

Issues of maternal health in Pakistan: trends towards millennium development goal 5

Muhammd Faraz Arshad Malik, Mahmood Akhtar Kayani

Abstract

Pakistan has third highest burden of maternal and children mortality across the globe. This grim situation is further intensified by flaws of planning and implementation set forth in health sector. Natural calamities (earth quakes, floods), disease outbreaks and lack of awareness in different regions of country also further aggravate this situation. Despite of all these limitations, under the banner of Millennium Development Goals (MDGs) a special focus and progress in addressing maternal health issue (set as goal 5) has been made over the last decade. In this review, improvement and short falls pertaining to Goal 5 Improve maternal health have been analyzed in relation to earlier years. A decline in maternal mortality ratio (MMR) (490 maternal deaths in 1990 to 260 maternal deaths per 100,000 women in 2010) is observed. Reduction in MMR by three quarters was not achieved but a decline from very high mortality to high mortality index was observed. Increase usage of contraceptives (with contraceptive prevalence rate of 11.8 in 1990 to 37 in 2013) also shed light on women awareness about their health and social issues. Based on progress level assessment (WHO guidelines), access of Pakistani women to universal reproductive health unit falls in moderate category in 2010 as compared to earlier low access in 1990. From the data it looks that still a lot of effort is required for achieving the said targets. However, keeping in view all challenges, Pakistan suffered in the said duration, like volatile peace, regional political instability, policy implementation constrains, population growth, this slow but progressive trend highlight a national resilience to address the havoc challenge of maternal health. These understandings and sustained efforts will significantly contribute a best possible accomplishment in Millennium Development Goal 5 by 2015.

Keywords: Maternal health, Indicators, Improvements, World Health Organization.

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Department of Biosciences, COMSATS Institute of Information Technology, Park Road, Islamabad, Pakistan.

Correspondence: Faraz Arshad Malik. Email: famalik@comsats.edu.pk

Introduction

Pakistan is the sixth most populous country of 180 Million people with population density of 548.51sqmi.¹ According to World Bank report, women are 48.6% of the population with an estimated life expectancy of 65.45 years.² Around 800 women across the globe die every day during pregnancy and its related complications. In developing countries, it is also considered as second leading cause of death after HIV infection among women of reproductive age. The causes of maternal deaths include severe bleeding, infections, unsafe abortions and hypertensive disorders.

Early in 2000, Millennium Development Goals (MDGs) were set for 2015 and signed by 189 countries at Millennium Declaration. These eight goals include 1) poverty, 2) education, 3) gender equality, 4) children mortality, 5) maternal health, 6) combat diseases like HIV malaria 7) environmental sustainability and 8) global partnership for development. In light of these goals 2005, ministry of health of Pakistan also developed a national maternal, new born and child health programme (NMNCH). Two targets set for achieving this goal include 1) reduction in maternal mortality rate (MMR) by three quarters and 2) a universal access for reproductive health to each Pakistani female by 2015. A set of six indicators were used to assess the efficiency of these two targets pertaining to maternal health. These indicators include maternal mortality ratio (MMR), proportion of birth attended by skilled health personnel, contraceptive prevalence rate, adolescent birth rate, antenatal care (number of visits) and unmet need for family planning. So far trends in maternal health observed in Pakistan are also summarized in Table-1. In subsequent sections, a concise overview of earlier efforts related to each mentioned indicators are explained.

Goal 5 Target A: Reduction in MMR by three quarters between 1990 and 2015 in Pakistan

In order to explore the efficiency of goal 5 (target A) in accordance with WHO guidelines trend set for these two indicators including MMR and proportion of births attended by skilled health personnel are analyzed in this review.

Table-1: Maternal health indicators in Pakistan.

