Millennium Development Goals 4 & 5
Where are we in Pakistan ?

April 28, 2009

Presentation Outline

- Millennium Development Goals (MDGs)
- Data from Pakistan Demographic and Health Survey (PDHS) 2006-2007
- Pakistan's progress towards Goal 4 & 5
- Why is it so?

Millennium Development Goals


Goal 1: Eradicate extreme poverty and hunger


Goal 2: Achieve universal primary education


Goal 3: Promote gender equality and empower women


Goal 4: Reduce child mortality


Goal 5: Improve maternal health


Goal 6 Combat HIV/AIDS, tuberculosis, malaria and other diseases


Goal 7: Ensure environmental sustainability


Goal 8: Develop a global partnership for development

189 countries agreed on certain goals as commonly accepted framework for measuring progress.
UN Millennium Summit 2000.

Millennium Development Goals for Maternal and Child Health (4 & 5)

Millennium Development Goal 4: Reduce Child Mortality	
Targets	
4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	
Millennium Development Goal 5: Improve Maternal Health	
Targets	
5.A: Reduce by three quarters, between 1990 and 2015, the Maternal Mortality Ratio	
5.B: Achieve, by 2015, universal access to reproductive health*	

*Added in January 2008

UNICEF State of The World's Children 2009

Millennium Development Goal 4: Reduce Child Mortality

Targets & Indicators

Target 4.A:

- **Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate**

Indicators:

4.1 Under-five mortality rate
4.2 Infant mortality rate
4.3 Proportion of 1 year-old children immunised against measles

Pakistan

Demographic and Health Survey 2006-07

Pakistan
Demographic and Health Survey
2006-07

National Institute of Population Studies
Islamabad, Pakistan

Macro International Inc.
Calverton, Maryland USA

June 2008

USAID
FROM THE AMERICAN PEOPLE

NIPS

Pakistan Demographic and Health Survey

Objectives

Provide information on

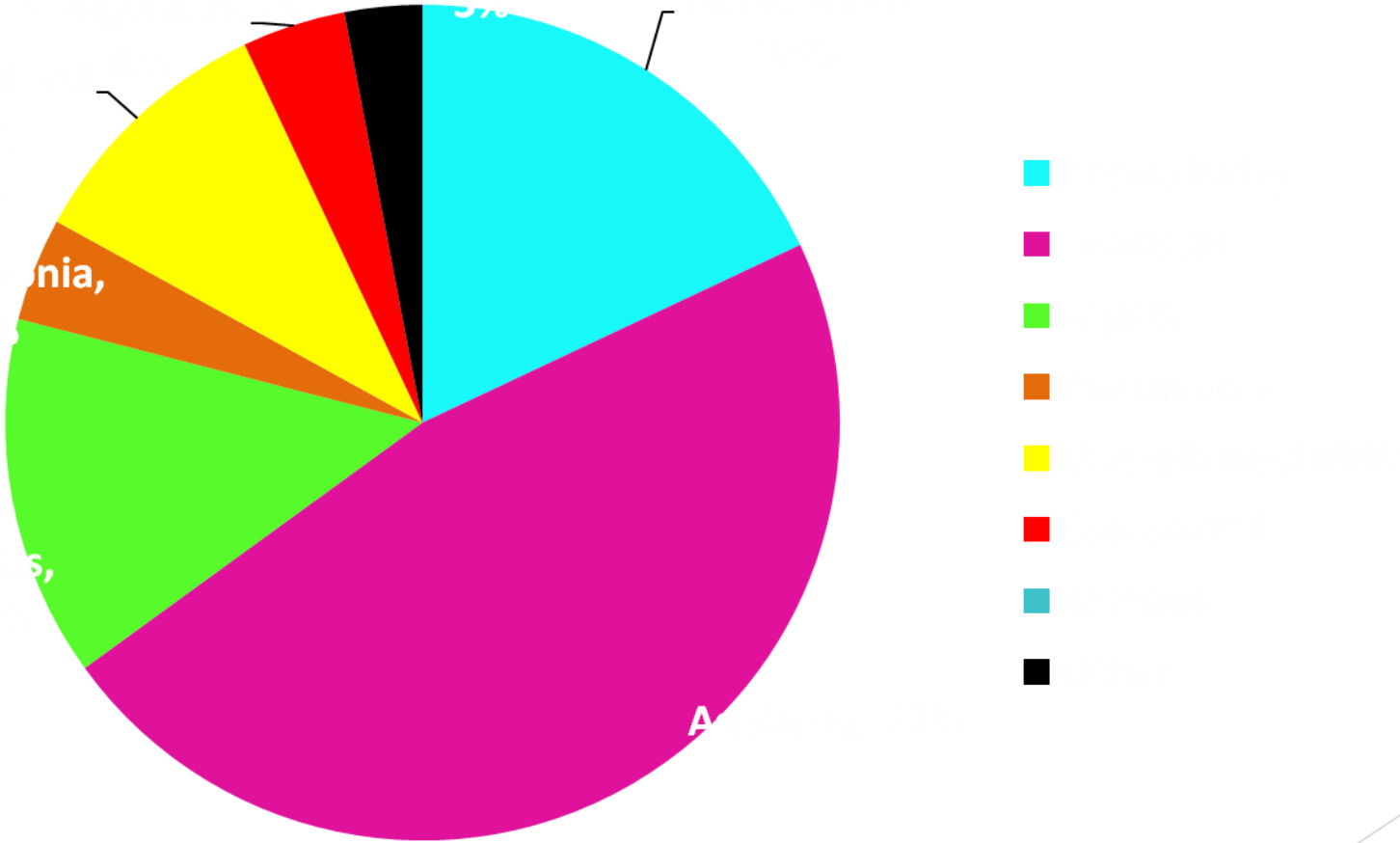
- Fertility
- Family Planning
- Maternal and Child Health
- Childhood mortality
- Adult and maternal mortality
- HIV/AIDS related awareness and behaviour

Findings: Childhood Mortality

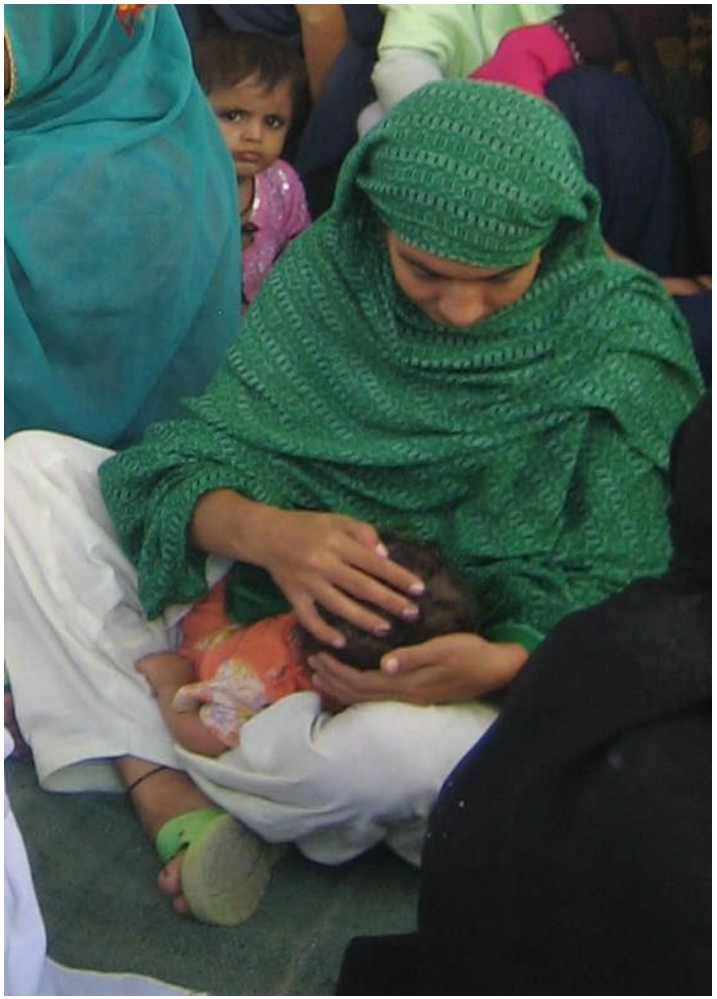
- Infant mortality rate 78 per 1000 live births
- Under five mortality rate 94 per 1000 live births
- Perinatal mortality rate 159 per 1000 pregnancies
- 50% babies die in the first month of life - majority in the first 3 days
- 1 in 11 children dies before reaching age 5

*PDHS 2006-07

Causes of Early Neonatal Deaths (0-7 days)



Perinatal Deaths and Morbidity



- A reflection of the health and nutritional status of the mother --- chronic maternal malnutrition and under nutrition is closely linked to low birth weight babies
- The quality of care she receives during pregnancy and childbirth
- Quality of health care for the newborn

Immunization against measles:

Children aged 12-23 months- 60 Percent

Male: 63.1%

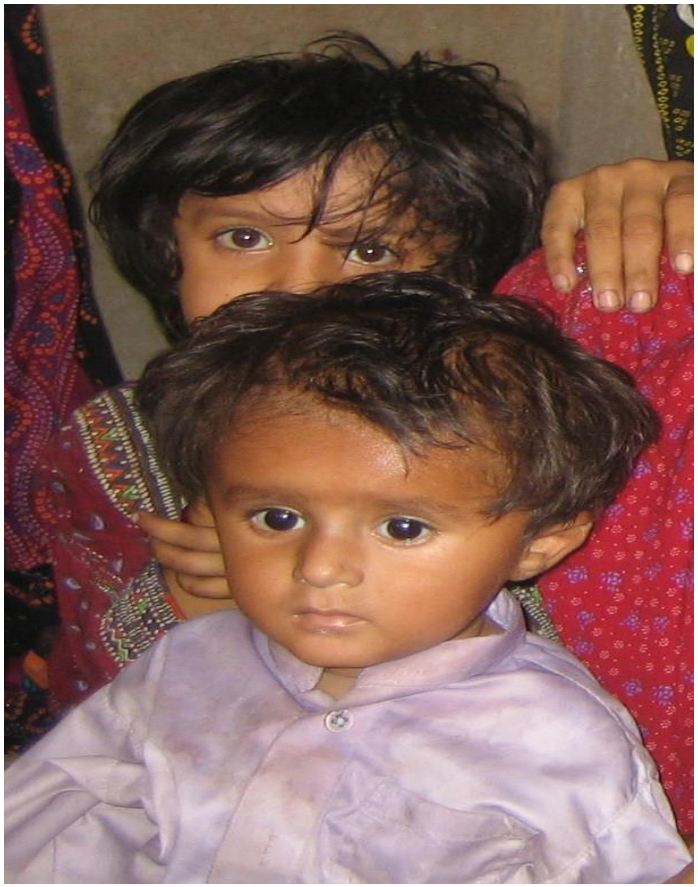
Female: 56.1%

Urban: 68.8%

Rural: 55.7%

children one year old 50%

Morbidity and mortality are significantly reduced due to the immunization program in Pakistan



It is estimated that more than

100,000 deaths due to measles,

70,000 cases of neonatal tetanus, and

20,000 paralytic cases of poliomyelitis

are being prevented

each year in Pakistan

due to these vaccinations

(NIH, 2008)

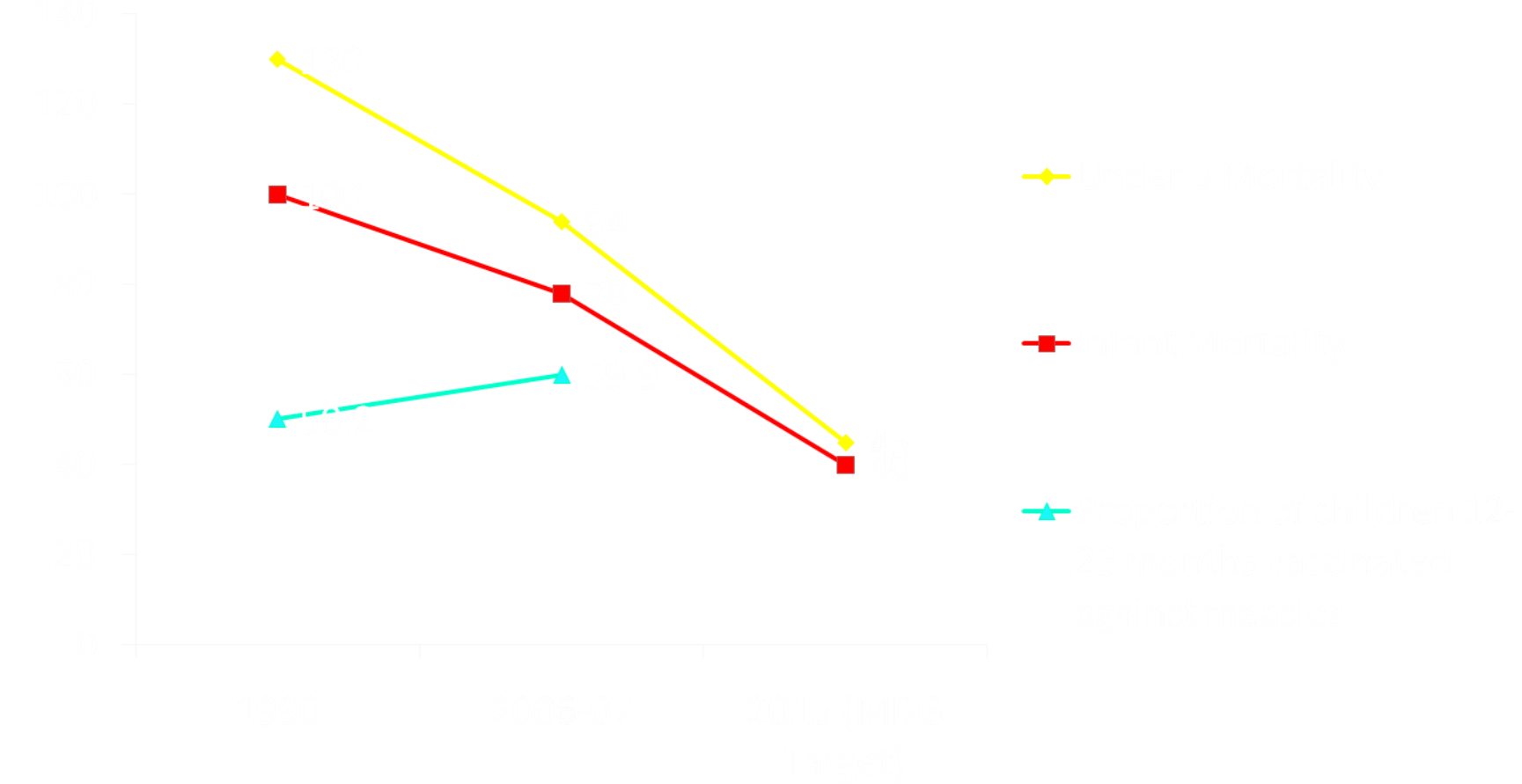
PDHS 2006-07

Trend in Indicators for Child Health

Indicator	1990	2006-2007	2015
Under Five Mortality Rate	130	94	45
Infant Mortality Rate	100	78	40
Proportion of 1 year-old children immunised against measles	50	50	>90

