IMPLEMENTATION OF IMCI IN PAKISTAN; A SUCCESS STORY OR A FAILURE?

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Integrated Management of Childhood Illness (IMCI) is a program of World Health Organization (WHO), which is designed with an aim to save the under-five and neonatal population of the world from easily preventable diseases which are responsible for an average seven out of ten deaths in the pediatric population. Nearly nine million children under five years of age die each year out of which 6.6 million children under 5 years of age had died in 2012 only, mostly from preventable causes (UNICEF/WHO, 2009). These diseases include upper respiratory tract infections (most commonly pneumonia), diarrhea, measles, malaria and malnutrition. The program has achieved tremendous success in last few decades throughout the world. Pakistan, ranked 26th in the list of countries with the highest infant mortality rates in the world, has also shown remarkable improvement for under-five mortality rate which was measured to be 13.8% in 1990 to 8.6% in 2012. According to the report, an estimated 86 babies died below the age of five per every 1000 live births in Pakistan during the year 2012. The figure comes from 409,000 babies dying below the age of five out of 4,604,000 newborns in 2012 (Voice of America, 2014). For children under the age of one, the number of babies dying per a thousand births was 106 in 1990, and an improved 69 in 2012 (Trading Economics, 2014).

IMCI provides basic guidelines to health care providers to avoid and reduce the mortality and morbidity in the children. The IMCI guidelines consists of particular danger signs which helps healthcare providers classify the severity of disease in the home particularly if the patient is not able to access the nearby hospital or healthcare facility. Furthermore, the guidelines are also provided for counseling of the mothers regarding the continuum of care of the ill child and prevention of the rest of the family members from acquiring that particular disease. IMCI provides thorough instructions regarding the monitoring of the child growth with respect to feeding practices as well (WHO, 2014). Considering the preventable diseases; Pneumonia claims an innocent child’s life every 30 seconds making it the number one global cause of childhood mortality. In Pakistan alone, it has been responsible for the death of 92,000 children of under 5 years of age annually and contributes 18 per cent to the total global child deaths (The Nation, 2013). The IMCI guidelines for ARI include classifying the condition as severe pneumonia, pneumonia, cough or cold, and then to give appropriate antibiotics and/or bronchodilators as the management and also to treat wheezes, if present. However, it has been shown in several studies that the management strategy adopted by the Pakistani doctors is not completely in accordance with the WHO/IMCI guidelines and they do not use antibiotics and bronchodilators appropriately particularly when it is accompanied by wheezes. During the period 2008-2012, the percentage of children who were brought to healthcare center for suspected pneumonia and sought advice only were only 69.3% whereas only 50.3% of those actually got the antibiotic treatment during the same period for suspected pneumonia showing the ignorance regarding this lethal but treatable disease (UNICEF, 2014).

Diarrhea is second only to pneumonia as the cause of deaths in pediatric population globally causing an estimated 1.5 million (1 in 5) under-five deaths every year (UNICEF, 2014). It kills more young children than AIDS, malaria and measles combined. In Pakistan alone, 53,300 annual deaths have made Pakistan ranks 6th among the list of 15 countries that are responsible for nearly three quarters of child deaths due to diarrhea (UNICEF/WHO, 2009). The cause of death is mostly electrolyte imbalance and...
dehydration which can be corrected easily using Oral Rehydration Therapy (ORT), zinc and appropriate and timely breast feeding (Ahmed, 1990). Similar to pneumonia, studies have shown that the treatment plan in Pakistan doesn’t follow the guidelines provided by WHO (Nizami, 1996). Furthermore, one study has even highlighted the fact that the knowledge and attitude towards mainstay of the guideline i.e., ORT is poor among doctors as well as mothers (Seyal, 2009). It was an unfortunate finding that less than 50% of the mothers use ORS for their children in acute episode of diarrhea, and almost equal number of the mothers cannot even prepare ORS properly at their homes. UNICEF stats for use of ORS in treatment of diarrhea for 2008-2012 are just 41%. In another study, over 50% of mothers identified ORS as the best therapy for diarrhea but only around 35% of them actually used it for their child (Malik, 1992). Surprisingly, the prescription of ORS by doctors is also not very commendable as it has been shown by a study that majority of doctors rely on antibiotics and anti-diarrheal for treatment of diarrhea in comparison to ORS (Halvorson, 2004). On the contrary, majority of the doctors’ advice breast feeding for diarrhea but the percentages remain low for the mothers who actually bring this into practices. Remember that the proper breast feeding is a major guideline for diarrhea (Kasi, 1975).

