

**REVIEWING THE SOCIO-CULTURAL CAUSES OF INFANT MORTALITY IN  
PAKISTAN**

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*Abstract*

*Children includes as an important portion of any society. This study aims to sociologically study numerous factors contributing to infant mortality. This is review article whereby Databases were searched to extract studies related to infant mortality in Pakistan. It is concluded that poverty, lack of health facilities, patriarchal culture, lack of education and awareness are the key causes of infant mortality in Pakistan.*

**Keywords:** Infant, mortality, mother, poverty

## **1. Background**

### **1.1. What is infant mortality?**

#### **1.1.1. Infant**

Infant simply is a newborn baby. Exact time for infancy varies, for example, it may range from hours to months. However, from Latin, *neonatus*, newborn defines infancy up to 28 days. Mortality simply refers to death rate; however, limiting it to an area and or an age group or across certain groups. In addition, it is used specifically in context of diseases across social, racial and ethnic groups (National Cancer Institute, n.d). Infant mortality rate (IMR) simple can be define as the, number of deaths per 1,000 live births of children. The age varies however up to one year of age. It varies across regions and countries. The formula is the rate for a given region is the number of children, dying under one year of age, divided by the number of live births during the year, multiplied by 1,000 (WHO, 2016).

### **1.2. Situation and trends of Infant Mortality and its Importance**

4.1 million children died in 2017 aging under five. African region counted for the highest rates of deaths, for example, 51 per 1000 live births in Africa. On the contrary it was recorded 8 per 1000 live births in European Region. However, it is also important to mention that annual infant deaths have decayed from 8.8 million in 1990 to 4.1 million in 2017 (WHO, 2017). IMR is an important attribute for health of population. For policy-makers the issue is of notable importance (Sartorius and Sartorius, 2014).

#### **2.1. Poverty and Infant Mortality**

Poverty is a menace and root cause of many social problems in society. The life standard in a given area is determined by the level of poverty. Similarly, health sector is affected by the level of poverty in an area or country. Countries where the level of poverty is minimum have better health standards whereas countries with higher levels of poverty have poor quality of health services. In this regard, per capita income is significantly associated with infant mortality rates, for example, countries where per capita income is below 2000 US dollars annually have higher infant mortality rates. A study conducted in African countries revealed that women aging 30-49 years with less than income of 2000 US dollars annually have loss at least one baby (Guttmacher Institute, 2002).

Pakistan is in the list of countries with higher level of poverty both at governmental level as well as at societal level. Therefore, majority of people cannot afford to avail better health

facilities whereas the government is unable to provide better health facilities. There are two types of health providing facilities in Pakistan e.g. the private sector and the government sector. The government sector is known for its poor standard of health services whereas the private sector provides better facilities but is quite expensive. Majority of the people in the country live in poverty and are unable to afford private sector health facilities. Similar is the situation with regard to women's health and particularly in the field of gynecology.

Literature indicates that in developing countries pregnant majority of women suffers from anemia which paves way for lack of hemoglobin and red blood cells. It is because of lack of nutritious food and proper care required during pregnancy. Majority of families in poor countries are confronted with economic problems which do not allow families to take proper care required for pregnant women i.e. that is taking enough amount of fruits, vegetables, proteins and food rich in vitamins. Anemia is a condition which affects the growth of children within the womb of mother, and in many cases leads to poor physical development among children. Such a situation makes the children to be born with diseases and is more vulnerable to early neonatal death (Arene and Anyaeji, 2010).

A study conducted in Vietnam revealed that poor people who didn't had money to pay for availing health facilities had to borrow money and delayed seeking treatment at health facilities. Borrowing money for seeking medical facilities is a common practice in third world countries as well as developing countries. However, it is noticeable that borrowing money for availing medical facilities often results in complications as the ill couldn't avail the facilities in time. One of its consequences is infant mortality as well (San, 1996).

## **2.2. Illiteracy, Lack of Awareness and Infant Mortality**

The founder of Salt Lake City, and the first governor of Utah named as Brigham Young, famously stated that *you educate a man; you educate a man. You educate a woman; you educate a generation* which ultimately indicates the importance of schooling and education for females.