PDHS 2006-07
Ministry of Health 2006

Current trend and MDG Target 4 in PAKISTAN



PDHS 2006-07
Ministry of

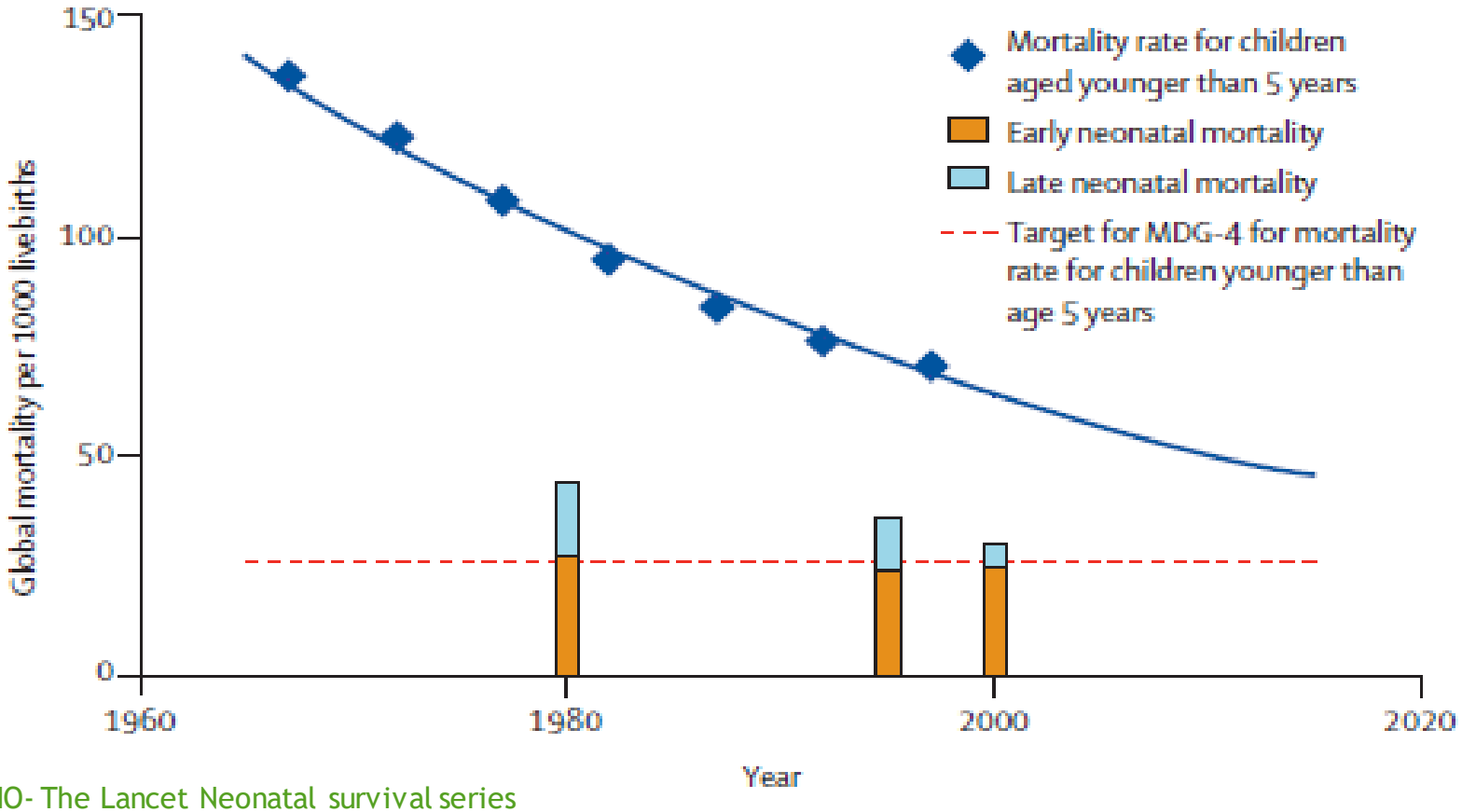
South Asian countries- Progress towards MDG 4

Reduce child mortality-indicators	World 2007	South Asia 2007	Afghanistan 2007	Bangladesh 2007	India 2007	Nepal 2007	Pakistan* 2007	MDG Target 2015
Under 5 mortality	72	83	-	69	76	59	94	45/1000
Infant mortality	49	62	-	52	57	46	78	40/1000
Proportion of fully vaccinated children 12-23 months	80	65	68	81	59	85	47	>90%

World Bank Group, September 10, 2008

GLOBAL trends in child mortality among those younger than age 5 years and in first 28 days of life, 1965-2015

Trend for deaths in children younger than age 5 years fitted assuming constant proportional reduction every year.



WHO- The Lancet Neonatal survival series

To meet MDG 4
a substantial reduction in Neonatal Mortality Rate
is needed,
especially in the first week

How can Child Mortality be Reduced?

Almost 3 million of the 4 million babies who die **globally** each year

can be saved with

low-tech, low-cost interventions.

These interventions, which would also help save the lives of mothers and prevent stillbirths, are not reaching those most in need

WHO- The Lancet Neonatal survival series

Millennium Development Goal 5: Improve Maternal Health

Targets & Indicators

- **5.A: Reduce by three quarters, between 1990 and 2015, the Maternal Mortality Ratio**
  - 5.1 Maternal mortality ratio
  - 5.2 Proportion of births attended by skilled health personnel

- **5.B: Achieve, by 2015, universal access to reproductive health***
  - 5.3 Contraceptive prevalence rate
  - 5.4 Adolescent birth rate
  - 5.5 Antenatal care coverage (at least one visit and at least four visits)
  - 5.6 Unmet need for family planning

‘maternal mortality remains the indicator of population health that reveals most starkly the profound inequities of our time’

Lynn Freedman
Columbia University

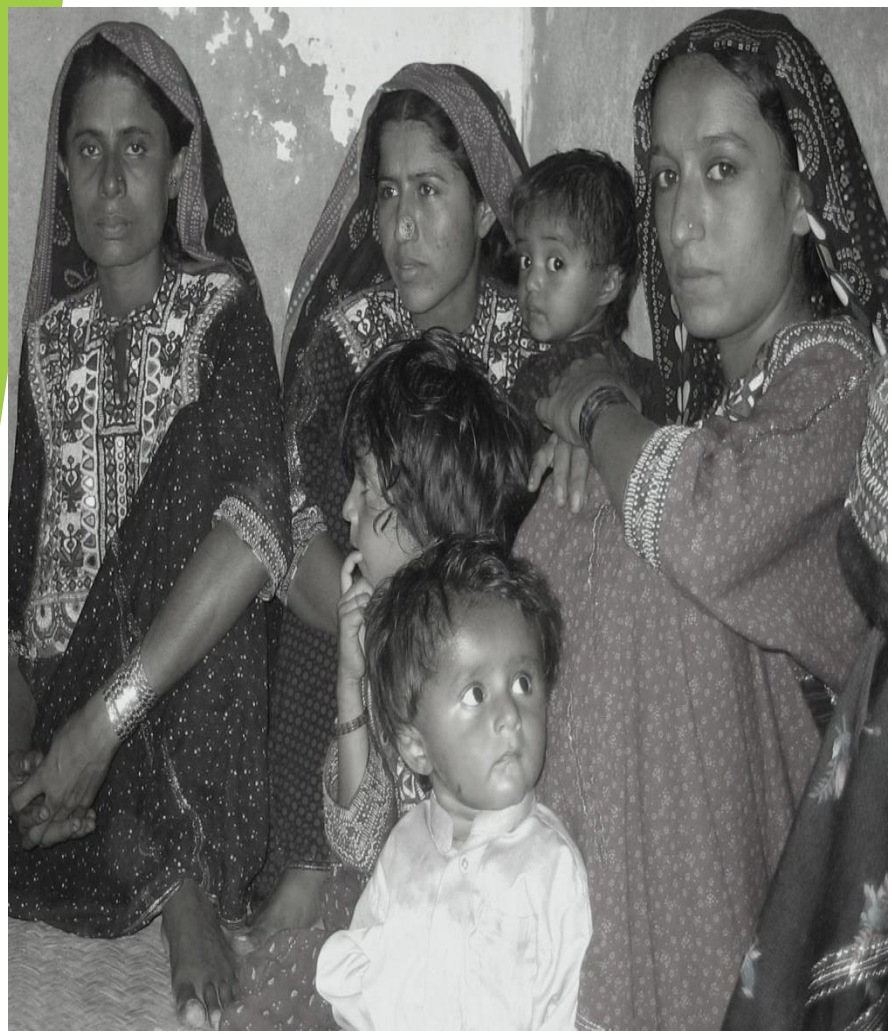
Maternal Mortality Ratio

276 deaths per 100,000 live births

1 maternal death occurs every **30-40** minutes

LIFETIME RISK

1 in 89 women in Pakistan will die of Maternal causes during her life time



The hardest hit are the poor and rural women

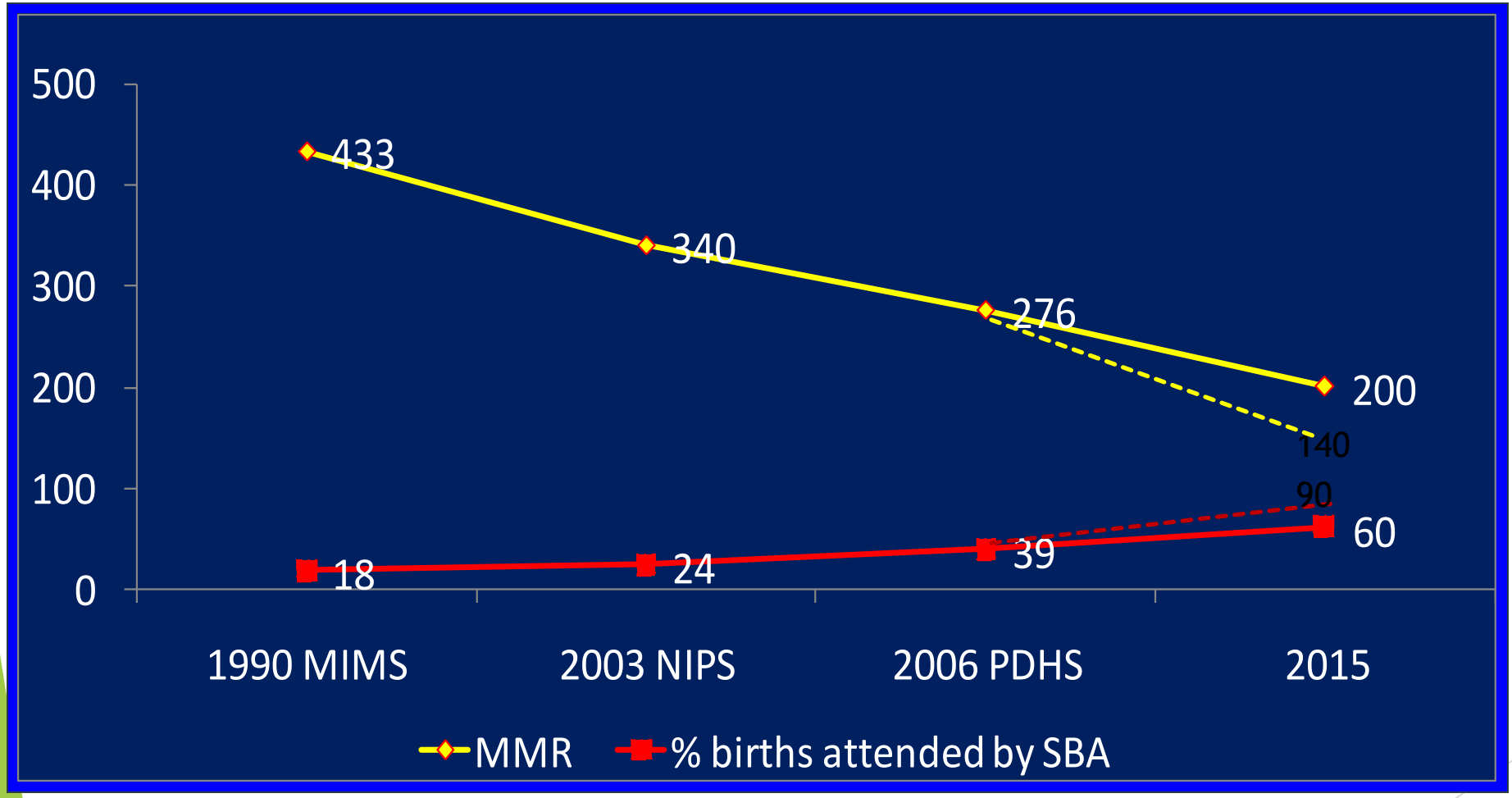
Skilled Birth Attendance

Less than two-fifths (39 percent) of births take place with the assistance of a skilled medical provider (doctor, nurse, midwife, or Lady Health Visitor)

