo in the future is likely to continue growing

Currently Married Women (15-49) Who Are Not Using But Intend to Use a Method in the Future, BDHS 2007

<table>
<thead>
<tr>
<th>Method</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>F sterilization</td>
<td>2.2</td>
</tr>
<tr>
<td>M sterilization</td>
<td>0.2</td>
</tr>
<tr>
<td>Pill</td>
<td>43.4</td>
</tr>
<tr>
<td>IUD</td>
<td>0.1</td>
</tr>
<tr>
<td>Injectables</td>
<td>15.0</td>
</tr>
<tr>
<td>Implants</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>1.1</td>
</tr>
<tr>
<td>Unsure of a method</td>
<td>34.3</td>
</tr>
<tr>
<td>All</td>
<td>100</td>
</tr>
</tbody>
</table>
### One-year Discontinuation Rates (%) of Selected Methods, Bangladesh, Early 2000

<table>
<thead>
<tr>
<th>Method</th>
<th>Method failed</th>
<th>To become pregnant</th>
<th>Side effects/Health</th>
<th>Other reasons</th>
<th>All reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>3.0</td>
<td>7.7</td>
<td>22.1</td>
<td>13.8</td>
<td>46.7</td>
</tr>
<tr>
<td>IUD</td>
<td>0</td>
<td>2.0</td>
<td>29.4</td>
<td>2.8</td>
<td>34.2</td>
</tr>
<tr>
<td>Injectable</td>
<td>1.3</td>
<td>3.8</td>
<td>36.6</td>
<td>8.3</td>
<td>50.0</td>
</tr>
<tr>
<td>Condom</td>
<td>6.5</td>
<td>12.6</td>
<td>9.6</td>
<td>38.1</td>
<td>66.7</td>
</tr>
<tr>
<td>Periodic Abstinence</td>
<td>8.6</td>
<td>9.0</td>
<td>2.1</td>
<td>23.2</td>
<td>42.9</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>9.7</td>
<td>9.2</td>
<td>5.3</td>
<td>27.1</td>
<td>51.3</td>
</tr>
<tr>
<td>All</td>
<td>4.3</td>
<td>7.7</td>
<td>19.2</td>
<td>17.4</td>
<td>48.6</td>
</tr>
</tbody>
</table>
# Reasons for Discontinuation of Injectable Contraception, Bangladesh

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent (N=336)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amenorrhoea</td>
<td>20.2</td>
</tr>
<tr>
<td>Spotting</td>
<td>38.7</td>
</tr>
<tr>
<td>Burning sensation, headache and abdominal pain</td>
<td>13.7</td>
</tr>
<tr>
<td>Nausea, giddiness, weakness</td>
<td>22.9</td>
</tr>
<tr>
<td>Switched to other method</td>
<td>3.3</td>
</tr>
<tr>
<td>Lack of supply</td>
<td>14.9</td>
</tr>
<tr>
<td>Planned pregnancy</td>
<td>5.1</td>
</tr>
<tr>
<td>Other</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Some Popular Perceptions About Injectable Contraception in Bangladesh: Implication for Mass Campaign and Counseling

- If a woman does not menstruate, toxic blood accumulates in her body.
- Injectable contraceptives cause infertility.
- It is harmful if a woman stops menstruating due to using injectable contraceptive because then she will not be able to become pregnant again.
- Women who are breastfeeding should not use injectable.
- Injectable contraceptives transmit diseases!
- DMPA causes cancer.
Lessons Learned:
Ensuring a Steady Injectable Program

- Giving injections safely and appropriately
  - Training and supervision of paramedics and other workers and pharmacy staff
  - The Matlab project experience was reassuring about CBD workers’ skills: infections after injections have been rare, that is, only about 3 per 10,000 injections.

- Counseling
- Follow-up
- Disposing of needles and syringe
- Maintaining the supply of injectable
Lessons Learned (cont’d)

• Reducing barriers to access to services led to increase in the use of services. The use of Depo in Bangladesh increased from less than 1% in 1980s to about 8% in the first half of the 20s.

• Depo can be provided safely and effectively through paramedics, provided they are properly trained according to standards set by MoH.

• Expanding new modalities of access to services needs to be well planned, thought through and well-tested before scale-up. Results from operations research conducted in both the public and the private sectors over the years have provided evidence as to what to modify and how to make the program user-friendly.

• Learning from the experiences of various programs within the country and between programs and translating knowledge into action have been important process-level factors.
Lessons Learned *(cont’d)*

- The increase in injectable clients was largely due to switching from other methods (principally, the oral pill) than new clients. Depo has, however, increased the range of methods to choose from for potential clients.

- Strict supervision and monitoring is crucial for increasing acceptance and better continuation.

- Support from medical personnel who are not involved in the Family Planning program, whether in NGOs, GOB or private sector, is very essential.

- DMPA is much more popular among clients for its longer duration of contraceptive action.

- Management of side effects and complication is an important part of program management. Client-focused BCC and mass campaign are essential to dispel myths and rumors and to generate demand.
In Conclusion

- Expanding access to Depo services beyond the clinic walls has been an important policy and programmatic intervention for increasing its use in Bangladesh.

- With quality of service standards defined, implemented and monitored, paramedical workers have played a key role in expanding access to Depo and increasing its use in both urban and rural communities.

  Among the current users of Depo, 70% of those in the public sector obtain Depo from places where paramedics provide the service. Similarly, 63% of those in the private sector obtain it from a drug shop / pharmacy.

- MoH has a critical technical leadership role in facilitating innovations, setting of service standards and ensuring that the standards are implemented and sustained.