

Letter to the Editor (Pages: 2307-2309)

# Under-five Mortality in Iran and the World, 2015

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# Dear Editor-in-chief,

Under-five mortality rate is the probability per 1,000 that a newborn baby will die before reaching age five, if current age-specific mortality rates be continued. Under-5 mortality, a Millennium Development Goal indicator, is a leading indicator of child health and overall development. This indicator measures child survival. It also, reflects the social, economic and environmental conditions in which children (and others in society) live, including their health care, and also it is a one of health development index (HDI) in world (1, 2).

## 1-1. Situation and trends in the World

Globally, 5.9 million children under- five years old died in 2015, about 16 000 death every day. 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 that located in WHO African Region, indeed several countries in this region have an under-five mortality rate above 100 deaths per 1000 live births. **Figure.1** shows under-five mortality rate in the World in 2015 (3, 4).

But, generally, 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 the world 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 (**Figure.2**). About 19 000 fewer children died every day in 2015 than in 1990. Percentage of children aged under-five mortality rate, according to different regions of WHO, illustrated in Figure.3. The highest deaths rate of children under 5 years related to African Region and South – East Asia. WHO has suggested that under-five mortality rate should reach to less as 25 per 1000 live births. Currently, 79 countries have an under-five mortality rate above 25, and 47 of them will not to 25 deaths per 1000 live births in 2030, if they continue their current trends in reducing under-five mortality. So, for reach to under-five mortality rate less as 25 per 1000 live births, serious and global measures are required (1, 3).

Key Words: Children, Under-five years, Iran, Mortality rate, World.

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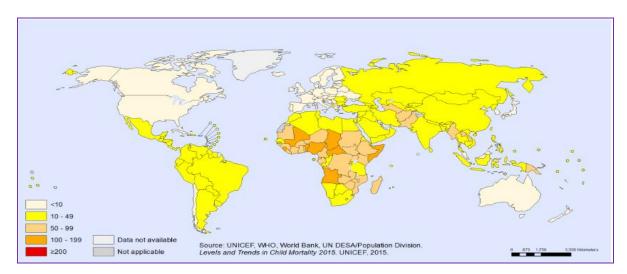
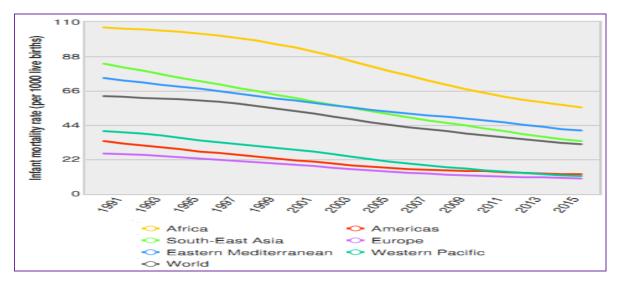


Fig.1: Under five – mortality rate (probability of dying by age 5 per 1000 live births), 2015(3)



**Fig.2**: Trends in infant mortality rate (per 1000 live births) globally and by WHO region,1990-2015(3)

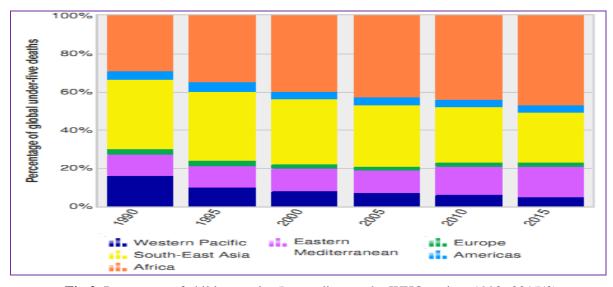


Fig.3: Percentage of children under 5 mortality rate by WHO region, 1990- 2015(3)

#### 1-2. Situation and trends in Iran

Iran has been a significant decrease in the under-five mortality rate, like other countries; from 54.5 in 1991 to 15.5 per live births 1000 in 2015. This substantial decline reflects the success of the prevention programs by Ministry of Health and Medical Education in the field, but in compared to advanced countries such as U.S.A which this rate is 6.5 per 1000 live births in 2015, it is clear that is not in a

very good position, so better and more effective measures require in this filed (Figure.4) (3). For decreasing under-five mortality the most important preventive measures are vaccination, adequate nutrition. exclusive breastfeeding, reduction of household air pollution, safe water and food & adequate sanitation and hygiene, therefore interventional measures in our country must focus on these factors (5, 6).

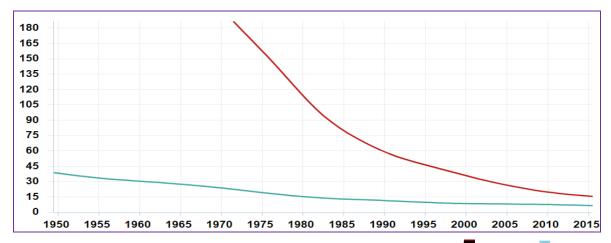


Fig.4: Trends among under- five mortality rate (per 1000 live births) in IRAN and U.S.A 2015

## **CONCLUSION**

The substantial decline under- five mortality rate in Iran indicates success of prevention programs in the field, but in compared to advanced countries has a long way and requires more serious and more effective interventions.

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