Urban	60%
Rural	30%

PDHS 2006-07

Current trend for MDG Target 5 A in Pakistan



PDHS, NIPS- 2006-07

South Asian countries- Progress towards MDG5 Target A

Country	Maternal Mortality Ratio (per 100,000 live births)			Deliveries by skilled birth attendants (%)	Progress
	1990	Latest (year)	MDG 2015	2000- 2006	
Bangladesh	574	380 (2002)	143	20	Insufficient
Bhutan	560	255 (2000)	140	51	Insufficient
India	437	301 (2005-06)	109	47	Insufficient
Maldives	500	72 (2005)	125	84	On Track
Nepal	515	281 (2005)	134	19	Insufficient
Pakistan*	433	320 (2007) 276**	140	39	Insufficient
Srilanka	92	47 (2001)	36	97	On Track

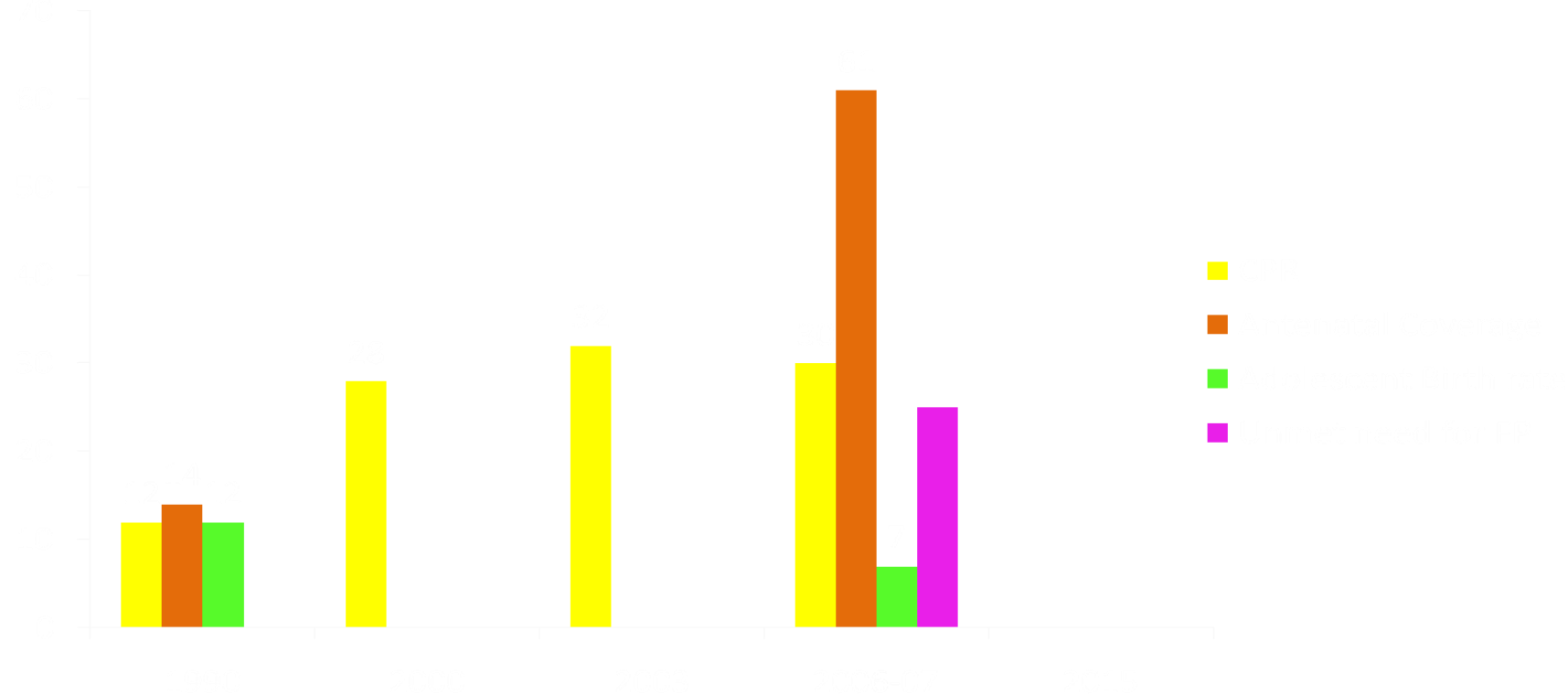
Latief D. WHO/SEARO 2008
*Government of Pakistan
** PDHS 2006-2007

Indicators for MDG Target 5 B in Pakistan

Indicators 5B	2006-07
5.3: Contraceptive Prevalence %	30
5.4: Antenatal Coverage %	61
5.5: Adolescent Birth Rate %	7
5.6: Unmet Need for Family Planning %	25

PDHS-2006-07

Current trend for MDG Target 5 B in Pakistan

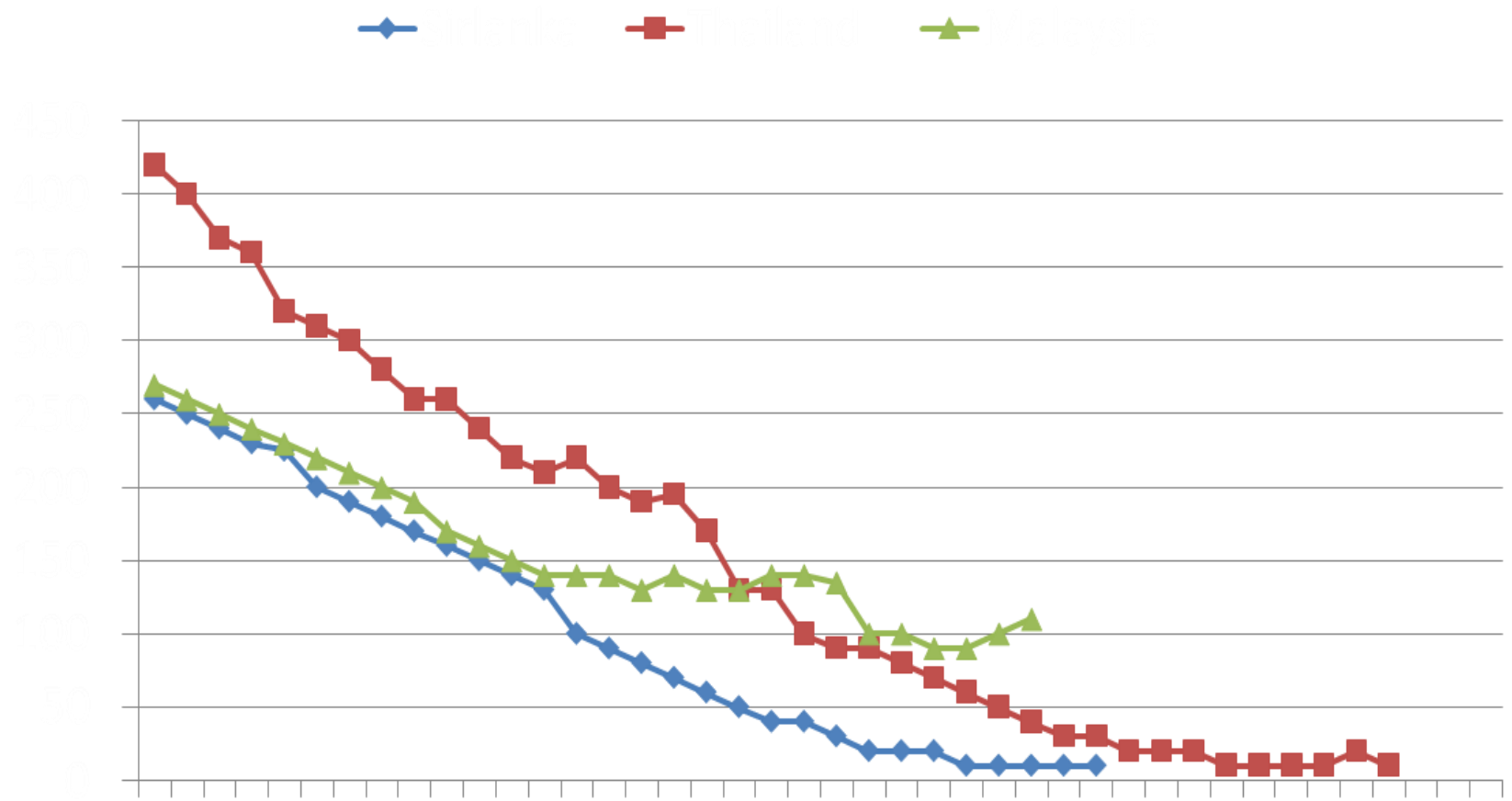


5

IMPROVE MATERNAL HEALTH

Progress is possible

Trends in Maternal Mortality



Reproduced from The Lancet September 2006

What has worked in the world?

- **Malaysia, Sri Lanka, Thailand, Tunisia have reduced the number of maternal deaths in half in a decade by increasing access to:**
  - Skilled birth attendance
  - Emergency obstetric care
  - Family planning services
- **For reduction of maternal mortality, "What works" is pretty well documented**

What do we need to do?

A. Strengthen health systems

B. Provide continuum of care across life cycle and place

Strengthening Health Systems

There is increasing consensus that strengthening health systems has a very crucial role in reducing the high ratios of maternal mortality and morbidity

Situation Analysis of Emergency Obstetric Care (EmOC) Services

Situation Analysis of 48 health facilities in 4 districts of Sindh (Tertiary 20, Secondary 18 and First level 10) **showed:**

- There was shortage of number of health facilities providing EmOC.
- 89% of secondary level facilities provided 24 hours coverage for cases with complications.
- The obstetric team (Surgeon, Anesthetist and Operation Theater Attendant) were available in 39% facilities only.

Contd..

Situation Analysis of Emergency Obstetric Care (EmOC) Services

- The knowledge and skills of health care providers were deficient
- Resuscitation of the new born was carried out by the person (Nurse, Doctor) who conducted the delivery. Only 33% facilities reported having a Pediatrician on call for high risk pregnancies.
- Resuscitation equipment was not present in 30 to 40% of the public facilities

Contd..

Situation Analysis of Emergency Obstetric Care (EmOC) Services

- There was extreme shortage of essential supplies and equipment.
- Record keeping was almost non- existent
- Referral system was not in place

Continuum of care across life cycle and place

Strengthening provision of care across the life cycle -- from home/community to the health facilities

Proper referral chain of facility- based services.

Take the services where they are needed most and when they are needed

HEALTH POLICY 2009

Draft

VISION

"a health system that is efficient, equitable and effective to ensure acceptable, accessible and affordable health system services. It will support people and communities to improve their health status while it will focus on addressing social inequities and inequities in

The Challenge in Pakistan
is **not**
what to do and how to do it…

The Challenge
is
Implementing what is known!

37 years ago…

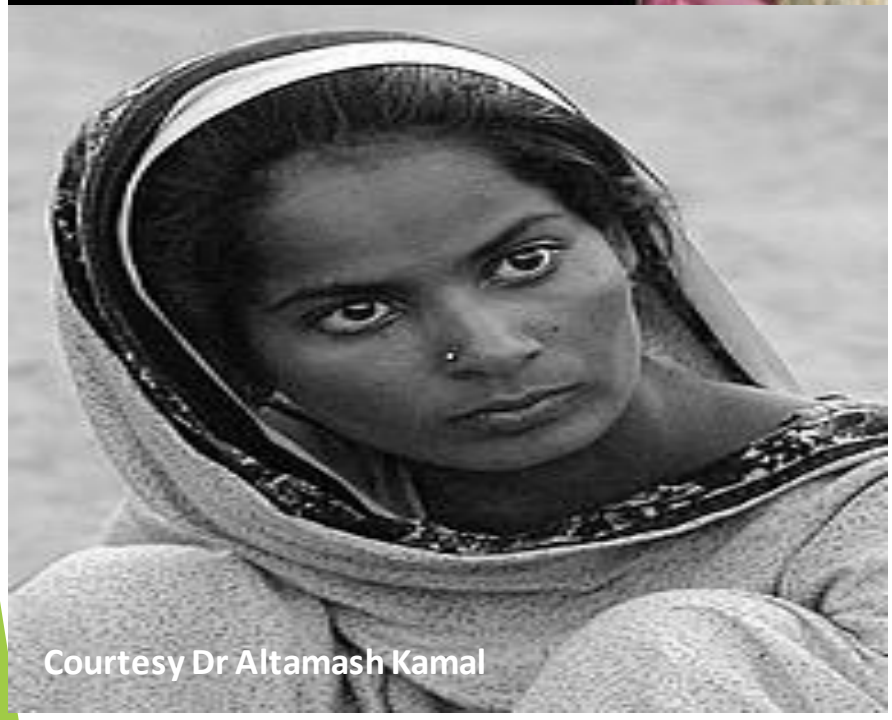
‘The M.M.R. is very alarming…

We hope that with better nutrition, reduced parity, better awareness of the importance of antenatal care and increase in the facilities available for maternal care we will be able to reduce our maternal mortality to levels comparable with western countries’.