Fever is a term which encompasses a huge number of illnesses. But in Pakistan, the most commonly implied differential diagnoses in clinical settings for fever are malaria, typhoid, measles, dengue and meningitis when accompanied with neck stiffness. The most common of these encountered is malaria. About 3.4 billion people – half of the world’s population – are at risk of malaria. In 2012, there were about 207 million malaria cases (with an uncertainty range of 135 million to 287 million) and an estimated 627000 malaria deaths (with an uncertainty range of 473000 to 789000). Increased prevention and control measures have led to a reduction in malaria mortality rates by 42% globally (WHO, 2014) b. Although, insufficient literature is present regarding the incidence of malaria in Pakistani population but the WHO stats that are available have revealed that only 3.3% febrile children received antimalarial treatment during the period 2008-2012 and only 0.1% households had at least one insecticide treated nets (ITN) in their houses during the same period. Population with high transmission (>1 case per 1000 population) is 29% whereas population with low transmission (0-1 case per 1000 population) is 69% and malaria free population is just 2% in 2012 (WHO, 2014)b. This horrible analysis highlights the need for trained individuals and strict compliance of IMCI guidelines which stresses the need to add primaquine to the regime to avoid relapse of malaria caused by vivax species (75% of the total infections in Pakistan). Despite these figures, the overall stats for measles have been very encouraging. Deaths from measles among children under 5 years of age fell from 482,000 in 2000 to 86,000 in 2012, thanks in large part to the greater immunization coverage, which increased from 16 per cent in 1980 to 84 per cent in 2012 (Kasi, 1995).

Malnutrition might be a single word but it can predispose an individual to a multitude of disorders mainly as it causes immunosuppression. Appropriate weaning and breast feeding practices amongst mothers can reduce the morbidity and mortality rates caused by malnutrition significantly. Although, a protocol exists in the IMCI protocols for malnutrition regarding weaning and breast feeding practices but many factors create obstacles in its proper implementation. These factors include illiteracy, customs, myths, a busy life schedule of mother and more importantly lack of awareness (WHO, 2014) b. Although, it is very encouraging that health care professionals are highly aware of WHO guidelines for breastfeeding but a large number of mothers are not aware of its importance. Poverty also results in worsening of the situation as a major number of children living in the country cannot buy good quality as well as adequate quantity of food which then leads to malnutrition (Mahmud, 1993). Another important factor is worm infestation which is a major cause for anemia in the country too mostly because of the poor sanitary conditions. Anemia is a very common problem in our settings, and there is a lack of adequate research and data amongst children for this very manifestation, and the evidence of proper implication of IMCI of this condition, is also lacking. In general, the proper implementation of IMCI in
Pakistan cannot be evaluated with accurately because we have inadequate amount of research and data available. Although, the stats available does show significant improvement in selective areas but still a high number of deaths are reported due to the preventable diseases. Low literacy rates should be considered as a major hurdle in the implementation of the program with its full swing. A shameful statistics for female education is the root cause of this problem as most of the mothers are care takers and nurturers of their child (Agha, 2007). A point not to be forgotten is that the guidelines chiefly encircles and targets the local population and are focused on intervention which should be taken before reaching to the hospital. The low literacy level is also responsible for diverting the mother’s attention towards non-logical customs and myths, which most of the time results in worsening of the situation. A high ratio of poverty also adds insult to the injury.

To conclude, we can say that we need to work on the area of education especially in rural areas. Awareness programs should be conducted at all levels from health care personnel to general population to combat the misconceptions and myths. Research culture should be promoted in order to increase the literature so that we can have appropriate data and statistics, which will then aid us in finding the right direction to work on and it will also help us in diagnosing the underlying causes of the existing problems, which will surely help us to produce better results in future.

REFERENCES


