

## Review Article

# A review of the prevalence and factors responsible for mal-nutrition in Pakistan

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## Abstract

*Problems occupying special attention identified by the World Health Organization also include Childhood malnutrition (Beagle hole et al., 1993). Development goals are also programmed by the United Nations to halve the problem of under-nutrition (Alderman et al., 2005). Despite of the involvement of international organizations still under-nutrition has a main contribution to the high mortality rate of the children in the most part of the world (Caulfield et al., 2004). Poverty plays a main part in the high prevalence of childhood under nutrition. The child is said to be under-weight when its weight is lower than the weight of the reference range for that age. The weight for height deficiency is known as wasting, while height for age deficiency as stunting. Wasting may be due to acute food shortage while prolonged food deprivation can cause stunting (Cosminsky et al., 1993; de Onis et al., 2000; Fernandez et al., 2002; and Zere & McIntyre, 2003). The factors responsible for the predisposition of children to mal-nutrition vary and ranges from political instability to the economical status of the area (de Onis et al., 2000). Therefore protocols developed for the preventive measures of mal-nutrition should be multifaceted.*

**Keywords:** Malnutrition, wasting, stunting.

## Introduction:

Problems occupying special attention identified by the World Health Organization also include Childhood malnutrition (Beagle hole et al., 1993). Development goals are also program by the United Nations to halve the problem of under nutrition (Alderman et al., 2005). Despite of the involvement of international organizations still under nutrition has a main contribution to the high mortality rate of the children in the most part of the world (Caulfield et al., 2004). Poverty plays a main part in the high prevalence of childhood under

nutrition. The child is said to be under-weight when its weight is lower than the weight of the reference range for that age. The weight for height deficiency is known as wasting, while height for age deficiency as stunting. Wasting may be due to acute food shortage while prolonged food deprivation can cause stunting (Cosminsky et al., 1993; de Onis et al., 2000; Fernandez et al., 2002; and Zere & McIntyre, 2003). The factors responsible for the predisposition of children to mal nutrition vary and ranges from political instability to the economical status of the area (de Onis et al., 2000). Therefore protocols developed for the preventive measures of mal-nutrition should be multifaceted.

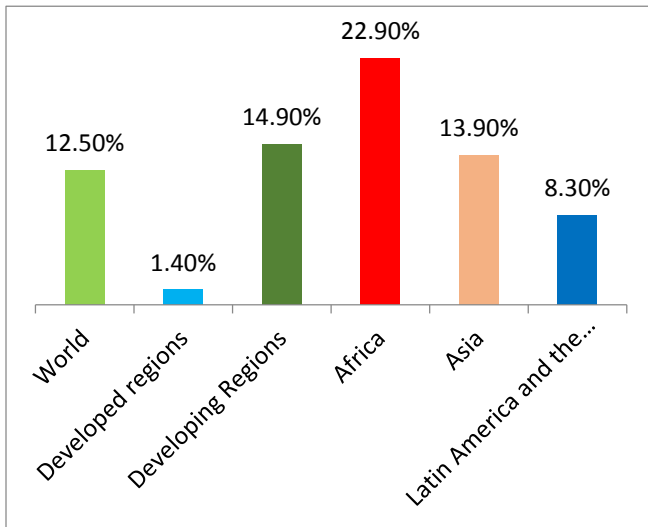
## Mal-nutrition Worldwide

There has been an estimation that about 870 million population worldwide are undernourished. A graphical representation of the malnutrition status is indicated figure 1. About 12.5 % of world

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population is affected with malnutrition. Although the ratio of malnutrition is much lower in developed region as compared to the developing areas. Asia has a percentage of 13.9 in malnutrition status.

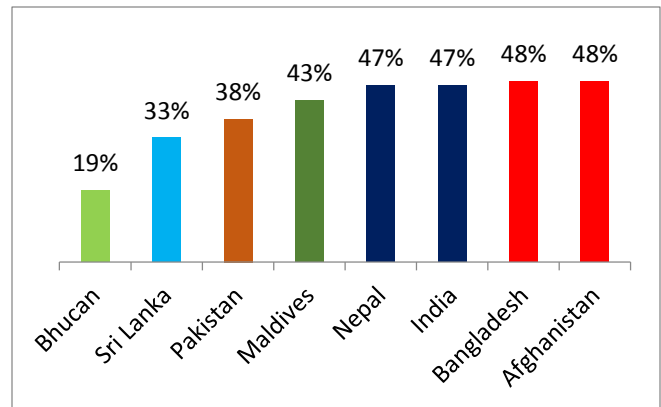
**Figure 1** the percentage of Mal-nutrition Worldwide (2010-2012).



**Malnutrition status in South Asia**

During 1990s malnutrition status in South Asia was distributing as stunting contributes 41 %, underweight shows 35 %, while wasting has a 10 percent of total (Muller and Krawinkel, 2005). Figure 2, exhibits the country wise status of percentage of underweight below five years children. It indicates that India, Nepal, Bangladesh and Afghanistan contain higher percentage of underweight children among the countries of South Asia.

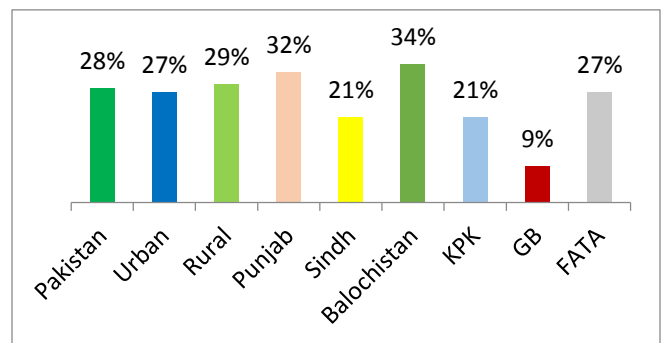
**Figure 2:** Status of Underweight below Five Years (percentage) in South Asia (1995-2000).