Jafarey S.N. Review of M.M. over 10 years period at JPMC, JPMA March 72

‘ the great thing to know
is not
where we are,
but
in which direction we are
moving’

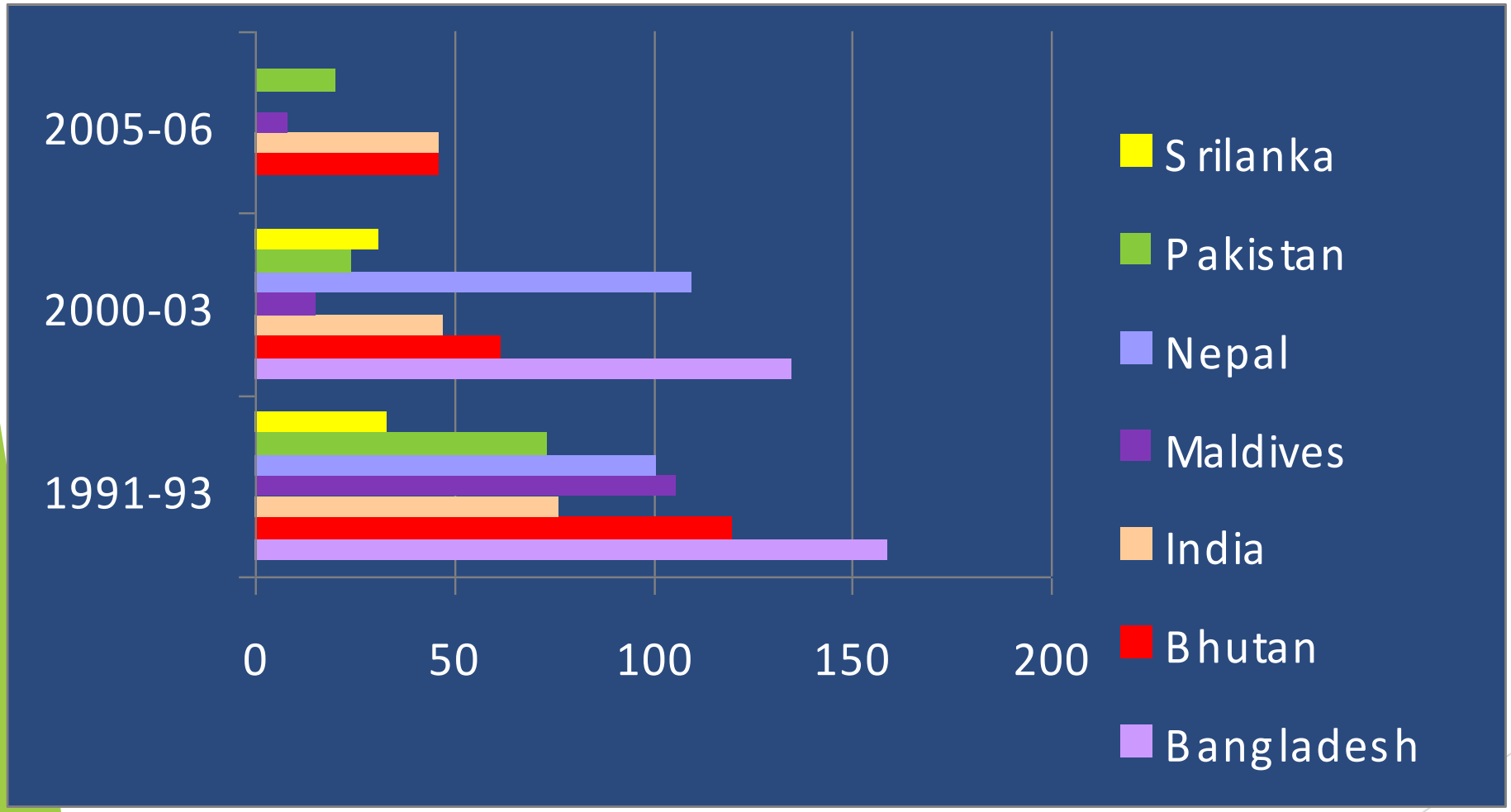
Oliver



Thank you for giving us Hope

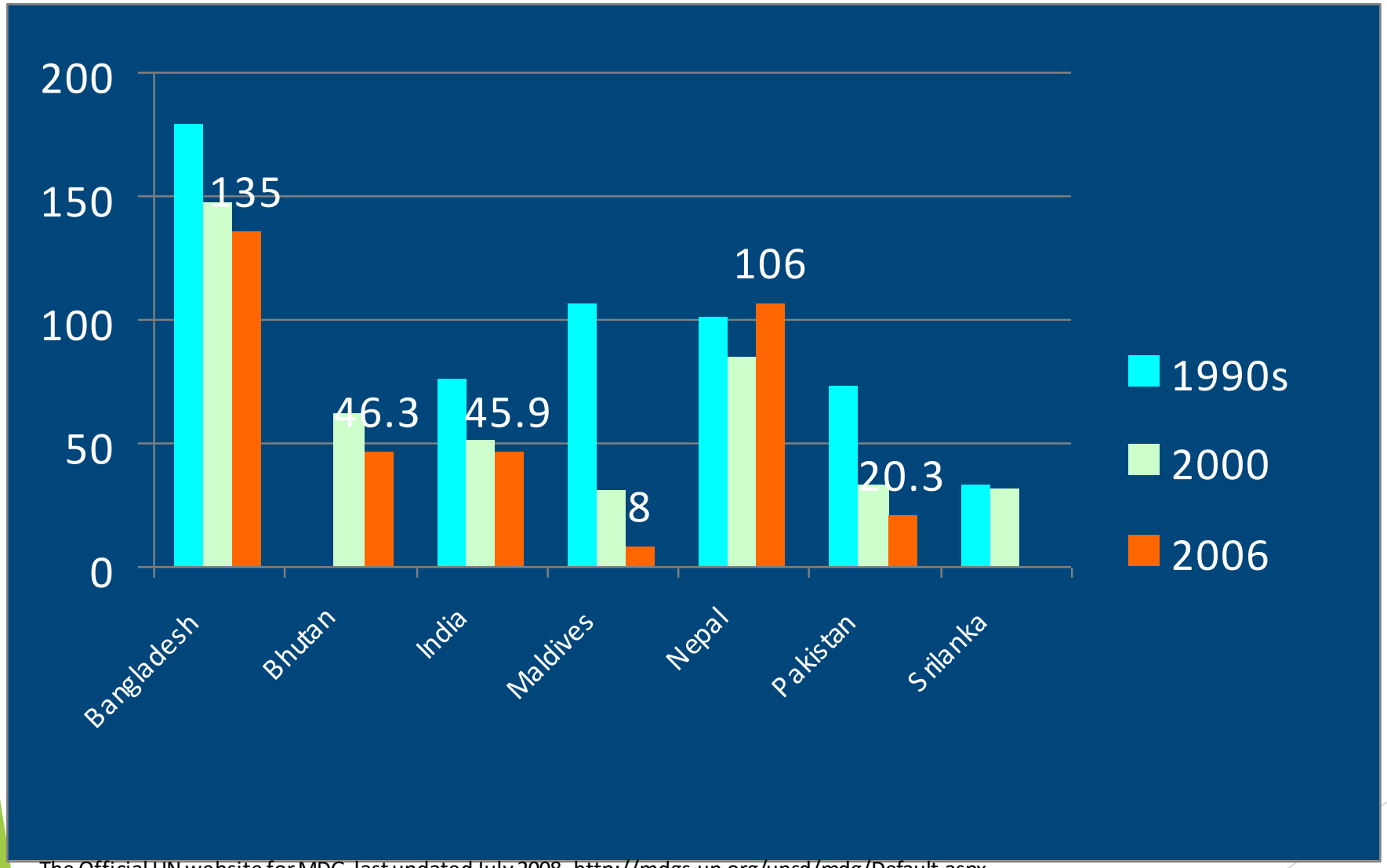
Target Indicator 5.B: Achieve, by 2015, universal access to reproductive health

5.4: Adolescent Birth rate %



The Official UN website for MDG, last updated July 2008. http://mdgs.un.org/unsd/mdg/Default.aspx

Target 5.4 – Adolescent Birth Rate (%)



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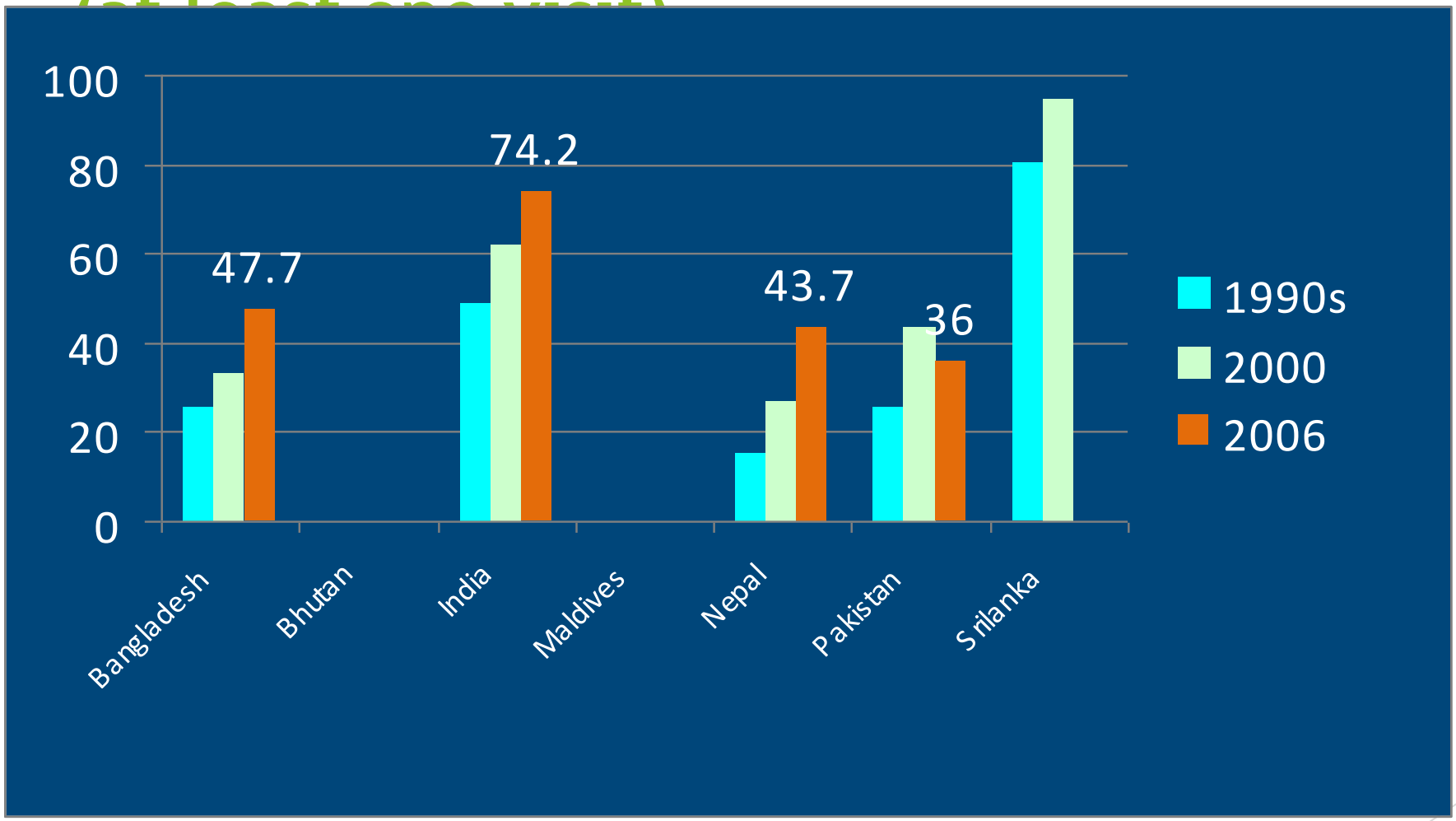
Target 5.5 - Antenatal Care Coverage (%)



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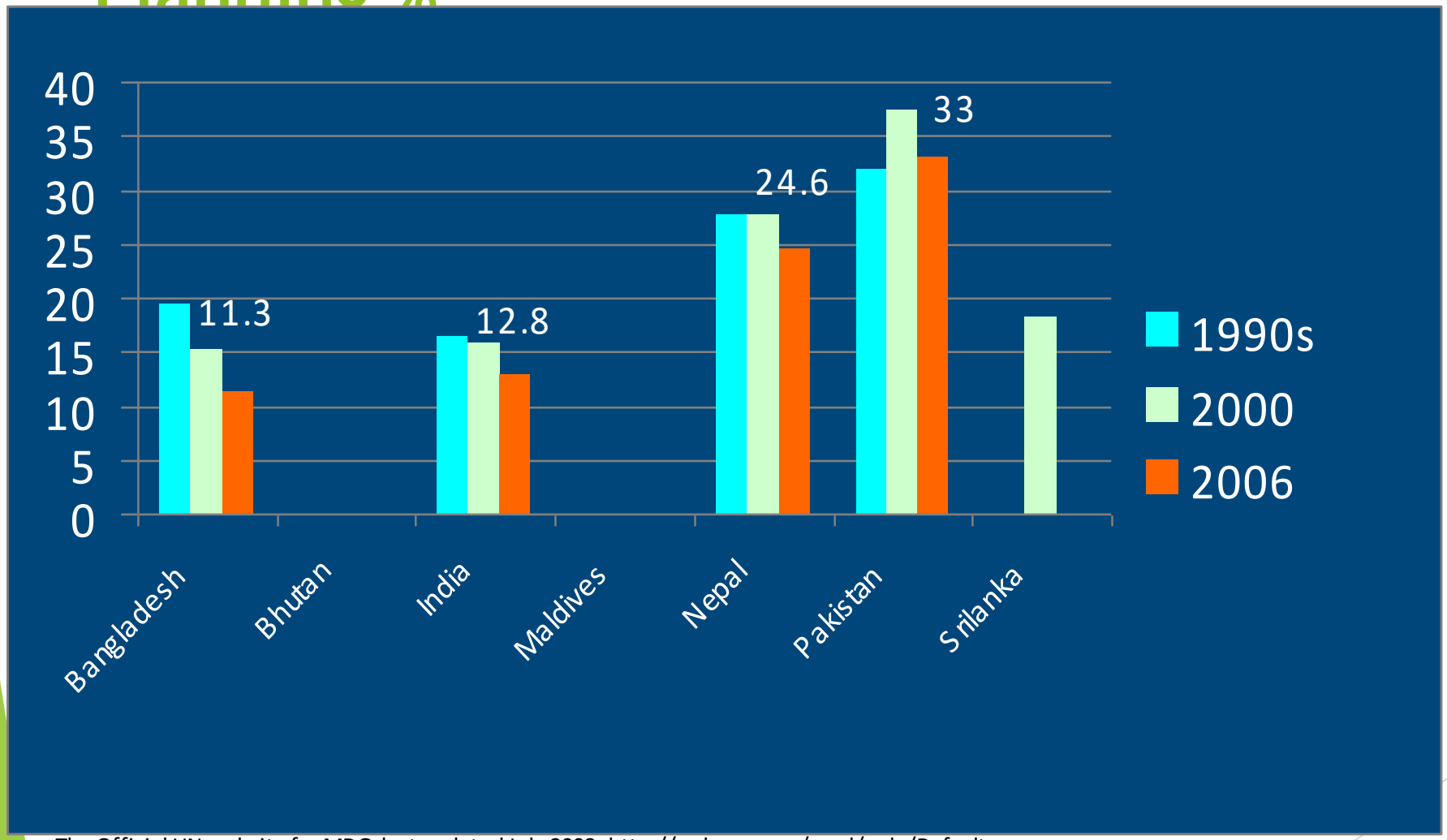
Target 5.6 – Unmet Need For Family Planning %