The importance of the role of female literacy on various health parameters and or indicators in particular with regard to infant mortality rate has been substantiated by many earlier studies. Female literacy by itself cannot be the sole and alone determinant factor impacting infant mortality. Female literacy by its empowering role acts as an additive, and conjunctive ingredient to various other factors and determinants. Various other studies have demonstrated the role of other determinants in influencing infant mortality. These include factors such as gender equality and

income allocation and distribution (see Hanmera, Lensinkbd and Whitec 2003; Webb, Sellen, Ramakrishnan, Martorell, 2009). Level of education and awareness is associated with many aspects which correlates with infant health, for instance, studies shows that the higher the education and awareness the better is immunization during pregnancy. Immunization provides the mother and the fetus with protection from infections which increases the vulnerability of the new born to be infected at the time of birth. Infection at the time of birth is highly linked with infant mortality. Besides, interval between births has been affected by the level of education whereby the higher the education the more is the gap between births. Two studies revealed that longer gaps between births reduces the rate of infant mortality as there is better chance for mother to recover and provide a better maternal health to the next children to be born (Mondal, Hossain and Ali, 2006).

Female literacy is one of the co-determinants in impacting and significant with regard to the infant mortality rate, but it has probably the most significant impact because of its capacity to influence other parameters and determinants. For example, educated women have higher income. Higher income enables women to avail better health facilities during pregnancy which reduces infant mortality. On the contrary, illiterate and uneducated woman have lesser income and are dependent. This makes them unable to avail better health facilities during pregnancy and increase the chance of infants to die (De Souza et al, 1999). In addition, studies shows that illiterate women have less awareness about birth control and pregnancy care which increases the risk of infant mortality, and thereby it is evident that infant mortality rate is higher among less educated females when compared to educated females. One of the key causes of extremely low mortality rates in developed countries is higher levels of education among females, and more participation in economic sphere (Moore, 2003).

In addition, many research studies indicate that the practice of family planning is more common among couples with higher education. Educated couples are more concerned with the future of their children and therefore tend to plan. Family planning significantly contributes to better health among femal and bearing lesser number of children provides them the opportunity to have better span of health among children (Guttmacher Institute, 2002).

Female education is pivotal aspect in infant mortality. Well educated mothers have more knowledge about health; they are more empowered, family planning is more common among them; an increase in female education is linked with spike in income and educated women are less

exposed to higher levels of poverty leading to decrease in infant mortality (Sartorius and Sartorius, 2014).

### **2.3. Maternal Health and Infant Mortality**

Maternal health refers to the health of women during pregnancy (right from the first day to birth of children), childbirth, and the postpartum period. The major direct causes of maternal illnesses include postpartum hemorrhage; maternal infections such as malaria, flue, and high blood pressure, and obstructed labor<sup>1</sup> (Luxemburgeret *al.*, 2001).

Maternal health is pivotal for any children. Many researches show that maternal health is a key determinant of children health. Maternal health plays a pivotal role in physical and mental well-being of children. Mother's health affects the growth of children within the womb as well. Many medical professionals validated from there researches that mother's health affects the physical and brain development of children in the womb. Mothers who are weak are more vulnerable to deliver the baby before its due time that is pre-term labor. Poor socio-economic conditions are responsible for poor health among mothers. Pregnancy requires better nutrition and health care providers whereby countries with poor socio-economic conditions do not allow women to get better nutrition and health services during pregnancy. This leads to pre-term labor which is responsible for infant mortality. Further, statistics validates that infants whose mother weight is less on Body Mass Index (BMI) scale tends to deliver babies with breathing problems leading to vulnerability early neonatal deaths (Statistics South Africa, 2012).

Maternal mortality (survival) appeared to be the most prominent risk factor for infant mortality. It is a common observation that in majority of cases when mother dies the neonatal also dies. This is biological in nature such the process of birth leads to complication and in that complication the neonatal also vulnerable to many risk factors of mortality (Sartorius and Sartorius, 2014).

