The future of Primary Health Care-Alma at 30 years

Case studies: Iran and Pakistan

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Executive Director, Global Health Workforce Alliance
Structure of presentation

- Global challenges
- Primary health care
- PHC in Iran
- PHC in Pakistan
- Comparison of both models
- Way forward
New millennium and health challenges

- Globalization
- Transition
  - Demographic
  - Epidemiological
  - Technological
  - Social
  - Climate
- Increasing economic divide
- Increasing natural disasters and emergency situations
- World food crisis
- Increasing inequalities in health, unfinished agenda of infectious diseases and new conditions
- Global crisis of health workforce
We are moving close to 2015, the deadline of achieving MDGs, while inequalities in health status and health workforce are increasing.
Global distribution GDP and health expenditure in developing countries

Total health expenditure = $351 billion (12% global total, 2002)

The developing countries are facing severe problem of health financing, reflecting their limited capacities to offer health services to their populations.

Health financing revisited, the World Bank, 2006
Millennium Development Goals – still a long way

- In 2007, 26% of the 43 countries, where data was available, the proportion of undernourished has increased.
- 63% of people Living with HIV/AIDS globally are in Sub-Saharan Africa.
- Tuberculosis incidence and related deaths increased in all sub-regions, except Northern Africa.
- Access to sanitation remains generally below 50% in the Sub-Saharan Africa.

MDGs is the key international agenda, directly linked with health. The powerful role of the Primary Health Care approach is significant in achieving the MDGs.
Global situation of health workforce

Health Service Providers (per 10,000 population) by WHO Region, 2005

<table>
<thead>
<tr>
<th>Region</th>
<th>Number per 10,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>19</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>29</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>30</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>45</td>
</tr>
<tr>
<td>World</td>
<td>62</td>
</tr>
<tr>
<td>Europe</td>
<td>131</td>
</tr>
<tr>
<td>Americas</td>
<td>142</td>
</tr>
</tbody>
</table>

Note:
1. Data as reported by countries (compiled at WHO Regional offices and the Headquarter)
2. Reference year of data for some countries may differ from the reported year 2005
3. Health service providers include: (i) Physicians (ii) Nurses (iii) Midwives (iv) Dentists (v) Pharmacists (vi) Environmental and public health personnel (vii) Lab workers (viii) Community health workers (ix) other health workers
PHC is core to a functional health system

- Health system delivery
- Equitable access
- Health workforce
- Institutional capacity
- Health investment
- Quality of care

A functional health system can only promote a change in the health situation; whereas, the PHC approach is a powerful instrument for achieving the health agenda.

Millennium Declaration has given us the challenge and the opportunity to build partnerships to strengthen the health systems and implement the PHC
Implementation of PHC approach

- The alma Ata Declaration, 30 years back, recognised PHC as an approach that can reduce the inequalities in health.
- Many countries adopted the approach and designed their own system according to their needs.
- Unfortunately, some countries could not implement PHC with the true spirit it was intended at. The components of community participation and intersectoral collaboration have been mostly neglected.
- The approach is still relevant to the new situation.
PHC – a driving force

• A health system based on Primary Health Care represents a feasible and politically appealing policy option.

• Primary Health Care approach is providing us with a unique window of opportunity to contribute towards building a more just society. A society guided by the core values of the right to the highest attainable level of health, through equity and solidarity.
Health system in Iran and Pakistan

Iran & Pakistan

- Rural urban disparities
- Grave health challenges
- Inadequate resources
- Imbalances in health workforce

PHC approach in both courtiers contributed in solving these problems
### Islamic Republic of Iran

