

Under-five Mortality in the World (1900-2015)

Gholam Hasan Khodae¹, Gholamreza Khademi², *Masumeh Saeidi³

¹ Mashhad University of Medical Sciences, Mashhad, Iran.

² Department of Pediatrics, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

³ Students Research Committee, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

Abstract

5.9 million child under age five died in 2015, 16 000 every day. Globally, under-five mortality rate has decreased by 53%, from an estimated rate of 91 deaths per 1000 live births in 1990 to 43 deaths per 1000 live births in 2015. The average annual rate of reduction in under-five mortality has accelerated from 1.8% a year over the period 1990–2000 to 3.9% for 2000–2015, but remains insufficient to reach Millennium Development Goal 4 (MDG- 4). About 19 000 fewer children died every day in 2015 than in 1990, the baseline year for measuring progress. The biggest challenge remains in the period at or around birth. A massive 45% of under-five deaths occur in the neonatal period – the first 28 days of life. Prematurity, pneumonia, complications during labour and delivery, diarrhoea, sepsis, and malaria are leading causes of death for children under 5 years old. Nearly half of all under-five deaths are associated with under nutrition.

Key Words: Under-five mortality, MDG4, World.

*** Corresponding Author:**

Masumeh Saeidi, Mashhad University of Medical Sciences, Mashhad, Iran.

Email: Masumeh_Saeedi@yahoo.com

Received date: Nov 11, 2015; Accepted date: Nov 15, 2015

1-Introduction

Child mortality is a core indicator for child health and well-being. In 2000, world leaders agreed on the Millennium Development Goals (MDGs) and called for reducing the under-five mortality rate by two thirds between 1990 and 2015 – known as the MDG 4 target.

2-Materials and Methods

The current study is a review survey which was conducted to evaluate of current status of child mortality by studying WHO website, Centers for Disease Control and Prevention (CDC), United Nations Children's Fund (UNICEF) and United Nations (UN) websites. To evaluate the texts and websites, the singular or combination forms of the following keywords were used: “Mortality”, “Children” and “Worldwide”.

3-Results

New estimates in “Levels and trends in child mortality report 2015,” released by UNICEF, WHO, the World Bank Group, and the Population Division of UNDESA, indicate that although the global progress has been substantial, 16 000 children under 5 still die every day. And the 53% drop in under-five mortality is not enough to meet

the Millennium Development Goal of a two-thirds reduction between 1990 and 2015 (Table.1).

3.1- Among the report’s findings:

- Roughly one-third of the world’s countries – 62 in all – have actually met the MDG target to reduce under-five mortality by two-thirds, while another 74 have reduced rates by at least half.
- The world, as a whole, has been accelerating progress in reducing under-five mortality – its annual rate of reduction increased from 1.8% in 1990-2000 to 3.9% in 2000-2015.
- 10 of the 12 low-income countries that have reduced under-five mortality rates by at least two-thirds are in Africa.
- 5 in 10 global under-five deaths occur in sub-Saharan Africa, while 3 in 10 occur in Southern Asia.
- 45% of all under-five deaths happen during the first 28 days of life. 1 million neonatal deaths occur on the day of birth, and close to 2 million children die in the first week of life.