### **2.4. Lack of Health Facilities and Infant Mortality**

Health facilities are significant to anybody's health. Women who are pregnant require special care including care in house and hospital. It is evident from many research studies that lack of health facilities significantly correlates with infant mortality. This trend is very common in developing world. Countries such as many African and Asian countries are unable to provide their

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<sup>1</sup>When a part of the fetus cannot progress into the birth canal (Dolea, 2003)

citizens with standard health facilities. Gynecologists are part of mainstream health sector; however, there is lack of female doctors for delivery and other issues related to pregnancy. It leads to poor health among pregnant women causing an increased infant mortality rate.

After controlling for other possible confounders and determinants, a rural place of residence was significantly associated with an increased risk of death before the age of five years (among children), for example, including indicators of social support for the primary caregiver, his/her degree of financial independence, and his/her source of revenue for health-care expenses were also significantly associated with child, newborn or neo-natal death (Rutherford *et al.*, 2009).

Another key dimension with regard to lack of access to health care facilities and infant mortality is discriminatory behaviors. There is no doubt in mentioning that in poorer countries people belonging to lower middle class and poor socio-economic stratum are discriminated. Some caregivers are also socially excluded at health centers and treated in a discriminatory fashion (Cassell, Leach, Fairhead, Small and Mercer, 2006).

## **2.5. Culture and Infant Mortality**

The normative structure of any society shapes the life of people. It is validated by many studies that societies with strict adherence to traditional customs and traditions often fail to change with the passage of time. The world now is better in many aspects including standard of life including transportation, communication, housing as well as health. However, the developing world still is far behind in the mentioned betterment when compared to developed world. The role of women in this context is also inevitable. Cultures whereby women are restricted to four walls and are denied from availing their basic rights confront many problems such as poverty. The denial of women rights such as schooling, political rights and economic participation leads to dependency and poverty among women. This also results in lack of awareness among women. Dependency, poverty and lack of awareness are correlated with poor health among women as well as lack of access to better health facilities whereby both are responsible for infant mortality (Williams, 2007).

Besides, there is another dimension to it such as traditional orientation and superstitious beliefs. Traditional orientation and superstitious values and beliefs also prevail with regard to health. Various traditional and superstitious values and beliefs have been adopted for pregnant women and by not availing the modern facilities for health care of pregnant and neonatal care

increasing the risk of maternal as well as infant mortality. For example, such traditional practices include using health care measures asking supernatural to help, use of medicines made from ethno-medicines, considering birth of children at home as more valuable (e.g. the concept of Daai), negative perception towards modern medical care, use of certain foods (not proven by research) which may harm the infant and the mother as well (Undelikwo & Ebingha, 2018; Luxemburger et al., 2001).

Pakhtun culture consists of certain norms and values leading to denial of certain basic rights of women such as education, employment and health. Haider (2014) argues that recently released findings from the 2012-13 Pakistan Demographic and Health Survey showed that women are extremely vulnerable in Pakhtun society. The patriarchal norms and values have made the women dependent, uneducated and suffers from poor health. It already has been mentioned that dependency, lack of education and poor health are key contributors of infant mortality.

Sartorius and Sartorius (2014) found that maternal mortality in itself is significant for infant mortality. The secondary causes after the survival of mother includes educational and economic status of mothers, water quality and sanitation quality. These factors are indicators and attributes of poor health among mothers which increase vulnerability to infant to die. For example, if educational and economic status of mother is poor along with father there is additional cushion of out-of-pocket costs increasing vulnerability. Medical costs are not always easy to handle for mothers with pregnancy because there are other needs as well which poor cannot fulfill which doubles the burden. These are often labelled as indirect factors contributing to higher infant mortality rates. On the contrary, better socio-economic status of fathers specifically mothers reduce vulnerability to infant mortality. The indirect effects include availing better health facilities because such parents can afford medical costs besides other needs. It is also evident that a greater gap or intervals between children is evident among children of such mothers and father (those with better socio-economic status. Parents having better socio-economic condition are also found to be living in better hygienic conditions which are important to pregnant women whereby it also decreases the probability of infant to die due to infections. At regional level many studies concluded inappropriate drinking and water sanitation as indirectly associated with higher infant mortality rates. Central America in mid-1960 was key example for this situation. (Leive and Xu , 2008).