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (KM)</td>
<td>16,480,000</td>
</tr>
<tr>
<td>Provinces</td>
<td>30</td>
</tr>
<tr>
<td>Districts</td>
<td>293</td>
</tr>
<tr>
<td>Villages</td>
<td>68,000</td>
</tr>
<tr>
<td>Population</td>
<td>70,472,846</td>
</tr>
<tr>
<td>Urban</td>
<td>68 %</td>
</tr>
<tr>
<td>Rural</td>
<td>32 %</td>
</tr>
<tr>
<td>Official language</td>
<td>Persian</td>
</tr>
<tr>
<td>Religions (%)</td>
<td></td>
</tr>
<tr>
<td>Muslims</td>
<td>99.68</td>
</tr>
<tr>
<td>Christian</td>
<td>0.20</td>
</tr>
<tr>
<td>Zoroastrians</td>
<td>0.07</td>
</tr>
<tr>
<td>Jews</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Health sector organization

MOHME

University of Medical Sciences: Training & education

District Health Centre
Management: logistic and administrative affairs of DHN

Rural Health Centre
Covers 1-5 HH; staffed by GPs, tech and admin. Rudimentary lab facilities

Urban Health Centre
Covers 3-5 HP; staffed by 2 GPs, mainly supervisory role and management of referrals

Health houses: for 1500 people; staffed by male & female Behvarz

Urban health post: for 12,000 people: Health tech., M/W (mainly FP), Health Vol.

Private sector at local levels

Health volunteers in urban areas
PHC in Iran – a progressive expedition

- Pilot project in West Azerbaijan
- Health network testing & local expansion
- Introduction of EPI, CDD & ARI
- Child survival campaign / breast feeding
- Women health volunteers

Future challenges and realities

PHC

Revolution

International Sanctions

Iran-Iraq war

PHC master Plan

1971

1978
1980
1983
1988
1990
2005-06

1979

1980
1983

1973
1980
2000

1983

1990

2005-06

New modalities like Family Physicians

PHC in Iran – a progressive expedition
PHC in Iran – a progressive expedition

Alma Ata

Pilot project in West Azerbaijan
Health network testing & local expansion
Introduction of EPI, CDD & ARI
Child survival campaign / breast feeding
Women health volunteers
FP program revival
Population boom
FP revival
Remarkable decrees in Fertility Rate
PHC master Plan
PHC in Iran – a progressive expedition
1971
1978
1980
1983
1988
1989
1990
2005-06
Future challenges and realities
New modalities like Family Physicians
1970
1980
1990
2000
2010
PHC Phase 1
PHC Phase 2
PHC Phase 3
PHC Phase 4
1983
Child survival campaign / breast feeding
Remarkable decrees in Fertility Rate
Child survival campaign / breast feeding
Remarkable decrees in Fertility Rate
Child survival campaign / breast feeding
Remarkable decrees in Fertility Rate
Child survival campaign / breast feeding
Remarkable decrees in Fertility Rate

International Sanctions

PHC

Family Planning

Revolution

Iran-Iraq war

International Sanctions

PHC

Family Planning

Iran Vision by 2025
PHC in Iran – a progressive expedition

**Alma Ata**
- Pilot project in West Azerbaijan
- Health network testing & local expansion
- Introduction of EPI, CDD & ARI
- Child survival campaign / breast feeding
- Women health volunteers

**PHC Plan**
- National plan for mental health
- FP program revival
- Mental health integrated in PHC
- Mental health integration in PHC
- New modalities like Family Physicians

**Future challenges and realities**
- Iran Vision by 2025

**International Sanctions**
- Population boom
- FP Revival
- Remarkable decrees in Fertility Rate

**PHC in Iran – a progressive expedition**
- PHC in Iran + Family Planning + Mental Health

**Revolution**
- Iran-Iraq war
- PHC

**PHC**
- Phase 1
  - 1970
- Phase 2
  - 1980
- Phase 3
  - 1990
- Phase 4
  - 2000
- Country wide expansion & development
- Population boom
- FP Revival
- Remarkable decrees in Fertility Rate
PHC infrastructure in Iran