Indicators for Maternal Health	Trends in Pakistan
Maternal Mortality Ratio (per 100,000 live births)	490 (1990) to 200 (2010) deaths Average annual rate of reduction 3.6%*
Skilled Health Workers for Child birth	19% (1990) to 43% (2010-2011)*
Contraceptive Prevalence Rate (any method)	11.8% (1990-1991) to 35% (2012-2013)
Adolescent Birth Rate (per 1000 women)	73.3 % (1992) to 16.1% (2007) *
Antenatal care (4+ visits)	14.2% (1991) to 28% (2007)*
Unmet Family Need	30.5% (1991) to 25.2% (2007)*

These indicators are retrieved from UN database resource and PDHS survey records. * indicates data taken from Millennium Development Goal Database

Indicator 1) Maternal Mortality Ratio (MMR)

MMR values are found alarmingly high in Pakistani population. Earlier a wide range (250-500) of MMR was reported in several independent reports.³⁻⁶ This marked variation in MMR values may also be attributed to the factors including variations in study design, methodology opted, data collection and location of hospitals (rural or urban area). Based on latest criterion values to assess the progress levels set forth by WHO, situation of MMR in Pakistani population falls in the range of very high mortality (≥ 500) to high mortality (200-500). A percentage decline of ~47% in MMR has been reported in countrywise progress snapshot on UN database for Pakistan.^{17,22} This reduction trend is also in agreement with the global findings from 400 deaths in 1990 to 210 deaths in 2010 among all other countries.^{7,23} Despite the observed decline in MMR by 3.1%, the estimated value of 5.5% is the set target for our population.

Although, at this stage it seems a relatively difficult and unachievable task but a reasonable improvement is possible. An evidence based interventions on addressing the key issues like maternal health, still birth controls and children health is useful approach to materialize these details. LIST (Live Saved Tools software) is used to study the impact of these interventions and their usefulness on related key issues as observed.⁸⁻¹⁰ Emphasis regarding an early detection of maternal complication and prompt referral for basic or emergency obstetric, up gradation in health related infrastructure, financing and trained manpower resources have also been suggested as useful intervention.¹¹ Apart from these factors, crisis of governance in war affected areas, proper allocation of funds to rural medical facilities and lack of strong political will for implementation are core limiting factors in attaining the desired goals. Despite these constrains, devolution of health ministry provides a unique opportunity for provinces to identify and design policies

according to their own needs. A particular focus on addressing nutrition and health related issues of poor women can substantially contribute in reducing MMR.

Indicator 2) Skilled Health Workers for Child Birth

Efforts to improve maternal health involve training and availability of skilled personnel, in both government and private sector. Data retrieved from developing countries show that only 44% of deliveries in rural areas and 75% in urban areas were attended by skilled personnel. An improvement in skilled birth attendants to 53% for rural and 84% for urban women was observed in 2011.¹³ According to a Pakistan demographic health survey report (PDHS 2006-2007) around 60% of all births in Pakistan occur at home by unskilled birth attendants.¹² During early 1990s in Pakistan, Lady Health Worker Programme (LHWP), also known as "National Programme for Family Planning and Primary Health Care (FP&PHC)", was launched.¹⁴ This programme seeks community involvement and awareness regarding basic issues of health and family planning. In several evaluation reports by both national and international agencies strength and usefulness of this programme was very well justified. This programme strengthens the primary care facility and has significantly improved MNCH status. Trained skilled staff attendants are gradually increasing from 19% (1990-1991) to 43% (2010-2011).⁷ Despite gradual rise in skilled LHW, several associated factors needs to be addressed and improved. These factors include proper training updates, placement and acceptance of LHWs in local communities, mobility issues of staff and coordination with health services at tertiary levels.¹⁵

In Pakistan, promising improvement in training human resource, infrastructure, up gradation of both local and district hospitals and dispensaries for maternal emergencies have been observed under NMNCH programme.¹⁶

Goal 5 Target B: A universal access for reproductive health in Pakistan

A universal access of all health facilities in general with an emphasis on reproductive health is set target for Pakistani women. According to WHO guidelines, four indicators used for analyzing this target are elaborated in the subsequent sections.

Indicator 3) Contraceptive Prevalence Rate and its usage in Pakistan

Contraceptive prevalence is the percentage of women married or in-union women (aged 15- 49), who are either using or whose sexual partner are using, at least one

Table-2: Trends of maternal health indicators in South Asia.

