

Special Article

Effects of COVID19 Pandemic on Child Health and Post Pandemic Scenario in Bangladesh

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Introduction

The COVID-19 pandemic creating profound panic, fear and anxiety for human race. The situation is undoubtedly tragic and heart-breaking. COVID-19 has taken and is still taking huge numbers of lives. During 1 August 2020, the affected numbers raised from 1 million to 17.39 million and lives lost from 50,000 to 675,060 worldwide with in last 4 months only.¹

While the global coronavirus crisis worsens, a surprising feature of the disease appears that children might be immune from the worst of it. Studies suggest that COVID-19 is more likely to infect older adult men, particularly those with chronic comorbidities.² There is only limited data detailing the effects of COVID-19 on the pediatric population. A review of 72,314 cases by the Chinese Center for Disease Control and Prevention showed that <1% of COVID-19 cases were in children younger than 10 years. Children of all ages were infected, with the median age being 7 years (range 1 day to 18 years) and over 90% of the cases were mild or moderate in nature.³ In Bangladesh 3% of children <10 years were identified as COVID-19.⁴ Young children, especially infants, however, seemed to be more susceptible to severe disease than older children; 10% of patients under 1 year of age had severe or critical disease.⁵ Comparing to adults, so far the direct effects of COVID19 on child and adolescent appears not significant. But, the indirect effect could be horrifying. If we reimagine and try to foresee the indirect impact, we would visualize the horrific impact on child health at the post Pandemic era.

As of 1 August 2020, according to the Institute of Epidemiology, Disease Control and Research

(IEDCR), there are 239,860 confirmed COVID-19 cases in Bangladesh, including 3,132 deaths.⁴ Apart from these huge numbers of affected and death toll it already created a havoc on our daily lifestyles, work and job, businesses with a negative impact on earnings and overall economy. The COVID-19 pandemic has changed, and will continue to change our way of lives as well as the world scenarios in coming years. At the same time COVID-19 will surely be throwing an horrific impact on child health in very near future. Visits to health care centres are declining due to lockdowns, imposition of movement controls and transport disruptions, and on the top of those the community remains fearful of coronavirus infection along with frustration for the future.

Reduction in health services

Health services for children has decreased significantly due to the COVID-19 pandemic. COVID-19 outbreak will adversely affect the condition of children, particularly in the lives of most vulnerable children. This includes disruption to their healthcare, nutrition, protection, education and overall mental wellbeing including social interaction with friends, peers, family members and caregivers, family planning, antenatal and postnatal care, child delivery, vaccinations and preventive and curative services. The uptake of maternal and newborn health services has decreased, approximately by 19 percent. In addition, key maternal health services such as antenatal care visits and postnatal checkups in health facilities have decreased substantially, and deliveries in facilities have decreased by 21 percent for the period of January to March 2020 compared to October-December 2019.⁶ Critical health services for under-five children also has decreased significantly due to the COVID-19 pandemic. The service utilization for children under 5 years of age in March 2020 was down to 25 per cent compared to March 2019.⁶

While the COVID-19 pandemic will increase mortality due to the virus, it is also likely to increase mortality

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indirectly. A study showed that if the COVID-19 pandemic results in widespread disruption to health systems and reduced access to food, LMICs can expect to see large increases in maternal and child deaths. If coverage reductions of 9·8-18·5% and wasting increase of 10%, over 6 months there would be 253 500 additional child deaths and 12 200 additional maternal deaths. If coverage reductions of 39·3-51·9% and wasting increase of 50%, over 6 months there would be 1 157 000 additional child deaths and 56 700 additional maternal deaths. These deaths would represent a 9·8-44·7% increase in under-5 child deaths per month, and an 8·3-38·6% increase in maternal deaths per month, across 118 LMICs.⁷

Reduction in Immunization services

With lockdowns in place as a part of the COVID-19 response, routine immunizations have been severely disrupted, and parents are increasingly reluctant to take their children to health centers. The World Health Organization and UNICEF warned of an alarming decline in the number of children receiving life-saving vaccines around the world. This is due to disruptions in the delivery and uptake of immunization services caused by the COVID-19 pandemic.⁸

