# Measles hectic in Pakistan; Upsurge versus the lurking vaccination

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## Abstract

Measles has claimed more lives than anticipated, as the outbreaks hit Pakistan severely in 2013 as compared to 2012. Claiming 350 lives through the year 2013, Measles became a headache for the health agencies, authorities and common people. The sudden appearance of the virus in different parts of the country both rural and urban at the same time can be linked to more than one cause. The notable being corruption in health system, poor health infrastructure, destabilized routine immunization, shortage in number of vaccinators, negligence among parents, and floods. As a consequence of these causative factors, the unclear picture of immunization coverage can be presumed as the ultimate etiology of outbreaks in such numbers. Therefore, there is an urgent needto draw out the actual data of immunisation coverage and focus on elimination of hurdles in the road to success in fully coverage with vaccines.

#### Background

It's been quarter less than a year, since another among the human viruses attacked the already vulnerable population of Pakistan. The highly contagious Measles virus is back with a massive number of deaths in Pakistan.<sup>1</sup> Outbreaks of Measles started in December 2012 hitting the under developed areas of Sindh province of Pakistan. The outbreaks were first thought to be confined only to Sindh, but they soon became apparent in other parts of the country mainly, Punjab.<sup>2</sup> The pattern of outbreaks was such that a steady rise in Measles cases started in April and then in October, 2012. This rise formed into outbreaks in the end of November and start of December, 2012. The situation got very serious in the year 2013. Killing about 350 people through the year 2013, Measles has unfortunately snatched more lives than anticipated, thus causing a very gloomy situation across the country especially in Sindh and now Punjab.Further, the nature and frequency of outbreaks reported were not like those occurring in other parts of the world.<sup>1,3</sup>

## The What, Why and How?

Looking at the above mentioned situation, there is a dire need to dig out the reason of this issue. In January this year, when the outbreaks were in the initial stages, Haris Riaz reported the failings of public health in Pakistan in the Lancet. The report emphasized on poor vaccination coverage and corruption in health system as the responsible factor for Measles outbreak.<sup>4</sup> The sudden appearance of the virus in different parts of the country both rural and urban at the same time tells a story. Such a massive number of outbreaks can be linked to more than one cause, like corruption in health system, poor health infrastructure, destabilized routine immunization, shortage in number of vaccinators, negligence among parents, floods and malnutrition.<sup>4-7</sup>

However, it can be presumed that the ultimate cause of such a massive number of outbreaks and deaths due to Measles is the staggered immunization coverage. Although the estimated coverage in 2012 is 83%, yet these outbreaks indicates that the actual coverage is not what is reported from different provinces of the country. Coverage with MCV suggests that during the past 6 years the coverage figure was almost constant except the year 2009 when the estimated figure got very down to 70%.8 Furthermore, taking the provinces, a report of the federal ombudsmen of Pakistan has depicted that measles vaccines for 2012-13 were not allocated to Sindh (where the outbreaks started), an example of the poor quality of the measles supplementary immunization activities (SIAs). The document further emphasized that the reported immunization coverage is higher than actual coverage.<sup>9</sup> This was affirmed, when international bodies recently rejected the EPI report on childhood immunization in Pakistan.<sup>10</sup>

Unfortunately, despite the launch of Measles and Rubella Initiative (MRI), the immunization coverage by Measles containing vaccine (MCV) in Pakistan remained almost the same in 2012 as it was in 2006 as shown in Figure.<sup>11</sup> Furthermore, the MRI in its annual report 2012 reported that about 1 million children were missed during Measles immunization in Pakistan in 2011.<sup>12</sup>

Low coverage, as an obvious outcome of all the causes mentioned above, is continually causing problems since

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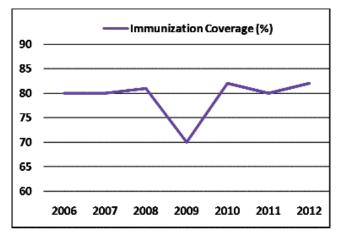


Figure: Measles containing vaccine coverage in the past 6 years.

long.<sup>13</sup> However, this time the case is more complicated. Despite the so many efforts of the WHO and other international agencies, the issue of low coverage of immunization still seems like an unsolved mystery. There are many reasons explored for the low immunization coverage. Two sides are to be blamed, health sector officials and parents of the victims. The former i.e. weaker management on part of government is obvious as explained by Haris Riaz in the report.<sup>4</sup> However, the lack of vaccination on part of parents is something that needs to be elaborated. Ignorance, lack of awareness, misconceptions, refusal to vaccinate their children and forgetting booster dose administration are among the notable causes on part of parents.

The delays in and thus the low coverage of vaccination against polio virus is understandable as there are many unavoidable and difficult-to-deal reasons like security issues, threats to vaccinators, prejudices and mistrust among public.<sup>13</sup> But, the ignorance in immunization against Measles is totally unjustifiable. Measles vaccine are readily available and a cost-effective vaccines.<sup>14</sup> Furthermore, As compared to polio vaccines, Measles vaccines are more heat-stable and thus efficacious at moderate temperatures.<sup>15</sup> Therefore, the only reason for this low coverage is ignorance; ignorance on part of the health officials and government bodies, and the negligence among parents of children.<sup>13</sup>

#### Conclusion

So, with the ongoing Measles and Polio epidemic, health

sector in Pakistan needs meticulous assessment. There is a serious need to focus on strategies for intensifying the vaccination coverage. Holding accountable the different involved agencies will result in actualizing the figures of coverage and thus will help in delivering vaccines to the missed population. Moreover, creating awareness among parents about the effectiveness of vaccination is indispensable.

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