

# Role of Private Sector in Provision of Immunization Services in Low to Middle Income Countries

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# Objective

- To summarize existing literature on the private sector's role in delivering immunization services in low to middle-income countries, leading to a conceptual framework
  - Includes not-for-profit and for-profit sector
  - Does not include role of private sector in the development, production and distribution of vaccines

# Background

- Immunization is a public good
  - Provide public health benefits to the population
  - Have positive societal externalities
    - Herd immunity
    - Control of contagious disease
    - Prevention of epidemics
- Governments believe that immunization provision is their responsibility
  - Many governments are unable to finance countrywide service delivery or provide new more expensive vaccines

# Background (continued)

- Governments believe that immunization provision is their responsibility
  - Many governments are unable to finance countrywide service delivery → gaps in coverage, inequities
  - May not be able to finance the introduction of new, expensive vaccines
    - E.g. Hib, rotavirus, pneumococcal

# Study Questions

- **HOW IMPORTANT IS THE PRIVATE SECTOR AND WHO ARE ITS TARGET POPULATIONS AND USERS?**
  - % vaccinations provided ?
  - Which vaccines?
  - Targets and users ?
- **WHAT ARE THE FUNCTIONS AND EFFECTS OF THE PRIVATE SECTOR ?**
  - Introduction of new vaccines
  - Access to services
  - Reducing disparities in access

# Study Questions (continued)

- **HOW WELL REGULATED IS THE PRIVATE SECTOR AND IS IT INTEGRATED INTO THE NATIONAL IMMUNIZATION AND HEALTH SYSTEM?**
  - **Public sector regulation**
  - **Quality control in private sector**
  - **Integration into national program**
  - **Relationship with private sector**



# Methodology

- Literature search of
  - Published articles through Pubmed
  - Solicited grey literature through networks of key informants working in immunization service delivery



# Findings

- Relatively few studies have researched the role of private sector in immunization services in low to middle-income countries
  - Misconception that government is providing most immunization services
- Private for profit sector plays *different roles* in low and middle income countries
  - Provider of immunization services in low-income countries
    - Sometimes helps to improve access to basic vaccines in low-income countries
  - Fills gaps in service delivery in middle-income countries
    - Provider of new and underutilized vaccines
  - Early adopter of new vaccines and technologies before adoption by the public sector (urban and wealthy areas)





# Findings (continued)

- Not-for-profit organizations are providing vaccination services in numerous low income and fragile countries and are increasing access to basic vaccines



# Role of not-for-profit Sector in Provision of Immunization Services differs from for-profit sector

- Not-for-profit healthcare providers offer services either for free or for a nominal fee
- Clients are from all socioeconomic levels with predominance of poor people
- Offer same vaccines as those found in the national program
- Often provide services in places where access to government health services is low
- Sector includes international NGOs, local NGOs, and mission facilities

# Low to Middle Income non-Fragile Countries vs. 'Fragile Countries'

- Role of the Private Sector is particularly important in 'fragile' countries
  - Low level of governance
  - NGOs play a prominent role in service delivery
  - Private practitioners often set up ad hoc practices throughout the country – e.g. Nigerian doctors in Liberia
  - % of total services offered through private sector not well-documented

# Private Sector's Role in 'Fragile' Countries

- Relationship between government and NGOs
  - Often unregulated
  - Sometimes formalized with 'contracting out' – e.g. Afghanistan
    - Allows government and partner agencies to have some control over outputs and service quality

# Relationship with Public Sector

- Regulation by public sector varies
  - little to no oversight to various levels of regulation and monitoring of NGOs and for-profit facilities
- Public sector sometimes provides vaccines and supplies to NGOs
- In some countries, governments and/or donor agencies contract out or in with NGOs for service provision

# Role of Private Sector in provision of Immunization services: Asia

<b>Country</b>	<b>% Private for-profit immunizations</b>	<b>% Not-for-profit immunizations</b>	<b>Source</b>
Bangladesh	<b>1% (2005)</b>	<b>22% urban/3% rural/4%</b>	<b>2000, Bass 2006</b>
Cambodia		<b>30-40%</b>	<b>Bass 2006</b>
India	<b>27% urban/15% rural Madhya Pradesh</b>  <b>17% children/36% women</b>		<b>Yoong 2007</b>  <b>Howard et al. 2004</b>
Sri Lanka	<b>33.5 Colombo; &lt;1% in rural areas</b>		<b>Agampodi 2008, 2007</b>
Thailand	<b>10% (33% in urban areas)</b>		<b>Madrid 1998</b>

# **Proportion of Total Immunization Services Delivered through Private Sector in African Countries**

# Percent of Private Facilities providing Immunization Services, DHS Service Provision Assessment

<b>Country</b>	<b>% of private for profit facilities providing immunizations</b>	<b># of not-for-profit facilities providing immunizations</b>	<b>Source</b>
<b>Ghana</b>	<b>25% (N=100)</b>	<b>70% (N=39)</b>	<b>Ghana SPA 2002</b>
<b>Kenya</b>	<b>81% (N=97)</b>	<b>97% (N=70)</b>	<b>Kenya SPA facility inventory 1999</b>
<b>Rwanda</b>		<b>89% (n=79)</b>	<b>Rwanda SPA 2001</b>
<b>Tanzania</b>	<b>51% (N=30)</b>	<b>39%(n=77)</b>	<b>Tanzania SPA 2006</b>
<b>Uganda*</b>	<b>81% (N=119)</b>	<b>81% (N=119)</b>	<b>Uganda 2008</b>