Indicators*	Afghanistan	Bangladesh	China	India	Iran	Nepal	Pakistan
Annual MMR reduction (2000-2010)	7.9	5.2	4.9	6.3	-	7.4	3.6
Birth attended by skilled health professional	38.6	31.7	99.6	52.3	97.3	36	43
Contraceptive Use among married Women	21.8	61.2	84.6	54.8	73.3	-	27
Adolescent Birth Rate (per 1000 women)	90	128	6.2	38.5	31.3	81	16.1
Antenatal care coverage at least 4 visits	14.6	25.5	-	37	94.3	50	28.4
Unmet need for family planning	-	13.5	2.3	20.5		27.5	25.2%

*Indicators percentages for above countries may vary in terms of most recent year of demographic health survey reports. A preliminary assessment in maternal health trends of the South Asian region can be assessed.

method of contraception. Both traditional and modern methods of contraception are included in this prevalence. In 2011, 62% of women belonging to developing countries were using contraceptives.²³ Distinctive choices regarding preference of contraceptive methods exist among different regions of the world. Female sterilization dominates in Southern Asia while injectable usage is more common in Eastern and Southern Africa. According to UN data base, usage of contraceptives doubled among married women from 1991 to 2008 (27.6%) in Pakistan.^{17,18} The PDHS recent survey (2012-2013) showed that 37% of married women in Pakistan are using contraceptive methods. Majority of women use modern methods (26%) as compared to traditional methods of contraception (9%).¹³ A marked rise in contraceptive usage from 10% in women (age 15-19) to 48% in women (age 35-39) has been observed. Contraceptive usage is remarkably high among urban women as compared to rural areas under the influence of numerous factors like education and social status.^{19,20} Involvement of religious scholars as proved in restricting contagious diseases (HIV/AIDs) spread, is a useful approach to improve maternal health.²¹

Indicator 4) Adolescent Birth Rate

Two most widely stated measures of fertility are total fertility rate (TFR) and age-specific fertility rates for five-year periods. According to PDHS (2012-2013), a higher age specific fertility rate in rural (4.2%) as compared to urban areas (3.2%) has been observed.¹³ A decrease in TFR from 5.4 births per woman in 1986-91 to 3.8 births in the period 2010-12 has been established. A marked reduction from 88 to 46 births per 1000 women had been reported over the last two decades in Pakistan.¹³ Although these trends are quite promising, however, Pakistan still requires rigorous efforts to meet this Millennium Development Goal's target of 2.1 births per woman. A comparative profile of all South Asian countries is also mentioned in Table-2.

Indicator 5) Antenatal Care (number of visits)

According to WHO recommendations, improvement in antenatal care is an important indicator to strengthen maternal health. It has been stated that only half of pregnant women in developing regions receive the minimal recommended four antenatal visits. According to PDHS latest findings remarkable improvement in the last decade related to antenatal care has been made ranging from 43% (2001) to 74% (2012-2013).^{12,13} Antenatal care facilities in Pakistan are influenced by several factors that significantly influence consultation of women at respective centers. These factors include awareness in pregnant women about the potential benefits of antenatal visits, approach to nearest health facilities and adequately trained midwives and medical staffs. In other developing countries, special measures to improve maternal health are also opted. In Bangladesh, a fulltime trained midwife's programme has been launched while in India special cash transfer incentives are provided to pregnant women for delivery at local health facilities.¹⁷ These measures ensure a significant improvement in maternal health.

Indicator 6) Unmet Need for Family Planning

The unmet need for family planning is defined as the percentage of women aged 15 to 49, married or in union, having a desire to delay or avoid pregnancy but not using any form of contraception. So far due to increase contraceptive prevalence, unmet needs for family planning has dropped from 15% (1990) to 12% (2011).^{13,18} At present unmet need range has dropped from 22% to 15% in southern Asia as shown in Table-2. This indicates a decrease in number of women who would like to delay or avoid pregnancy, but are not using contraception. However, since the population is increasing at an alarming pace and by 2015, total demand for family planning among married women is estimated to be around 900 million globally.¹⁷ This is one of the core indications of the unfinished agenda in maternal health

goal. There is an immense need of a large sustainable resource to keep pace with the demand for contraceptives and address the unmet needs of family planning. For a thorough insight, maternal health indicators of few South Asian and neighboring countries of Pakistan are mentioned in Table-2.

Conclusions

In the current volatile security situations, mobility constrains and issues related to resources allocation, accomplishment of MDG 5 in Pakistan is relatively difficult. However, the data showed a promising trend in overall improvement of maternal health in Pakistani women. For achieving substantial outcome persistence in these efforts should be opted.

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