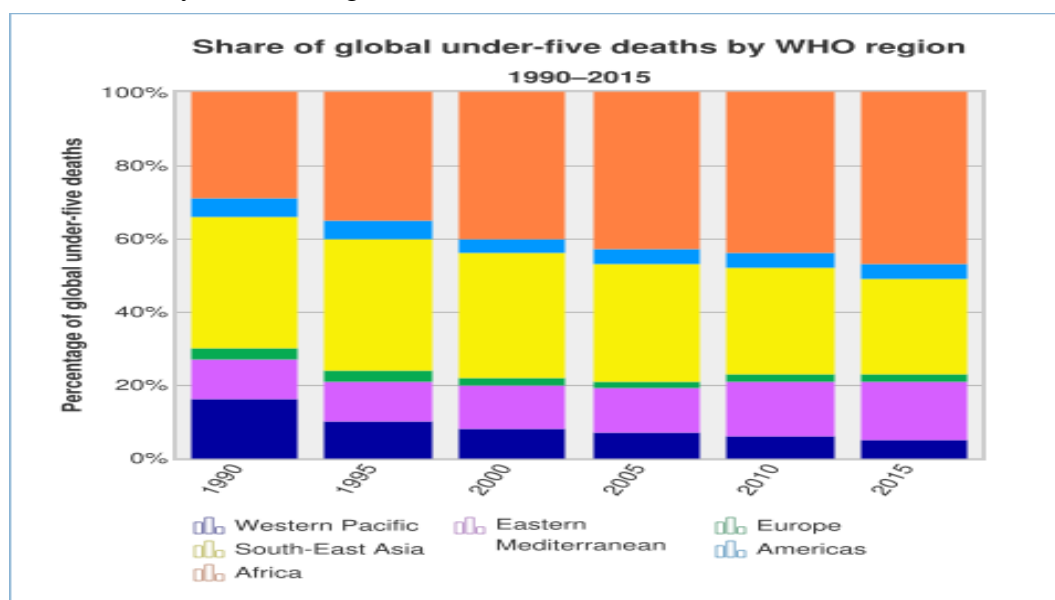


Fig 1: Under-five deaths by WHO region, 1990-2015

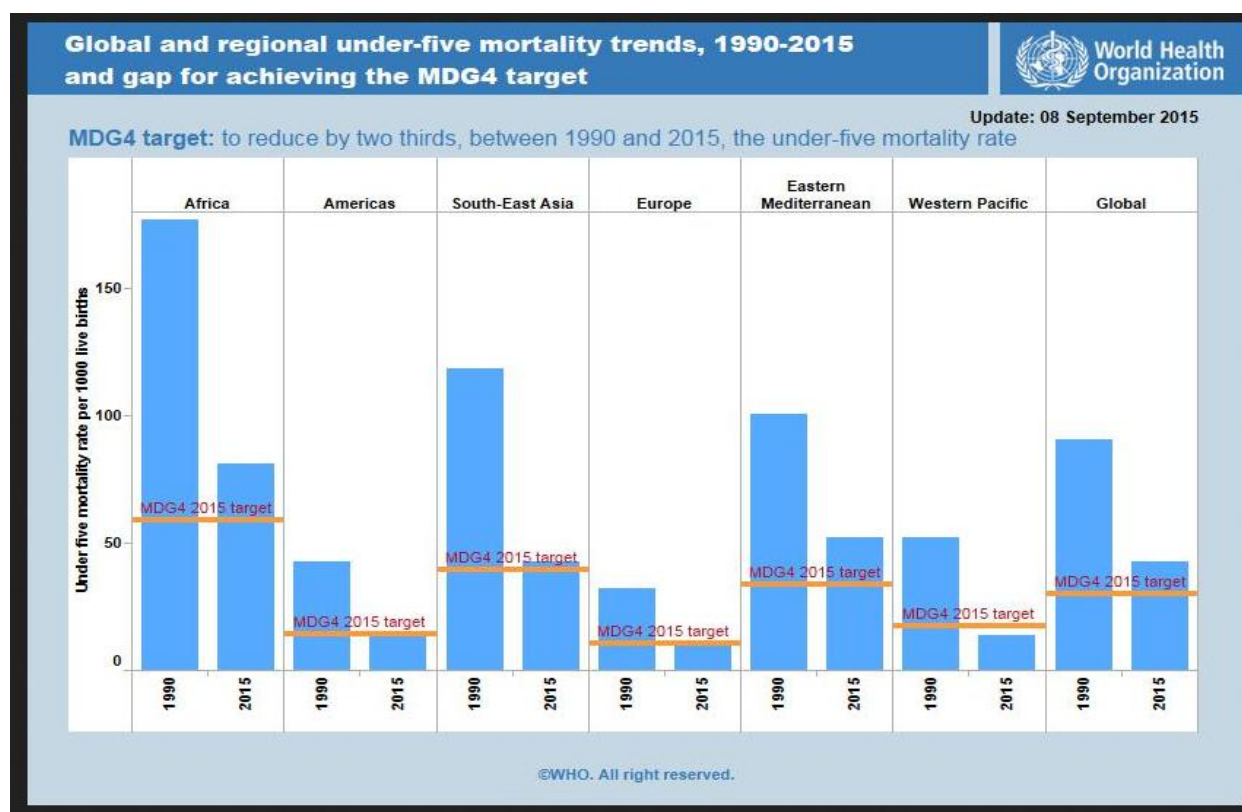


Fig.2: Global and regional under-five mortality trends, 1990-2015

4- Conclusion

The number of under-five deaths worldwide has declined from 12.7 (12.6, 13.0) million in 1990 to 5.9 (5.7, 6.4) million in 2015. This translates into 19 000 fewer children dying every day in 2015 than in 1990. The remarkable decline in under-five mortality since 2000 has saved the lives of 48 million children under age five – children who would not have survived to see their fifth birthday if the under-five mortality rate from 2000 onward remained at the same level as in 2000.

The risk of a child dying before completing five years of age is still highest in the WHO African Region (81 per 1000 live births), about 7 times higher than that in the WHO European Region (11 per 1000 live births). Many countries still have very high under-five mortality – particularly those in WHO African Region, home to 6 of the 7 countries with an under-

five mortality rate above 100 deaths per 1000 live births. In addition, inequities in child mortality between high-income and low-income countries remain large. In 2015, the under-five mortality rate in low-income countries was 76 deaths per 1000 live births – about 11 times the average rate in high-income countries (7 deaths per 1000 live births). Reducing these inequities across countries and saving more children's lives by ending preventable child deaths are important priorities.

5- Conflict of interest: None.

6- References

1. UNICEF, WHO, World Bank, UN DESA/Population Division. Levels and Trends in Child Mortality 2015. UNICEF, 2015.
2. Vakili R, Khademi Gh, Vakili S, Saeidi M. Child Mortality at Different World Regions: A Comparison Review. *Int J Pediatr* 2015; 3(4.2): 809-16.