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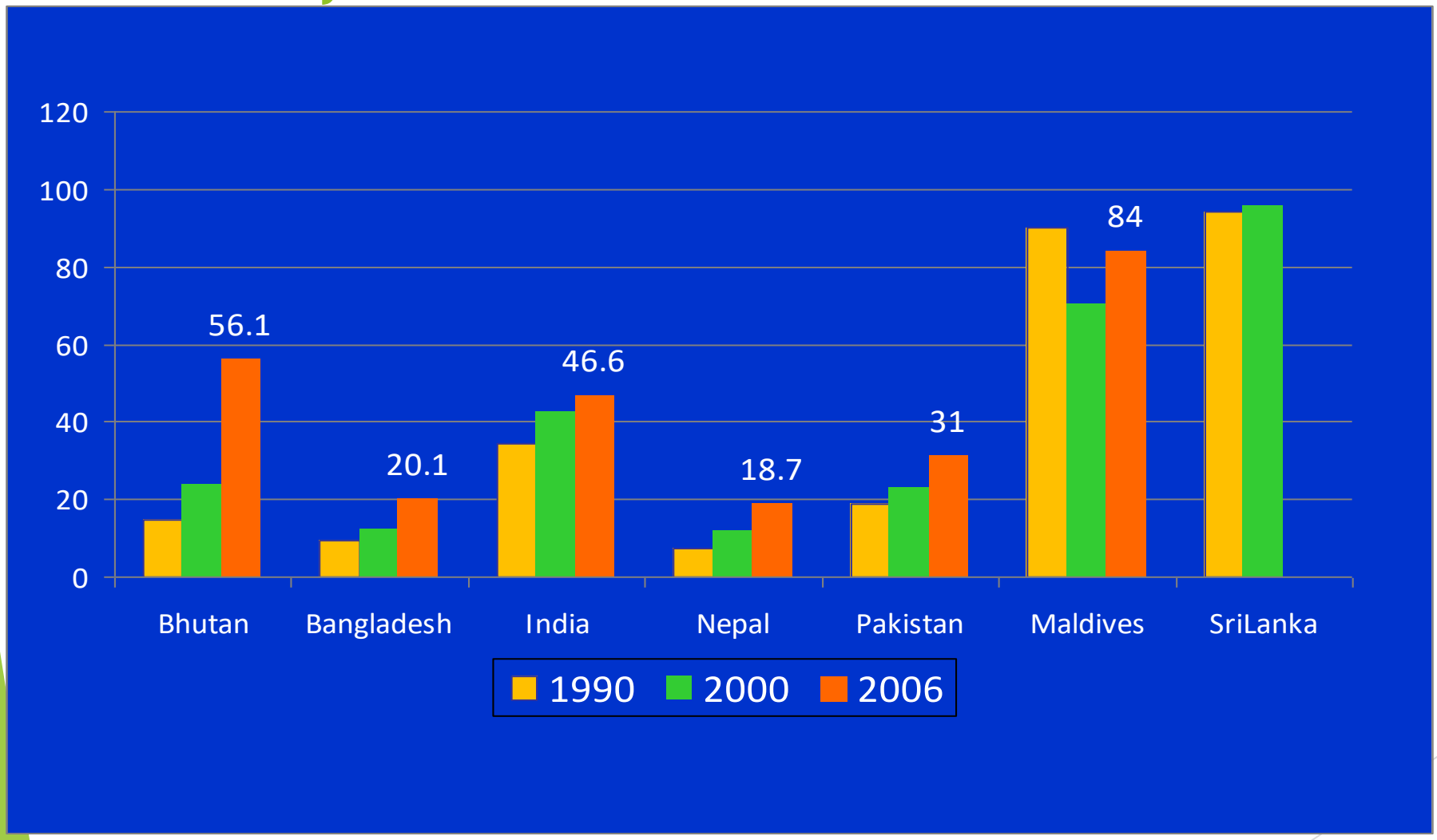
Target 5.2 - % Births attended by Skilled Birth Attendant

Trends - Country Wise



The Official UN website for MDG, last updated July 2008. http://mdgs.un.org/unsd/mdg/Default.aspx

- Only 34 percent of births in Pakistan take place in a health facility;
  - 11 percent are delivered in a public sector health facility and
  - 23 percent in a private facility.
    - 56 percent **urban and.** 25 percent **rural**
    - 18 percent **Balochistan and** 42 percent Sindh

- Three out of five births (65 percent) take place at home,

- Less than two-fifths (39 percent) of births take place with the assistance of a skilled medical provider (doctor, nurse, midwife, or Lady Health Visitor).
- Traditional birth attendants assist with more than half (52 percent) of deliveries,
- while friends and relatives assist with7 percent of deliveries.
- Lady Health Workers assist with less than 1 percent of deliveries.

- Births in urban areas are twice as likely to be assisted by a skilled health provider (60 percent) than births in rural areas (30 percent). Births in Sindh province are most likely to be attended by a skilled health provider (44 percent).

The poor and the Rural Areas are hardest hit

- The poor are not only those with the lowest incomes but also those who are the most deprived of health, education and other aspects of human well-being. Poor mothers are more likely to die in childbirth.

- People living in rural areas are furthest from achieving several of the MDGs in most regions.

The Millennium Development Goals Report 2008. UN

- The greatest risk of death is at the very beginning of life:
  - three-quarters of all neonatal deaths (3 million) occur within one week of birth,
  - and at least 1 million babies die on their first day of life.

Many of the world's 4 million stillbirths and 500,000 maternal deaths also occur close to the time of birth

WHO- The Lancet Neonatal survival series

Where?

- Almost all (99%) neonatal deaths arise in low-income and middle-income countries.*

- Some of the most serious problems are in South Asia where most countries are off-track,
  - India has 1.9 million children dying annually before reaching the age of five,
  - the rate for Afghanistan is more than 250 deaths per thousand live births.**

*WHO- The Lancet Neonatal survival series

A child born in a developing country is over 13 times more likely to die within the first five years of life than a child born in an industrialized country

Why?

Globally, the main causes of neonatal death are estimated to be:

Direct causes:

- Preterm birth 28%
- Severe infections 26%
- Asphyxia 23%
- Neonatal tetanus 7%

Indirect causes

- Low birth weight
- Maternal complications in labour
- Poverty

***Factors leading to neonatal death:**

- A lack of attention to maternal health, with limited access to skilled care providers.
- The poor state of maternal health care, especially during home births, which are associated with at least half of all newborn deaths.
- Inadequate recognition of newborn illnesses and insufficient care-seeking among families and communities.

Low birth weight is associated with:

- Age of the mother - higher proportion of low birth weight babies are born to mothers younger than 20 years and older than 35 years age than to mothers aged 20-34.

- Birth order.- 1st births and births of 6th and higher birth orders are also reported to have higher proportions with low birth weights compared with 2nd to 5th births.

- Mother's education- 12 % of the babies born to mothers with no education were reported to be very small at birth compared with 6% of the births to mothers with higher education.

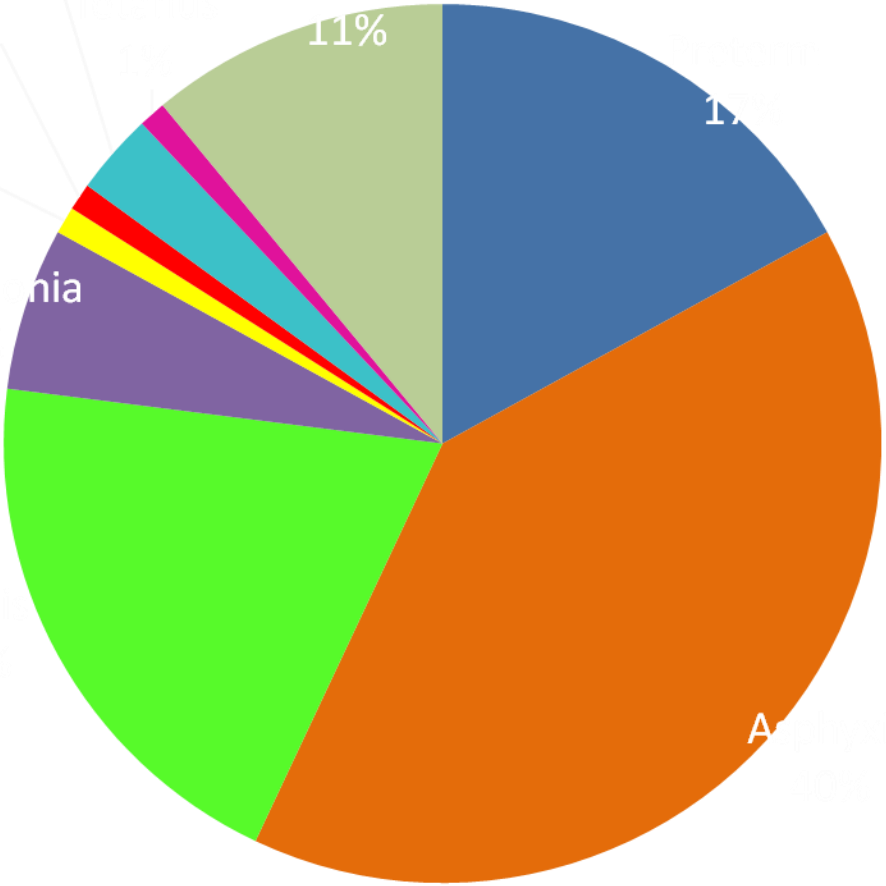
- Wealth quintile- 12 %of babies born to mothers in the lowest wealth quintile are of very small size compared with 7 % of those born to mothers in the highest wealth quintile.

PDHS 2006-07

Everyday

900 infants die
of which **625** are neonates
and
32 newborn babies become
motherless due to maternal deaths.

Causes of Neonatal Deaths

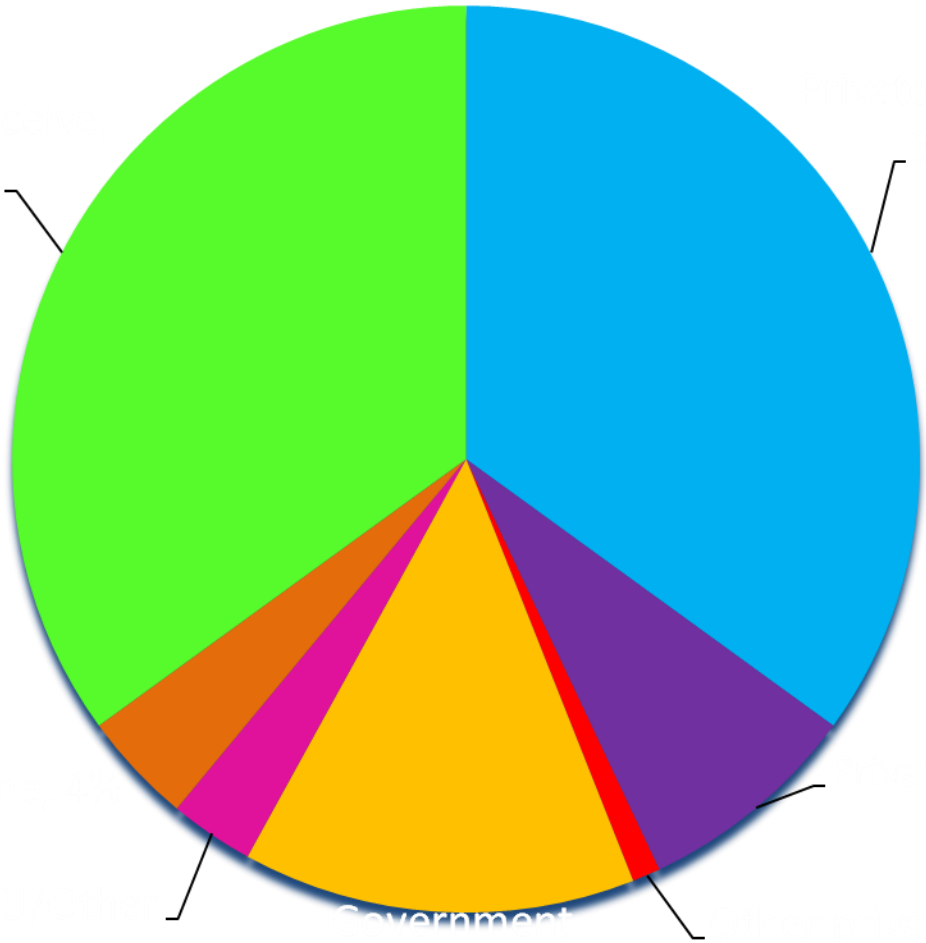


The Lancet- September, 2008

"The high risk of dying in pregnancy or childbirth continues unabated in sub-Saharan Africa and Southern Asia"

The Millennium Development Goals Report 2008. UN

The private sector provides 68% of Antenatal care Where ANC was received for last pregnancy



Source: PDHS 2006-07

Family Planning Saves Lives

One third of all maternal deaths can be saved by:

- Delaying motherhood
- Spacing births
- Avoiding unwanted pregnancies and unsafely performed abortions
- Stopping childbearing when they have reached deserved family size.