# Proportion of Immunization Services by the Private Sector in Latin American Countries

<b>Countries</b>	<b>% Private for-profit Immunizations</b>	<b>% Private not-for-profit Immunizations</b>	<b>Source</b>
<b>Sao Paulo state, Brazil</b>	<b>1.3%</b>	<b>No information</b>	<b>Coelho de Soares et al., 2008</b>
<b>Honduras</b>	<b>1.6%</b>	<b>No information</b>	<b>1998 EPI Newsletter</b>
<b>Nicaragua</b>	<b>5%</b>	<b>No information</b>	<b>1998 EPI Newsletter</b>
<b>Panama</b>	<b>15%</b>	<b>No information</b>	<b>1998 EPI Newsletter</b>
<b>El Salvador</b>	<b>5-10%</b>	<b>No information</b>	<b>1998 EPI Newsletter</b>
<b>Costa Rica</b>	<b>1-2%</b>	<b>No information</b>	<b>1998 EPI Newsletter</b>

# Characteristics of Users of Private for-profit Services

- Users were more likely to be of higher socio-economic status
  - In India, a small percentage of users were low-income, used private services due to proximity, access and shorter waiting time
- More likely to be in urban areas

# Impact of Private Sector Provision on Access to Vaccines

## ● Basic vaccines

- Private for profit sector increases access for those that can afford to pay
  - Offer longer service hours or is in more convenient locations than public sector
  - Some evidence that users of for-profit services are less likely to be fully immunized (Howard 2004, Agampodi (2007))
- Not-for-profit plays an important role in filling gaps in public service delivery

# Introduction of New and Underutilized Vaccines

- Survey of Asian policymakers (DeRoeck 2004) found:
  - Private sector can create public demand for new vaccines before they are introduced into the public sector
  - Provide new vaccines before the public is ready to do so
- Target populations with demand for new vaccines such as those with higher socio-economic classes
- Provide vaccines to respond to special needs and demand – e.g. flu or typhoid
- Sometimes private-for-profit sector collaborates with the public sector to introduce new vaccines
- Caveat that private sector is sometimes driven by pharmaceutical marketing campaigns to introduce new and costly vaccines
  - Aggressive marketing markets and links with prescribers and key opinion leaders

# Reductions in Disparities in Access to Vaccines

- Schwartz et al (2004) found that NGO provision of immunization services offered by NGOs in Cambodia reduced disparities
  - Compared
- Liu et al. (2004) found that contracting out to NGOs in Bangladesh and Cambodia improved access to services for the targeted poor

# Regulation of quality of service provision

- Contracts with NGOs often focus on outputs such as immunization rates as well as the quantity and quality of services
  - Afghanistan (Palmer 2006)
  - Rwanda experience with performance based financing (Soeters 2006)
  - Haiti performance based contracting (Eicher 2006)
- Regulation of the private sector not always successful
  - Gaps in regulatory frameworks, and inadequate resources for monitoring and enforcement

# Conceptual Framework for Role of the Private Sector in Immunization Service Delivery

Type of Private Sector	'Fragile' Countries	Low to Middle-income Non-fragile Countries
For-profit	Ad hoc unregulated service delivery by private practitioners	<ol style="list-style-type: none"> <li>1. Ad hoc unregulated service delivery by private practitioners</li> <li>2. Unregulated provision of immunization services</li> <li>3. Regulated service provision of immunization services</li> </ol>
<b>Not-for-profit</b>	<ol style="list-style-type: none"> <li>1. Unregulated NGO service provision</li> <li>2. Contracting out of NGOs for immunization and other services</li> </ol>	<ol style="list-style-type: none"> <li>1. Unregulated NGO service provision</li> <li>2. NGO provision of and advocacy for immunization services with some regulatory policies</li> <li>3. Public sector contracting out of services</li> </ol>

# Findings and gaps of Literature Review

- Private for-profit sector
  - Best documentation of role in Asian region
    - % of total coverage by private for profit providers over 15% in India and Sri Lanka
  - Facilities more likely to be in urban than rural areas
  - Quality of service delivery is variable
  - Offer a wider selection of new and under-utilized vaccines than public or NFP sector



# Findings and Gaps (continued)

- Not for profit sector
  - Play an important role in extending access to basic vaccines
  - Situated in rural as well as urban areas
  - Some evidence that reduce disparities in access to services

# GAPS

- Geographical: Few studies have been conducted in Latin America, Europe and the Middle East
- Contribution of NGOs to immunization service coverage
- Best practices of incorporation of private sector provision of immunization services into national program



# Next Steps

- Country case studies in different contexts
- Development of policies → "WHO guidelines" on private sector and immunization services