**Insecure Food situation in Pakistan**

It has been estimated that about 150 million children that are malnourished have age below five years. Malnutrition also linked with half percentage of infant mortality in the world. About 50 % of malnourished population is found in India, Pakistan and Bangladesh. Pakistan is also suffering from a problem such as malnutrition having serious consequences on children and women of reproductive age (National Nutrition Survey, 2011).

**Figure 3** distribution percentage of food insecurity in Pakistan



**Predisposing factors to Malnutrition**

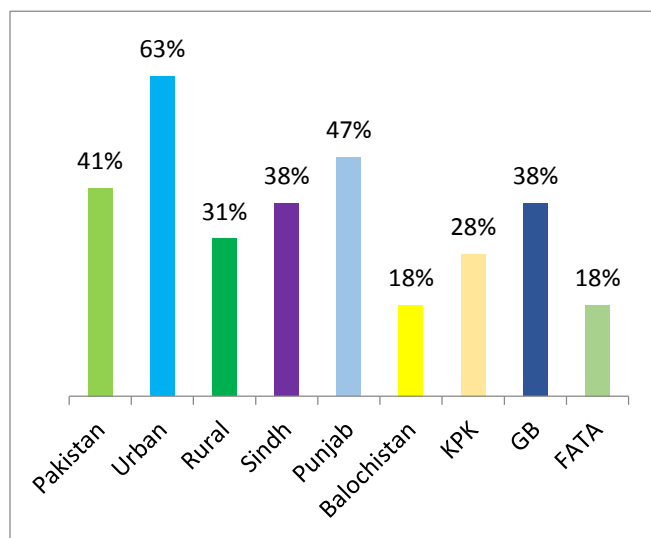
**Economical condition of the household.**

Child nutritional status can easily be determined by the economic status of the household (UNICEF, 1990). It has been reported that incidence of child stunting is decreasing with increasing level of the economic status of the household (Getaneh *et al.*, 1998; Genebo *et al.*, 1999; Yimer, 2000).

**Educational status of the mother**

Education of the mother plays a very important role in nutritional condition of the children. As education is included in those resources by which a women is becoming capable to care her children in a better way (Engle and Menon, 1996). ). As can be seen from Figure 3 and Figure 4 the literacy of mother is considerably associated with malnutrition in children. Results shows that malnutrition in the children is low with increasing level of their mothers’ educational status (Yimer, 2000; Genebo *et al.*, 1999).

**Figure 4** Percentage of literacy of Mothers National Nutrition Survey 2011.



**Mothers Occupation**

Nutrition status of the children also depends on the employment condition of the mother. If the mother is employed she can care her children in a better way. The job doing mother is contributing to the family financially. The prevalence of malnutrition in children whose mother is employed is less than those whose mothers are not doing any job (Leslie, 1988).

**Access to clean drinking water and availability of toilet facility**

The frequency of infectious diseases increases with low access to a safe drinking water. Low access to safe water may also result in different types of malnutrition (UNICEF, 1990; Engle, 1992). A comparative study has shown that children not having adequate toilet facility may also suffer from a certain type of malnutrition (Getaneh *et al.*, 1998).

**Prolong Diarrhea**

A comparative study showed that incidence of stunting was high among children having prolonged diarrhea (Sommerfelt *et al.*, 1994).

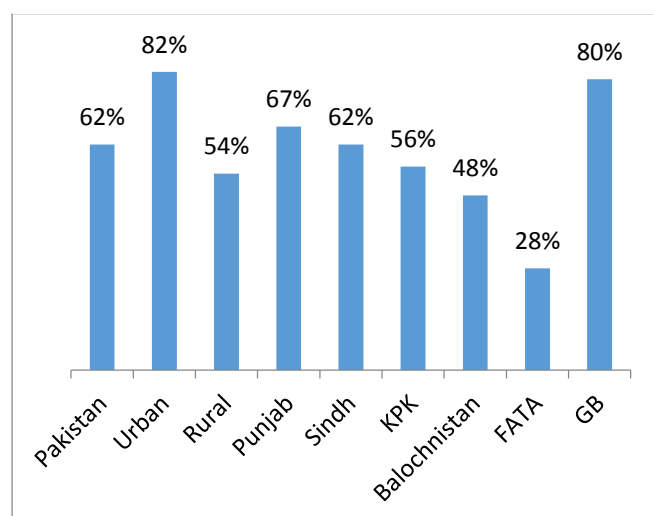
**Birth order**

With a birth of a new child parent’s attention to the elder’s one become less as a new baby needs more care than elder one (Jeyaseelan, 1997).

**Low Birth interval among children**

Pregnancies with low birth interval leave the mother with little time to restore fat and other nutritional requirements needed for the developing fetus (ACC/SCN, 1990). As clear that with higher birth spacing provides the mother with enough time for adequate child care and breastfeeding. The incidence of malnutrition in children having a birth interval less than 2 years is high (Sommerfelt *et al.*, 1994).

**Figure 5** Percentage of Antenatal care during last Pregnancy National Nutrition Survey 2011.



### Conclusion:

Childhood malnutrition has a main contribution to the high mortality rate of the children in most part of the world. Development goals and involvement of international organizations are programmed to address the problem of malnutrition by identifying the predisposing factors.

These factors includes economical status of the area, educational status of the mother, access to clean drinking water and availability of toilet facility, birth order and low birth interval among children. Therefore, protocols developed for the preventive measures of mal-nutrition should be multifaceted.

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