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Rural Areas</th>
<th>Urban Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural health centres</td>
<td>2,296</td>
<td></td>
</tr>
<tr>
<td>Behvarz training centers</td>
<td>241</td>
<td></td>
</tr>
<tr>
<td>Health houses</td>
<td>2,296</td>
<td></td>
</tr>
<tr>
<td>Behvarzes (male and female)</td>
<td>25,468</td>
<td></td>
</tr>
<tr>
<td>Urban health centers</td>
<td></td>
<td>2,212</td>
</tr>
<tr>
<td>Urban health posts</td>
<td></td>
<td>1,118</td>
</tr>
<tr>
<td>Women health volunteers</td>
<td></td>
<td>45,500</td>
</tr>
</tbody>
</table>

In rural areas, Behvarz (male & female) work in the Health Houses; whereas, in urban areas, women health volunteers worth through Health Posts.

Source: MOHME, 2006
Functions of a Health House / Behvarz

- Families registration and update information
- Formation of local health council and volunteer groups
- Home visits and community health education
- Mother and child health
- Immunization
- Nutritional care
- Prenatal care and family planning
- Environmental health
- Control of endemic diseases
- Basic medical care and follow up
- Treatment of common diseases (set protocols)
- Mental health (as 9th component of PHC by Iran)
- Assistance in school health, occupational health, and rehabilitation

Female Behvarzes are more involved and mother and child health whereas, male Behvarzes are more involved in sanitation and environment.

Behvarzes are trained for two years in Behvarz Training Centres.
PHC-based Health Information System

- Vital horoscope (a wall chart for key information)
- Household file (containing demographic and health information)
- Various logbooks for daily activities and monthly report forms.
Integration of Medical Education and Health Services

**Before 1985**
- MOH responsible for health services
- Medical education was under different ministry

**After 1985**
- Medical Education, Research and Health Services integrated and new ministry created with name of MOHME

**Chancellors of the universities in provinces became in-charge of medical education as well as services, leading three vice – chancellors for: medical education, research, and health services.**
Impact of integration of Medical Education and Health Services

- Increase in Medical Universities from 4 to 40
- Increase in production of health workforce: Physicians from few thousand to 61,870, dentist to 13210, Pharmacist to 13900, and Nurses & Midwifes 111107 (WHO-2006)
- Curriculum development through Education Development Centres
- Initiatives like Community Oriented Medical Education
- Decentralization of health management system
- Improvement in PHC coverage and health outcomes
- Initiated health research on PHC / Population Health Labs
- Improved in referral system / technical support to PHC

Source: Evaluation of Integration of Medical Education and Health services, 2006
Re-emphasis on Family Planning

Immediately after Revolution, restrictions on FP services

Population boom in early 1980’s due to ban on FP, need for young manpower due to Iran-Iraq war, and other factors

Government realized the need for FP and provided all legislative and advocacy support

Dramatic decrease in fertility rate and population

Family planning included as an essential component of PHC and a function of Health Houses/Behvarz
Total Fertility Rate trends

Changes in Neonatal Mortality Rate

Source: Center for Population Studies & Research, Ministry of Science, Research & Technology, Iran, 2004, MOHME, 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>62</td>
<td>120</td>
</tr>
<tr>
<td>1985</td>
<td>33</td>
<td>71</td>
</tr>
<tr>
<td>1988</td>
<td>31</td>
<td>58</td>
</tr>
<tr>
<td>1991</td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td>1998</td>
<td>27.2</td>
<td>30.2</td>
</tr>
<tr>
<td>2006</td>
<td>15</td>
<td>23</td>
</tr>
</tbody>
</table>
Major success factors

- Political support and ownership
- Universal access
- PHC principles in line with government agenda
- Community-oriented approach
- Decentralized management system through integration of medical education and health services
- Integration of vertical programs into health system
- Strong role of Behvarzes
- CME and professional development programs for health staff
- Substantial health research on PHC system and feedback actions
Challenges

• Addressing issues of the transition:
  – Unfinished and emerging diseases
  – Change in socio-economic status
  – Rapid urbanization
  – Changing roles of Government, privates sector and NGOs

• Coping with new technologies and professional developments.

