

REVIEW ARTICLE

CHILD HEALTH STATUS IN PAKISTAN

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Pakistan is the sixth most populous country in the world. Child health status is very poor and mortality rates for children at all ages are very high. Pakistan is making very slow progress towards better health of child and mother. Among the Asian countries, Pakistan has the slowest rate of child mortality reduction. Major factors which are playing role in death of children should be improved like education of mother, gender inequality and proper secondary as well as tertiary care. Since neonatal mortality rate (NMR) constitutes about half of under five deaths in the country, any initiative to reduce NMR would in turn help in decreasing under five mortality rate and improve child health status. We here present a brief review of child health status in Pakistan in comparison to world and discuss main interventions which need to be done to help Pakistan progress.

Keywords: Child health status, Child mortality rates, Pakistan

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INTRODUCTION

Globally under five mortality rate (U5MR) stands at 46 deaths per 1000 live births, however, it has reduced from 90 to 46 during 1990 to 2013 and has shown a decline of 49%. In absolute numbers, the deaths of children under five declined from 12.7 million to 6.5 million during the same period. Half of these deaths take place during the neonatal period, i.e., deaths within first 28 days of life and stand at 2.8 million. They have declined from 33 to 20 deaths per 1000 live births. Still 17000 children die every day. About half of under five deaths occur in only five countries: India, Nigeria, Democratic Republic of the Congo, Pakistan and China. The proportion of under five deaths during neonatal period has increased 19% since 1990. There is 60% decline in under five deaths in developed countries as compared to 48% in underdeveloped. There is 37% decline in neonatal deaths per 1000 live births. Globally annual rate of reduction of under-five is 2.86% from 1990 to 2013 with highest rate of annual reduction of 4% from 2005 to 2013.¹

Child Health Status in Pakistan since 1990 to 2013

According to US consensus Bureau, Pakistan is sixth most populous country in the world.² In Pakistan Under five mortality rate stands at 86 deaths per 1000 live births with annual rate of reduction of 2.1% from 1990 to 2013. Annual rate of reduction is much slower in Pakistan as compared to other countries. Also, infant mortality rate (IMR) declined from 106 to 69 deaths per 1000 live births in Pakistan. The neonatal mortality rate declined from 56 to 42 deaths per 1000 live births in Pakistan.¹ Among the Asian countries, Pakistan has the slowest rate of child mortality reduction. Furthermore, it is noted that many countries have made steady progress in reducing U5MR, however, there is a far slower decline in first

day deaths.³ The causes for high first day death rates in South Asia are high number of preterm babies and low birth weight, low use of contraception, poor maternal health and nutrition, inadequate healthcare and pregnancy at young age. Pakistan is among top ten countries with highest rates of first day deaths and still births during labour.⁴

Causes of death in Children

Globally leading causes of under-five mortality include pneumonia (17%), preterm birth complications (15%), intra-partum related complication (10%), diarrhoea (9%) and malaria (7%). About 45% of under-five deaths are attributable to malnutrition. Globally, the main cause of child mortality is prematurity and almost 50% deaths were due to infectious diseases. The other causes of death in children include pneumonia (13%), intra-partum related complications including birth asphyxia (11%), diarrhoea (9%), neonatal sepsis (7%) and malaria (7%). Measles, HIV/AIDS & neonatal tetanus account for less than 2% of deaths.⁵ Six diseases account for 70% of deaths in children less than five years i.e. pneumonia (19%), diarrhoea (18%), malaria (8%), measles (4%), HIV/AIDS (3%) and other neonatal conditions (37%).⁶ In developing countries like Pakistan and India, leading causes of deaths in children are still infectious diseases as compared to developed countries where injuries are leading cause besides neonatal causes such as birth defects.⁷

In Pakistan, major causes of mortality among children less than five years are birth asphyxia (22%), sepsis (14%), pneumonia (13%), diarrhoea (11%) and prematurity (9%). Before reaching age five, one in every eleven children in Pakistan dies. More than half of these deaths occur in first month of life. Birth asphyxia, prematurity, sepsis and pneumonia are major causes of death in neonatal period. Post

neonatal deaths are due to diarrhoea, pneumonia, meningitis and sepsis.⁸ The main determinants of neonatal death in Pakistan are lack of education and maternal empowerment, high fertility rate and short birth interval, poverty, gender inequality, poor referral system and poor quality of primary, secondary and tertiary healthcare.⁹

How can new-born deaths be prevented?