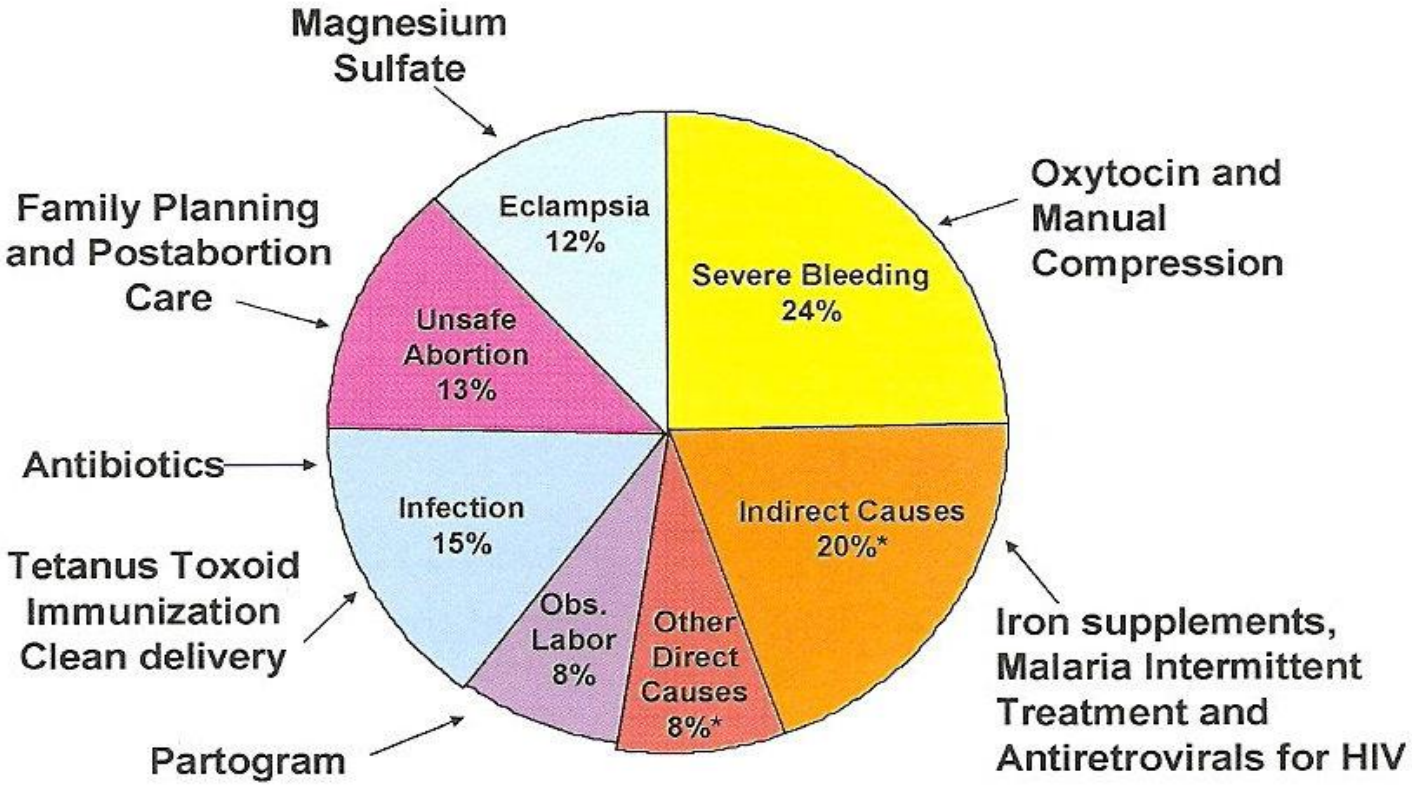
➢Strengthen the role of LHWs for safe motherhood including family planning

➢Establishment of proper monitoring system to address the logistics and supply of contraceptives

➢Shift from target oriented to people centered approach.

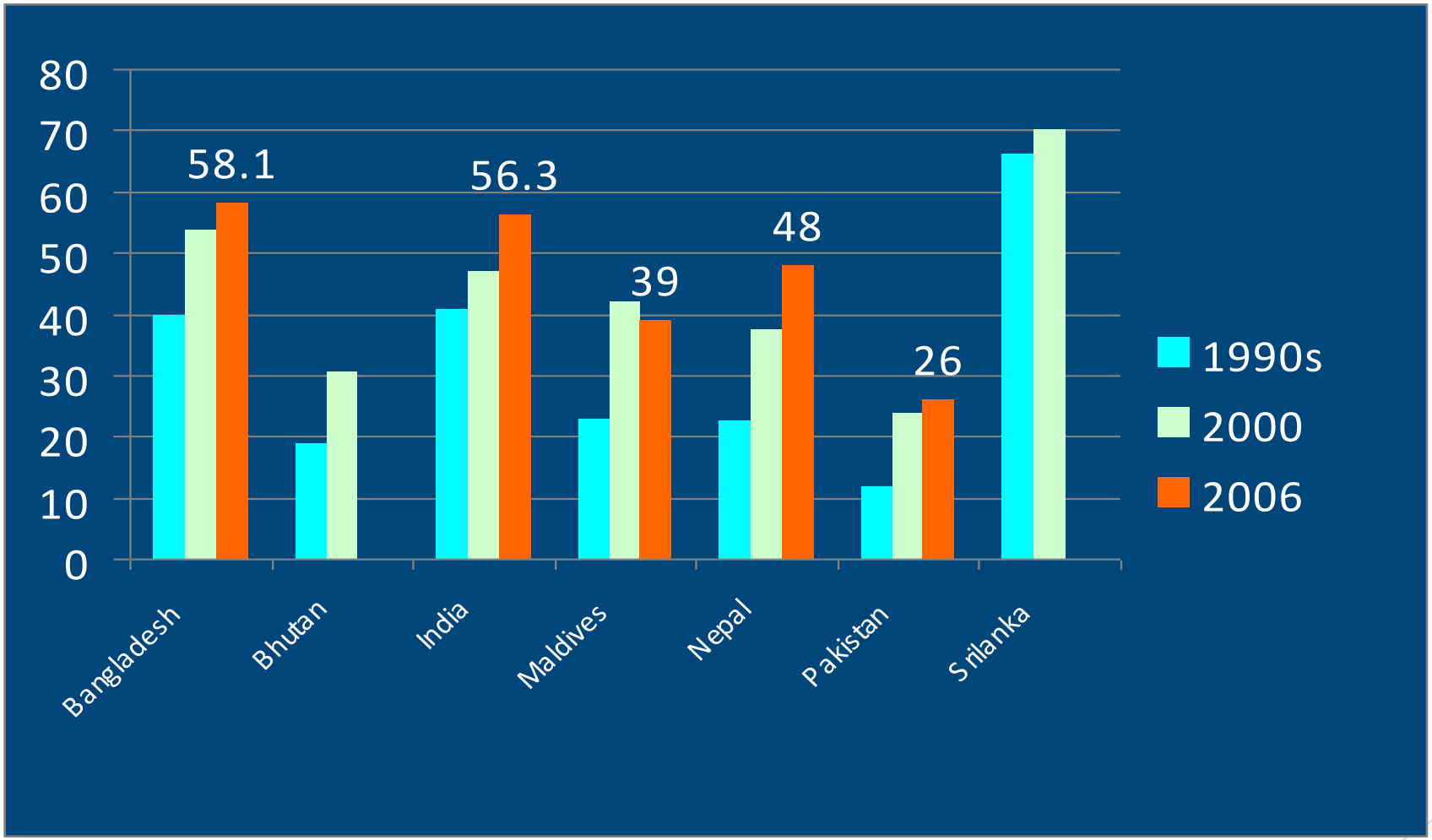
➢Increased availability and accessibility of Family Planning services at the doorsteps of the poor especially in the rural areas

Evidence-based Interventions for Major Causes of Maternal Mortality



*Other direct causes include: ectopic pregnancy, embolism, anesthesia-related
*Indirect causes include: anemia, malaria, heart disease
Source: Adapted from "Maternal Health Around the World" World Health Organization, Geneva, 1997

Target 5.3 – Contraceptive Prevalence Rate (%) (Any Method)



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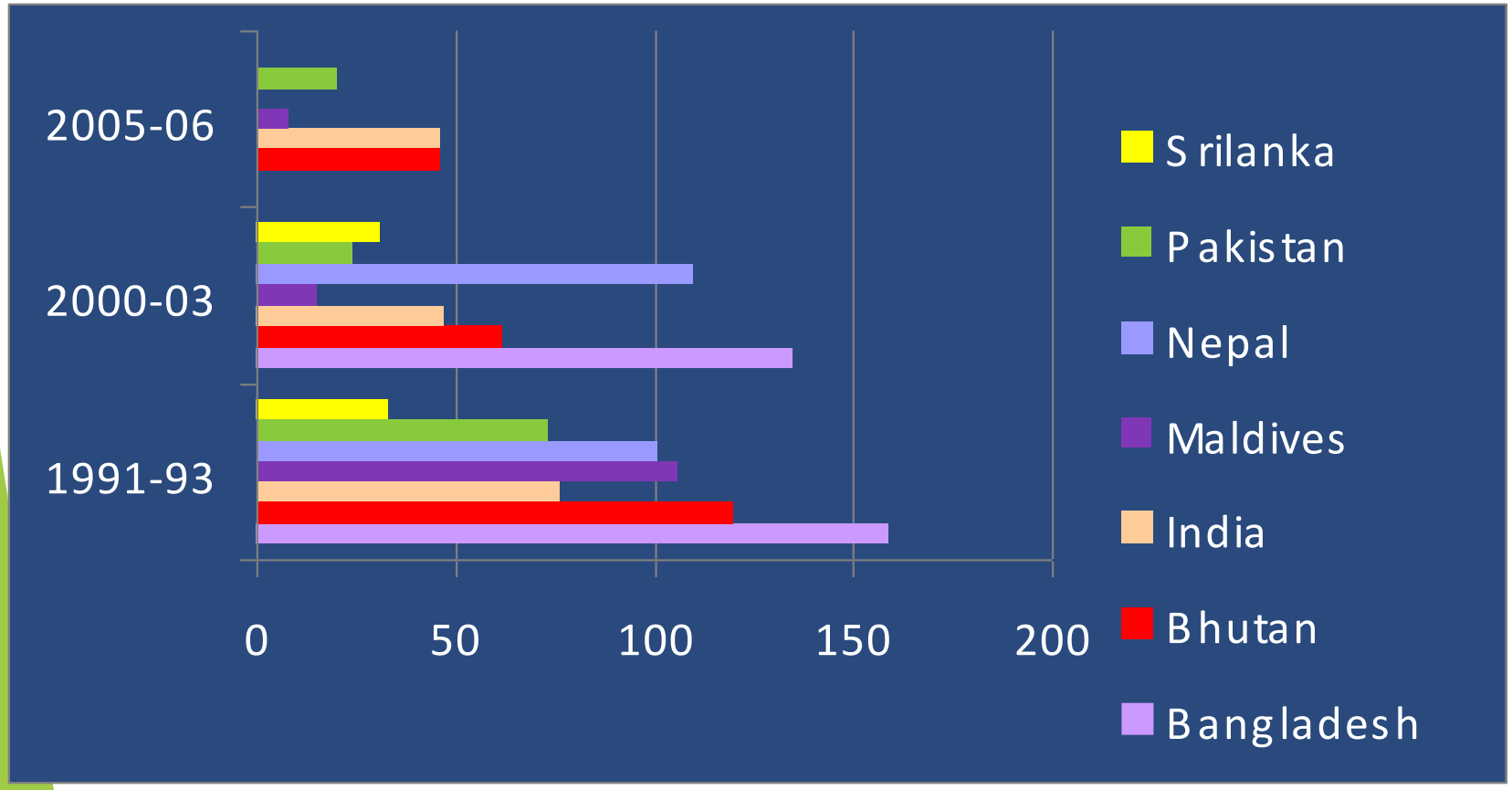
Target Indicator 5.B: Achieve, by 2015, universal access to reproductive health