• Reforming organizational structures and managerial systems

• Improving quality of care and referral system

• Strengthening community involvement and inter-sectoral coordination
| **Area (km)**: | 976,096 |
| **Provinces**: | 4 |
| **Areas**: | 4 |
| **Districts**: | 126 |
| **Population**: | 159 million |
| Urban | 38 % |
| Rural | 62 % |

**National language:** Urdu
National Program for Family Planning and Primary Health Care

- Initiative by Government of Pakistan in 1994
- A new cadre of Community Health Workers (Lady Health Workers).
- Trained for 3 months, with in-service continuous education for 12 months
- One LHW for 200 households or 1000 population
- Establishing health houses— one dedicated room
- By 2007, strength increased to 100,000
Management structure of NP for FP & PHC

- **FPIU**: Federal MoH
- **PPIU**: Provincial DoH
- **DPIU**: District Health Office
- **LHS/FLCF**: First level Health Facility
- **LHW**: Clients

First level Health Facility
Functions of Lady Health Workers

- Liaison between health facility and community
- Registration of families
- Community organization (women groups and health committees)
- Health education and health promotion
- Maternal and child health including family planning (and referral)
- Nutritional interventions, like anemia control, growth monitoring
- Coordinate immunization of mothers and children
- Prevention and treatment of minor ailments, (and referral)
LHW knowledge score by year of schooling

Source: Evaluation of National Program of PHC&FP, 2002
## Community (female) response on LHWs

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know the LHW and know that she is working as a LHW</td>
<td>98%</td>
</tr>
<tr>
<td>LHW lives most of the time in the village/locality</td>
<td>94%</td>
</tr>
<tr>
<td>It is usually possible to go for a consultation at the LHWs house</td>
<td>93%</td>
</tr>
<tr>
<td>LHW goes to visit households on most days of the week</td>
<td>78%</td>
</tr>
<tr>
<td>LHW has visited married women in their homes in the last month</td>
<td>72%</td>
</tr>
<tr>
<td>Become are usually respected after becoming LHWs</td>
<td>89%</td>
</tr>
</tbody>
</table>

*Source: Evaluation of National Program of PHC&FP, 2002*
Level of services provision by stratum and type of services

Source: Evaluation of National Program of PHC&FP, 2002
% of married women 15-40 yrs ever used modern FP methods

Source: Evaluation of National Program of PHC&FP, 2002
Comparison of trends in TFRs in LHW and control areas

Urban areas

Rural areas

Source: Evaluation of National Program of PHC&FP, 2002
% of children whose mother had at least one prenatal consultation (by year of birth)

Source: Evaluation of National Program of PHC&FP, 2002
% of children given BCG vaccination before age 12 months

Source: Evaluation of National Program of PHC&FP, 2002
Growth monitoring activities in LHW and other areas

Source: Evaluation of National Program of PHC&FP, 2002
Comparison of Infant Mortality Rate

Source: NP on PHC&FP, Annual progress report 2006
## Planned and actual health expenditure per LHW (US$)

<table>
<thead>
<tr>
<th>Service</th>
<th>Planned Cost</th>
<th>Actual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>(%)</td>
</tr>
<tr>
<td>Salaries</td>
<td>$308.40</td>
<td>31</td>
</tr>
<tr>
<td>Drugs/contraceptives</td>
<td>$393.22</td>
<td>39</td>
</tr>
<tr>
<td>Lady Health Worker training/kit</td>
<td>$120.02</td>
<td>12</td>
</tr>
<tr>
<td>Supervision</td>
<td>$132.82</td>
<td>13</td>
</tr>
<tr>
<td>Media and Health Education</td>
<td>$24.31</td>
<td>2</td>
</tr>
<tr>
<td>Administration and Health Management Information System</td>
<td>$24.31</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Evaluation of National Program of PHC&FP, 2002
Success factors