Health care workers can play an important role in preventing the new-borns deaths. Premature births, complications during labour and delivery and infections are the main causes of death of new-borns whereas child birth complications, maternal infections and hypertension are main causes of stillbirths. Eight essential services are identified to save children by health care workers and mid-wives. These are:

1. Timely care during delivery to prevent complications
2. Proper management of preterm babies especially use of corticosteroids for lung maturity
3. Basic new-born care e.g. breast feeding and cord care for infections, etc.
4. New-borns should be resuscitated if they are not breathing spontaneously.
5. Kangaroo mother care should be advocated.
6. New-born infections should be treated.
7. Inpatient care for sick and small new-borns
8. Prevention of TORCH infections⁴

Maternal and Child health key initiatives in Pakistan

World Health Organisation maternal, new-born and child health programme is playing pivotal role in improving the health. Health care providers have been trained in integrated management of new-born and childhood illness using developed training modules. Emergency obstetric care package has developed by WHO Pakistan. It provides guidelines to health care workers working at first-level care. WHO Pakistan along with UNFPA and UNICEF, received support through Norway-Pakistan partnership initiative for the maternal, new-born and child health programme.¹⁰ In addition to donor supported programme, Government of Pakistan has initiated following programmes promoting and protecting maternal and child health:

- Maternal and Child Health Programme (MNCH)
- National Programme for Family Planning and Primary Health care

- National EPI Programme
- Nutrition Project
- MNT-Special Immunization Activities
- National Programme for Control of Diarrhoeal Diseases (CDD)
- Acute Respiratory Infections Control Project
- Polio Eradication
- Integrated management of childhood illnesses (IMNCI) strategy
- Women's Health Project (in 20 districts)
- Reproductive Health Project

CONCLUSION

Indicators of child health status in Pakistan are very poor and Pakistan is lagging behind in achieving Millennium Development Goal.¹ Prioritizing neonatal care can result in tangible improvement. Enhancing primary health care can bridge the gap. Increased financial allocations are required to improve maternal and child health. There is a need to focus on education of people and equality should be maintained. Appropriate research and evidence based interventions are required to improve health status. Rapid growth rate has negative impact on health status of children and mothers. There is a need for the country to plan and prioritize resources and in doing so, consider to start early intervention centres in districts that have shown higher decline in U5MR. A national level technical resource group and an advisory group is required to guide the ministry of health for planning and budgeting and detailing year wise activities for such an initiative. Better quality of health services should be provided at all levels especially in rural areas along with proper referral system for diseases undiagnosed at low level especially in these areas.

It is important to screen and manage children for birth defects but also to address reduction in their incidence through proper policy changes.¹¹ Since new-born mortality rate constitutes a major proportion of the U5MR, a national new-born action plan should be developed.¹² As sepsis and birth asphyxia are leading causes of deaths in infants and new-borns, it is important to observe clinical treatment protocols, infection control practices and quality of care at birth. It is important to educate mothers about child care especially in neonatal period. This could include good nutrition and exclusive breastfeeding during first six months of life. As expenditure is a limiting factor for care seeking, free of cost treatment should be given to pregnant women and children especially those from

the low income group or social insurance schemes should be initiated. fewer complications and more benefits.

REFERENCES

1. United Nations Inter-agency Group for Child Mortality Estimation, Levels & Trends in Child Mortality: Report 2014', UNICEF, New York, 2014. [Internet] 2014 [cited 2014 Feb 12]. Available from : http://www.childmortality.org/files_v19/download/unicef-2013-child-mortality-report-LR-10_31_14_195.pdf
2. United Census Bureau. International Programs, Country Rank, [Internet] 2015 [cited 2015 Mar 10]. Available from : <http://www.census.gov/population/international/data/countryrank/rank.php>
3. United Nations Children's Fund (UNICEF) Pakistan. Annual report 2013. [Internet] 2014 [cited 2014 Feb 12]. Available from : http://www.unicef.org/pakistan/FINAL_UNICEF_Annual_Report_2013_-_Version_11.1.pdf
4. Save the Children. Ending newborn deaths: Ensuring every baby survived. [Internet] 2014 [cited 2014 Feb 12]. Available from : http://www.savethechildren.org/site/c.8rKLIXMGlpI4E/b.8989373/k.E376/Ending_Newborn_Deaths_Ensuring_Every_Baby_Survives.htm
5. World Health Organization. Causes of Child Mortality (CHERG) 2013. [Internet] 2014 [cited 2014 Feb 12]. Available from : http://www.who.int/gho/child_health/mortality/causes/en
6. The Partnership for Maternal, Newborn & Child Health. Countdown to 2015 – Tracking Progress in Maternal, Newborn and Child Survival. [Internet] 2014 [cited 2014 Feb 12]. Available from : http://www.who.int/pmnch/media/press_materials/fs/fs_mdg4_childmortality/en
7. Mehnaz A. Infectious diseases in children-still leads, J Pak Med Assoc 2009;59(7):425–6.
8. National Institute of Population Studies (NIPS) [Pakistan] and IRD/Macro International Inc. Pakistan Demographic and Health Survey 2006/2007. Columbia, Maryland, USA: NIPS and IRD/Macro International Inc. 2008.
9. Siddiqi S, Haq IU, Ghaffar A, Akhtar T, Mahaini R., Pakistan's maternal and child health policy: analysis, lessons and the way forward. Health Policy 2004;69(1):117–30.
10. World Health Organization. Maternal, newborn and child health. [Internet] [Cited 2015 Mar 10] [Internet] 2014 [cited 2014 Feb 12]. Available from : <http://www.emro.who.int/pak/programmes/maternal-neonatal-a-child-health.html>
11. Khurmi MS, Gupta M, Chaudhari G. Addressing the public health challenge of birth defects in India. Indian J Child Health. 2014;1(3):95–8.
12. Khurmi MS, Karpe V, Kaur P. India launches India newborn action plan. Indian J Child Health. 2015;2(1):43–4.

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