5.4: Adolescent Birth rate %



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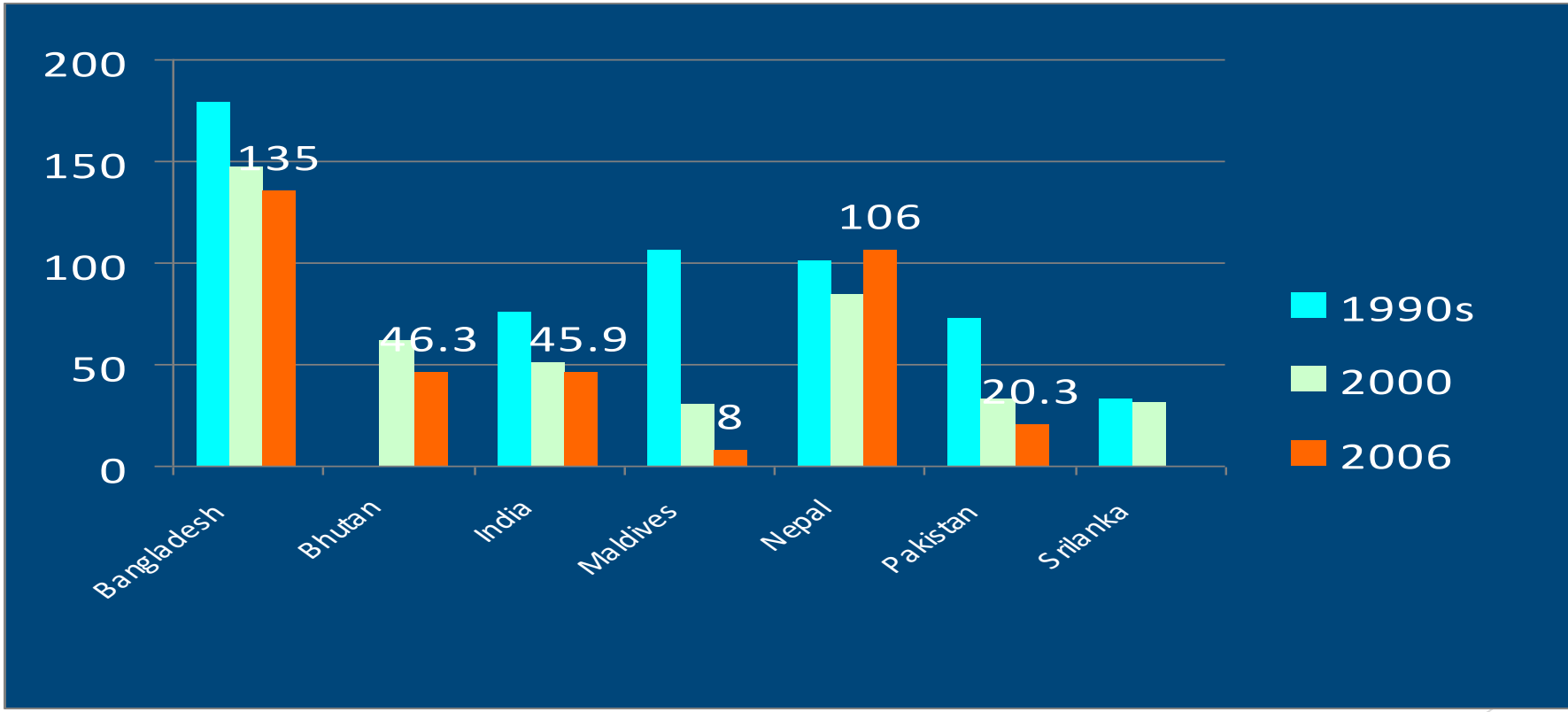
Target 5.4 - Adolescent Birth Rate (%)



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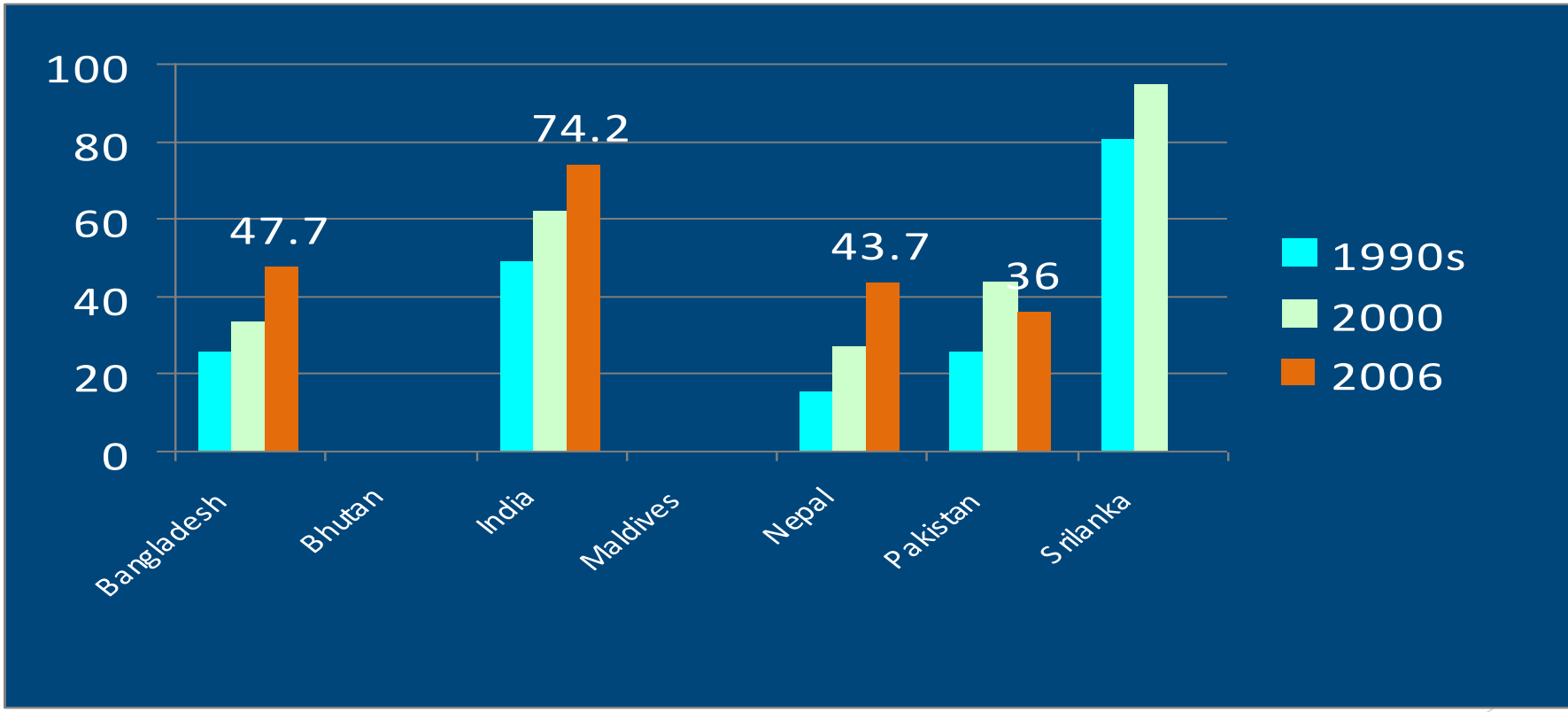
Target 5.5 – Antenatal Care Coverage (%) (at least one visit)



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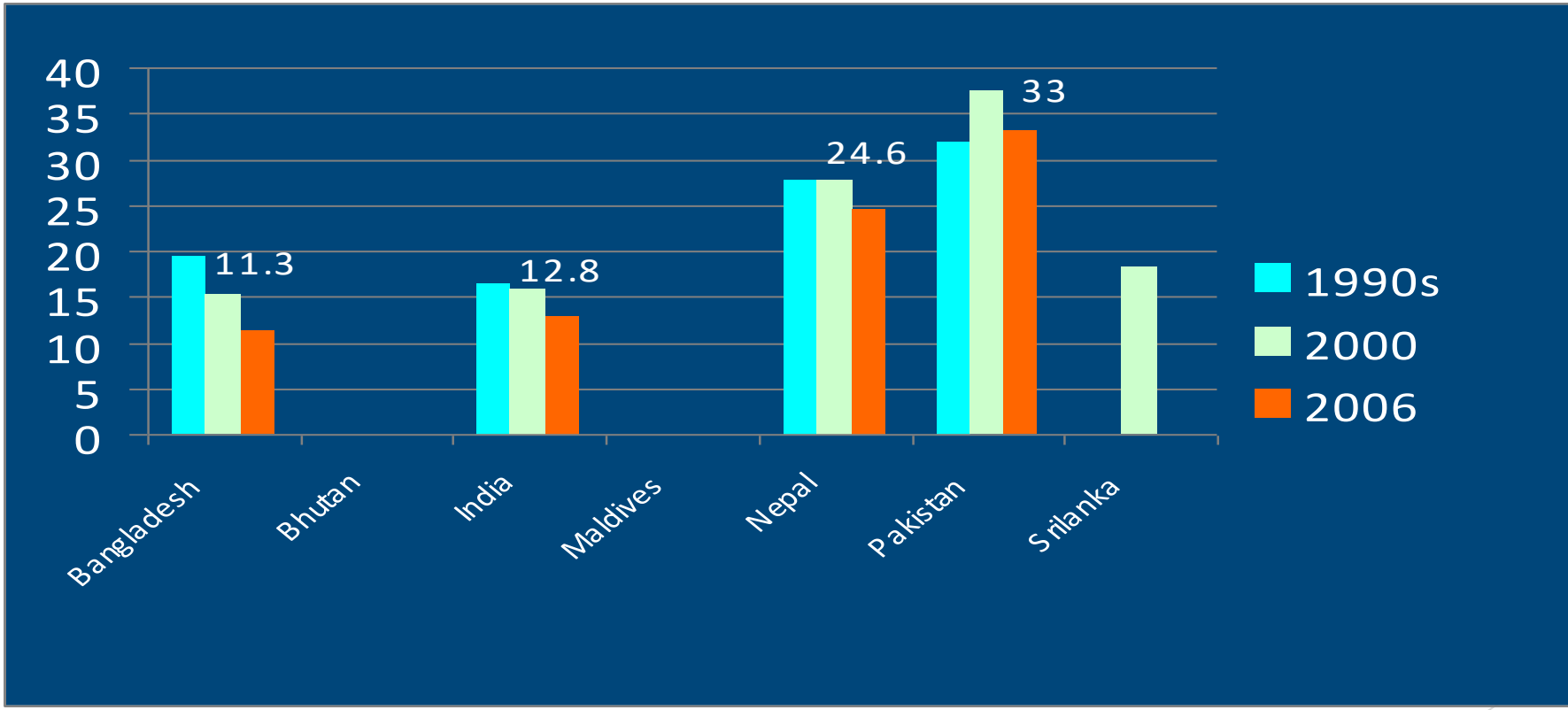
Target 5.6 - Unmet Need For Family Planning % (Total)

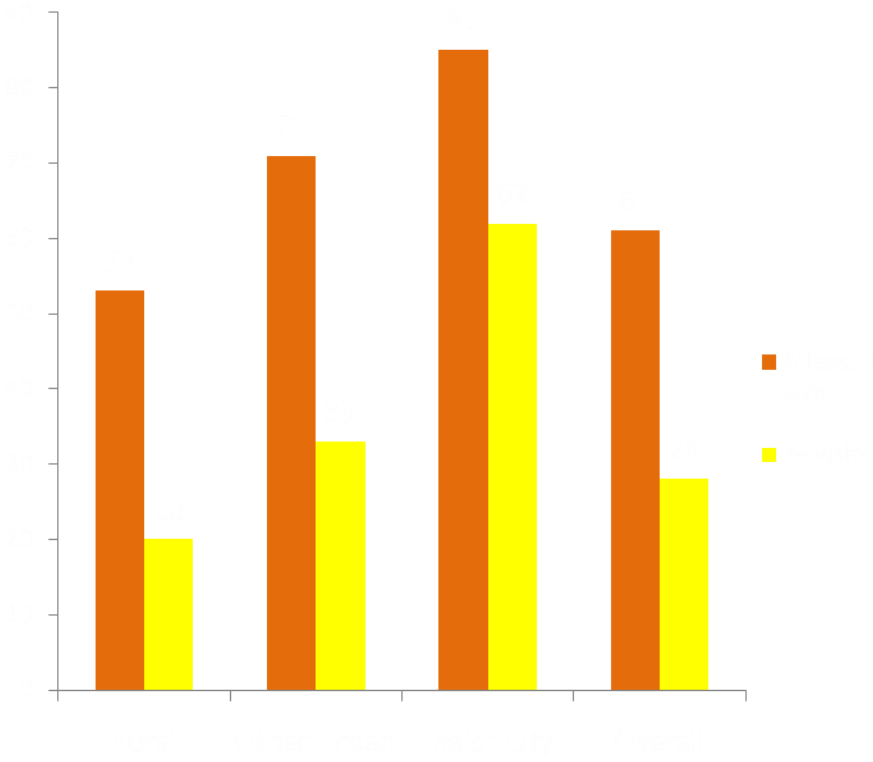


The Official UN website for MDG, last updated July 2008. http://mdgs.un.org/unsd/mdg/Default.aspx

ANTENATAL CARE VISITS ARE

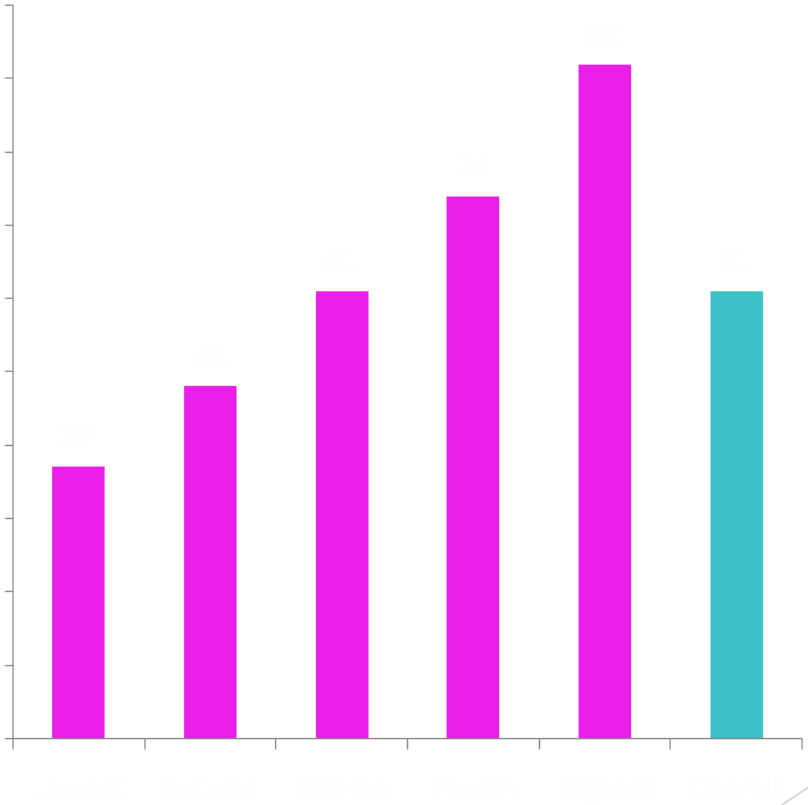
Less frequent in RURAL areas

% of women 15-49 who receive any antenatal care and % with 4 or more prenatal visits