## References

- Adhikari, R. and Sawangdee, Y. (2011). Influence of women's autonomy on infant mortality in Nepal. *Reproductive Health*, vol 8:Pp. 1-8.
- Agha, S. (2000). The determinants of infant mortality in Pakistan. *Soc Sci Med*. Vol 51(2): Pp 199-208.
- Akwenabuaye, U. V. & Enang, E. (2018). Cultural Practices and Infant Mortality in Cross River State, Nigeria: A Sociological Perspective. *Mediterranean Journal of Social Sciences*, vol 9:Pp 211-220. 10.2478/mjss-2018-0153.
- Bushra, A. (2019). Infant mortality. Interview by Ilyas Khan, 10 November, 2020.c
- Dolea, C. (2003). Global burden of obstructed labour in the year 2000. *Global burden of disease 2000*.
- Ezzati, M. Lopez, A. D. Rodgers, A. Vander, S. and Murray, C. J. (2002). Selected major risk factors and global and regional burden of disease. *Lancet* 2002, 360: 1347-1360. 10.1016/S0140-6736(02)11403-6
- Guttmacher Institute. (2002). Family Planning Can Reduce High Infant Mortality Levels. Online available at: <https://www.guttmacher.org/report/family-planning-can-reduce-high-infant-mortality-levels>. Retrieved on 11/4/2019.
- Haines, R. M.(1985). Inequality and childhood mortality: A comparison of England and Wales, 1911, and the United States, 1900. *The Journal of Economic History*, 45( 4), 885-912
- Jain, A. K. (1985). Determinants of regional variations in infant mortality in rural India. *Popul Stud* 1985, 39: 407-424. 10.1080/0032472031000141596
- Kulsoom, K. (2019). Infant mortality. Interview by Ilyas Khan, 11 November, 2020.
- Mahmood, S. and Arif, F. (2008). Assessment of nutritional beliefs and practices in pregnant and lactating mothers in an urban and rural area of Pakistan. *Journal of Pakistan Medical Association*, Vol 47; 112-119.



Merriam-Webster online dictionary. (2007). [Merriam-Webster. Archived](#) from the original on 2007-03-11. Retrieved 2019-03-27.

Murray, C.J., Laakso, T., Shibuya, K., Hill, K. and Lopez, A.D. (2007). Can we achieve Millennium Development Goal 4? New analysis of country trends and forecasts of under-5 mortality to 2015. *Lancet, Vol 370: 1040-54.*

Nosheen, A. (2019). Infant mortality. Interview by Ilyas Khan, 17 November, 2020.

SANTE. (2007). The Integrated Management of neonatal and child hood illness. Steps to prevent child mortality. *SANTE (13): 1-8.*

Sartorius, B.K., Sartorius, K. (2014). Global infant mortality trends and attributable determinants – an ecological study using data from 192 countries for the period 1990–2011. *Popul Health Metrics* **12**, 29. <https://doi.org/10.1186/s12963-014-0029-6>

Shamim, A. (2019). Infant mortality. Interview by Ilyas Khan, 24 November, 2020.

WHO (2016). [https://www.who.int/healthinfo/indicators/2015/chi\\_2015\\_27\\_mortality\\_infant.pdf?ua=1](https://www.who.int/healthinfo/indicators/2015/chi_2015_27_mortality_infant.pdf?ua=1)

WHO (2016). **Infant mortality.** [https://www.who.int/gho/child\\_health/mortality/neonatal\\_infant\\_text/en/](https://www.who.int/gho/child_health/mortality/neonatal_infant_text/en/)

Zara, K. (2019). Infant mortality. Interview by Ilyas Khan, 26 November, 2020.