- Strong political leadership and support
- Need based and cost effective approach (LHW’s salary is US$ 343 per year and only 4% admin. cost)
- Local belonging and community led selection
- Respect to local values and cultures
- Optimum educational level
- Phase wise and pedagogical training
- Use of simple technologies and tools
- Systematic monitoring and supervision
Major challenges

- Decaying infrastructure and weak governance
- Verticality of health programmes and unsatisfactory quality of services
- Limited resources for public sector and inadequate oversight over private sector
- Weak referral mechanisms due to insufficient coordination between PHC and hospital care
- Inadequate social protection of health staff, especially for females and in remote areas
- Increased expectations and overload on health workers
Comparison of both models
Common factors

- Political support and commitment
- Community based approach and selection
- Essential services through community health workers
- Health houses in local communities
- Defined curricula, practical training and skills development
- Use of simple technologies and tools
- Effective supervision and monitoring
- Cost effectiveness and sustainability
## Differences

<table>
<thead>
<tr>
<th>Component area</th>
<th>Iran</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management system</td>
<td>Managed by district health network</td>
<td>Federally administered programme</td>
</tr>
<tr>
<td>Health house</td>
<td>Built by government (health house and residence)</td>
<td>One room devoted by LHW in her home</td>
</tr>
<tr>
<td>Gender and role</td>
<td>Male &amp; female Behvarzes with different roles</td>
<td>Females only</td>
</tr>
<tr>
<td>Service structure</td>
<td>Regular</td>
<td>Not regular</td>
</tr>
<tr>
<td>Coverage</td>
<td>Above 90%, Behvarz in rural areas and VHW in Urban areas</td>
<td>100,000 LHWs, covering majority of rural and urban areas</td>
</tr>
<tr>
<td>Health programs</td>
<td>Mostly integrated, some vertical</td>
<td>Mostly vertical</td>
</tr>
<tr>
<td>Health change</td>
<td>Drastic change</td>
<td>Evident change</td>
</tr>
</tbody>
</table>
PHC approach still relevant

• With the global trends and changing landscape of public health, countries still view PHC as a policy cornerstone.

• Evidence overwhelmingly demonstrates that health systems oriented towards primary health care produce better outcomes, at lower costs, and with higher user satisfaction. The need to strengthen Health Systems using PHC approach has been recognized
PHC implementation models

• There is no place for a “blue print” approach to implement PHC.
• Primary health care is conditioned by its holistic framework and use different expressions.
• There is enormous diversity in the PHC models. No one application of the PHC approach is to be championed.
• What is required, a shared understanding of some of the key forces driving a comprehensive PHC with a commonality of approach during implementation.
Primary health care and other approaches

The emerging concepts like Community-based Initiatives for Health and Development, Social Determinants of Health and others

PHC should be tailored to various perspectives and other approaches within a system perspective.
Health system challenges in the changing world

• Health systems do not gravitate towards the goals of health for all through PHC.

• Health systems are developing in direction that contribute little to equity and social justice and fail to get the best health outcomes for their money, as:
  – More focus is on narrow specialised care
  – Disease control focuses on short-term results
  – Un-regularized commercialization of health

• The resulting inequalities access, impoverishing costs, and erosion of trust in health care cause a threat to social stability
Growing expectations and PHC approach

• Growing realization that:
  – PHC can provide a stronger sense of direction and unity
  – Conventional health care is less effective
  – Mismatch of expectations and performance
  – Growing economic weight and cost of health care

• Increasing popular support for better health equity, an end to exclusion, and health services centred to people's needs and expectations, ensuing health security of the communities.

• These expectations resonate with the values that were core of Alma Ata Declaration 1978.

• Demand for reforming the health system, aligned with the primary health care.
Revitalization of PHC

WHO has called for revitalization of primary health care as an approach to strengthening health systems.

Taking forward PHC policies and models in the 21st century:
- Completing implementation
- Strengthening to meet new challenges
- Locating PHC in a new paradigm
- Responding to a population health crisis
"I believe we will not be able to reach the health-related Millennium Development Goals unless we return to the values, principles, and approaches of primary health care."
Clarifications