Low among POOR women

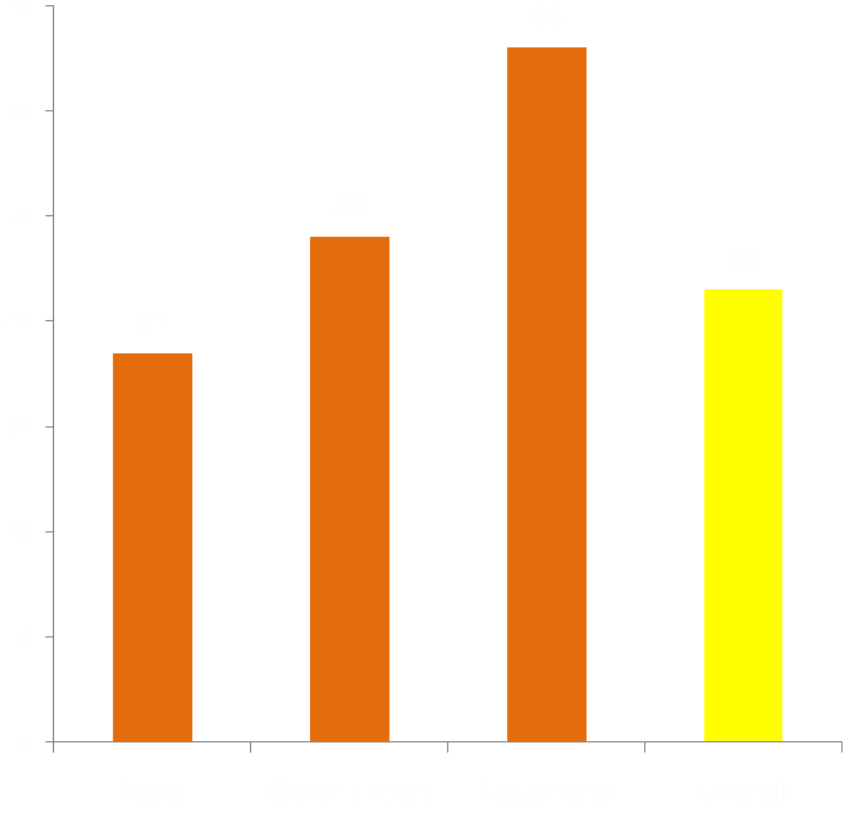
% of women 15-49 receiving antenatal care from a skilled provider, by wealth quintiles



Source: PDHS 2006-07

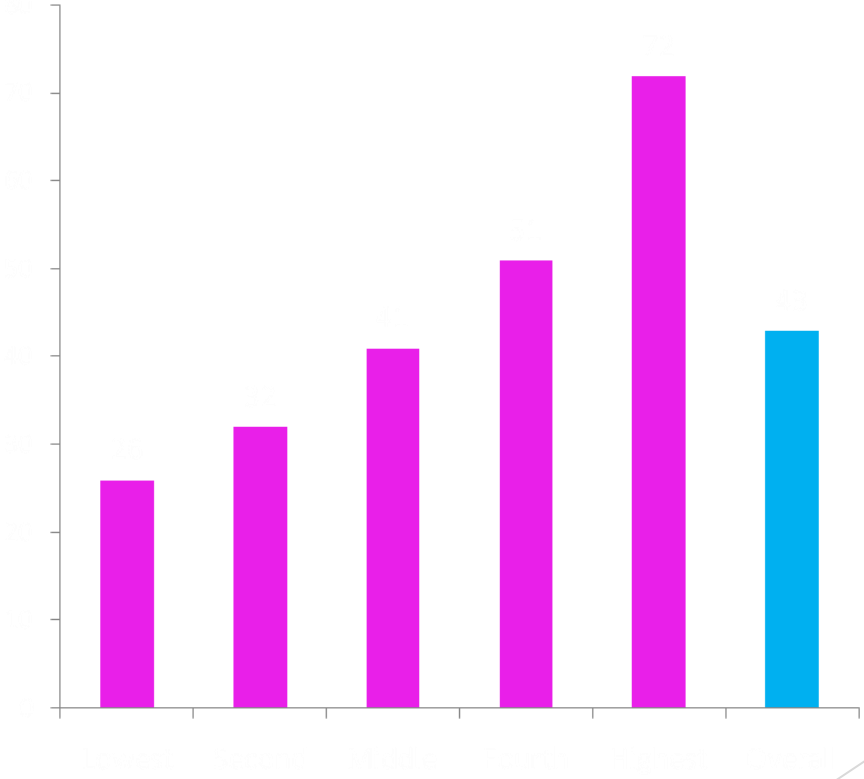
Only one-third of rural women take iron during their pregnancy

% of women with a live birth in last 5 years who took iron tablets or syrup during last pregnancy, by residence



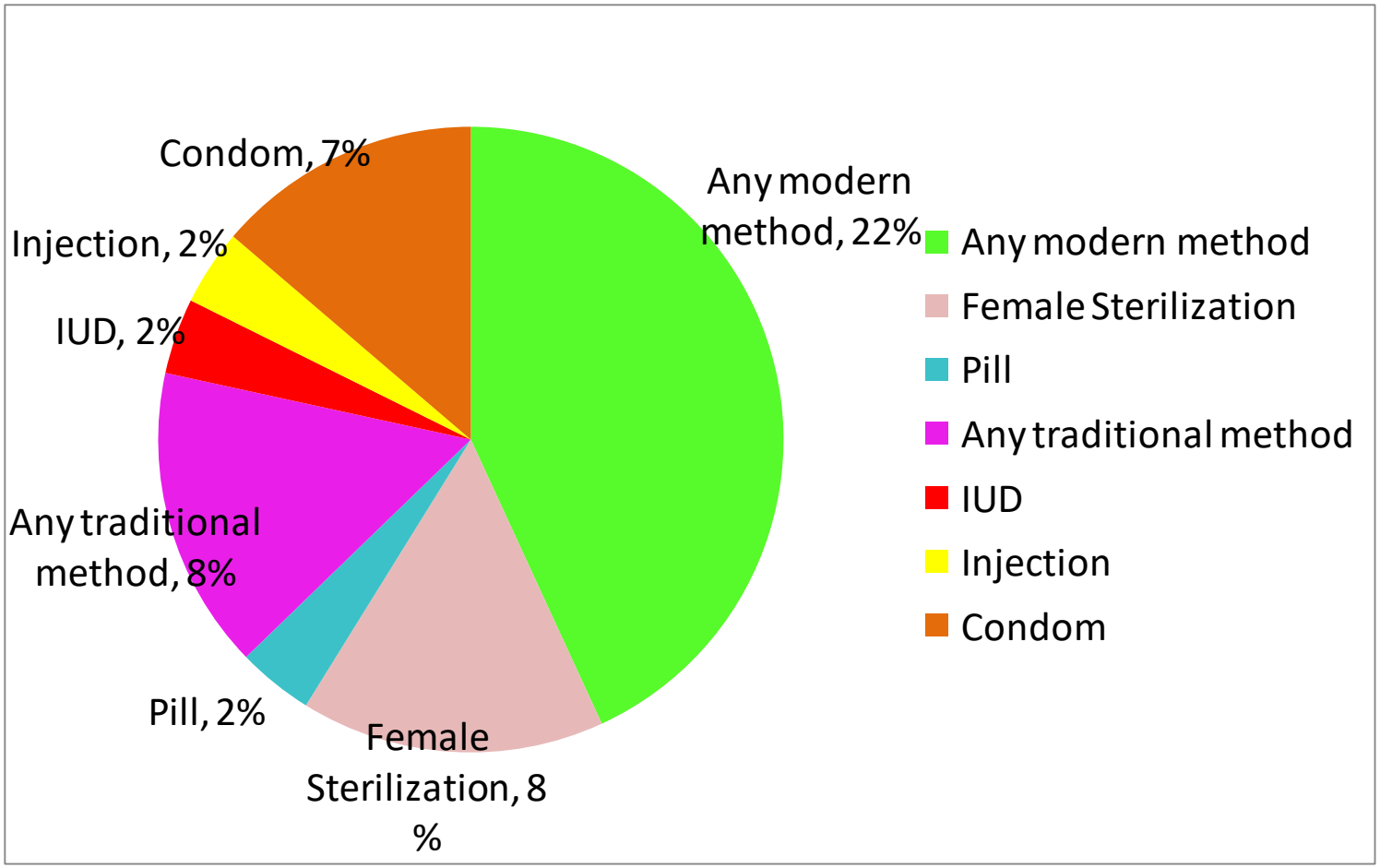
Only 26% of the poorest women take iron during their pregnancy

% of women with a live birth in last 5 years who took iron tablets or syrup during last pregnancy, by wealth quintiles



Source: PDHS 2006-07

Current Use of Family Planning



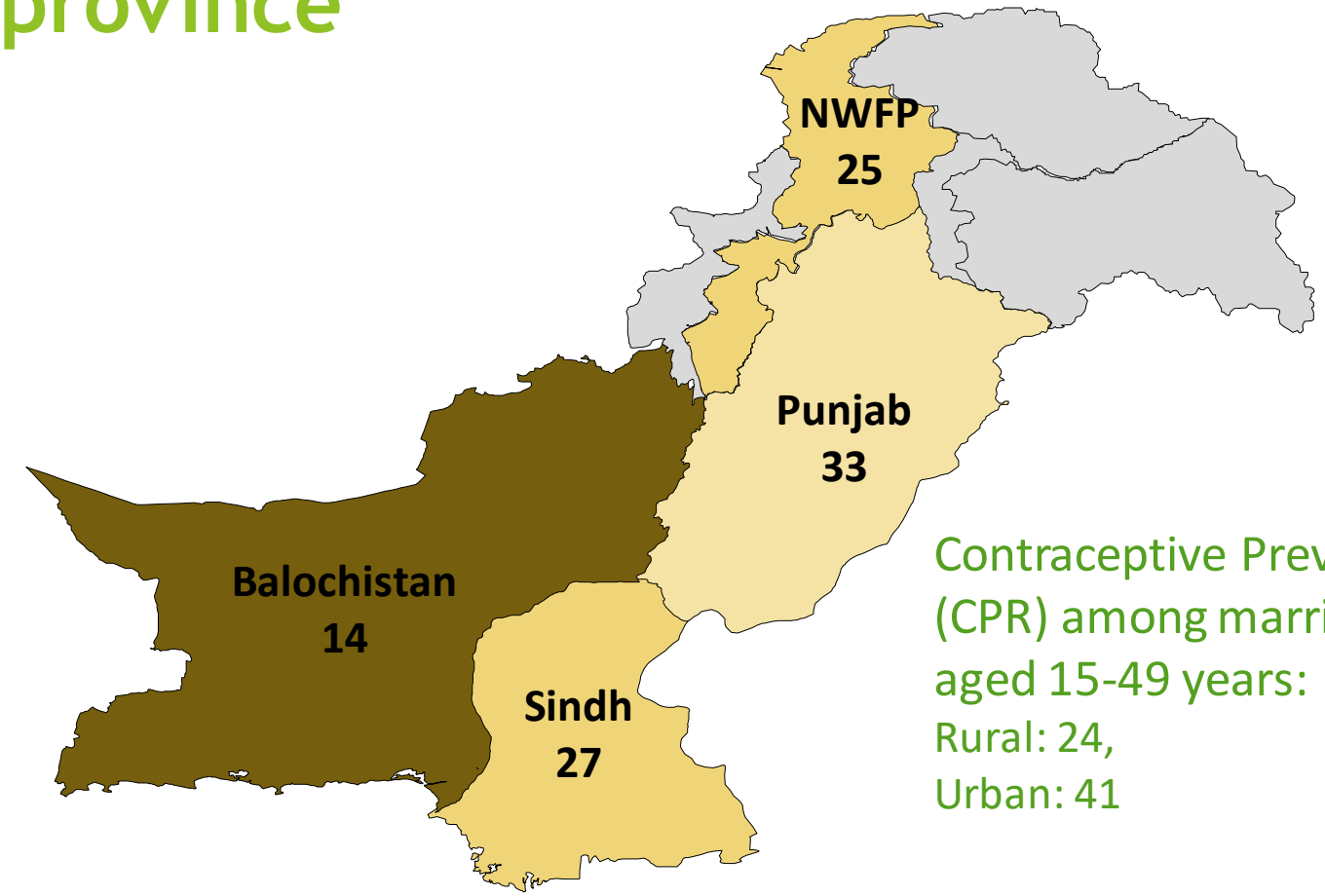
*PDHS -2006-07

Conclusion

- In context of MDG5, progress is slow
- There was a 2.5% decrease per year in countries with data and a 4.6 % in upper middle income group
- The yearly rate of decline to achieve MDG5 should be 5.5%

Hill et al . Estimates of maternal mortality worldwide between 1990 and 2005:an assessment of available data. 2007. Lancet .370. 1311-1319

Contraceptive Prevalence Rate by province



Contraceptive Prevalence Rate (CPR) among married women aged 15-49 years: **30**
Rural: 24,
Urban: 41

Thanks