National measles and rubella (MR) mass vaccination campaigns had been postponed. In Bangladesh, measles and rubella campaign targets 34 million children aged from 9 months to 9 years scheduled on the last week of March 2020 was postponed because of the COVID19 outbreak.⁶ Though routine immunization sessions continues, many outreach sessions have been suspended and the transportation of vaccines remains challenging.⁹ The surveillance of measles dropped at the alarming level in April and May, 2020. The EPI routine immunization coverage is also decreasing, putting the countries including Bangladesh at risk of outbreaks of extremely contagious diseases like measles.¹⁰

Potential impact of COVID-19 on Child Health

All the achievements so far in child health and survival are dependent on the continued provision of essential health services to mothers and children around the world. Bangladesh was successful in achieving the MDG well ahead of scheduled target and proud for being able to lower the Newborn, Infant and under five mortalities appreciably than its neighborhood. This was possible because of our well structured and

wonderfully functioning EPI and PHC service network for IMCI and Neonatal, Maternal Care right from the community level.

A large number of children could die from preventable and treatable conditions if the pandemic leads to substantial reductions in health service coverage. Analysis estimates by researchers from the Johns Hopkins Bloomberg School of Public Health, warned that an additional 1.2 million under-five deaths could occur in just six months in 118 low- and middle-income countries, due to reduction in routine health service coverage levels and an increase in child wasting. These potential child deaths will be in addition to the 2.5 million children who already die before their 5th birthday every six months, threatening to reverse nearly a decade of progress on ending preventable under-five mortality.⁶ Reduction of health services could cause death of over 28,000 children under the age of 5 years in the next 6 months as an indirect result of coronavirus pandemic.¹¹ The greatest number of additional child deaths will be due to an increase in wasting prevalence among children, which includes the potential impact beyond the health system, and reduction in treatment of neonatal sepsis and pneumonia.

Experience from the past epidemics like the 2014 West Africa Ebola outbreak and SARS has shown that indirect effects of an outbreak-e.g. medical supply including vaccination chain disruptions, declining of health care services delivery and utilization as well as need of increased healthcare resource and personnel reallocation might be severe, sometimes outpacing the direct impact of the outbreak itself. Moreover, many of these indirect mortality effects may not be apparent for some time after the pandemic recedes and may even reverberate for an extended period following the pandemic. In parts of West Africa, for example, measles deaths among children increased dramatically following the Ebola outbreak as immunizations were curtailed amid the epidemic.¹²

Reduction in routine immunization coverage, means that many children will be unvaccinated or under-vaccinated, putting their lives at risk of vaccine preventable diseases. Reduction in routine immunization coverage putting millions of children - in rich and poor countries alike - at risk of diseases like diphtheria, measles and polio.¹³ Its postulated,

post COVID-19 pandemic, many children could die from preventable causes over the next six months. According to a UNICEF analysis, some 77 per cent of children under the age of 18 worldwide are living in one of 132 countries with movement restrictions and lockdown. These are creating the household income loss, poverty, hunger and disruptions to care-seeking and preventative interventions like vaccination are also substantial and widespread.⁶

The COVID-19 pandemic threatens to disrupt the provision of essential services due to barriers to the supply and demand for services. Mathematical models indicate that large service disruptions in Bangladesh have the potential to leave 1,654,500 children without oral antibiotics for pneumonia, 3,673,600 children without DPT vaccinations, 386,500 women without access to facility-based deliveries, and 5,932,000 fewer women receiving family planning services. As a result of disruptions in all essential services, child mortality in Bangladesh could increase by 37 percent and maternal mortality by 19 percent over the next year.¹⁴

Future challenges

In the past, world had faced many challenges, but the human race could overcome those with inventions of vaccines, adopting appropriate policies and timely interventions. Here again, we must be positive but at the same time must formulate appropriate policies and take actions for timely implementation. Surely, one day the COVID19 challenges will end, but we must understand the fact that we have to face new challenges in post pandemic era. So, being panicked and overwhelmed by the present pandemic, we cannot just be looking and waiting for a vaccine preventable disease (VPD) to emerge as a different pandemic.

Under a worst-case scenario, the global number of children dying before their fifth birthdays could increase for the first time in decades. So we must encourage that children receive their routine immunizations with preventive measures including physical distancing, hand washing, and face mask. We must make already panicked parents to understand that Vaccines are safe, effective and life-saving tools to control and prevent outbreaks of infectious diseases. Disseminating accurate information and stopping the spread of misinformation is important to ensure that every child is protected with life-saving vaccines. Lessons

learned from the past, we must rethink to adopt new outcomes, to restart the withhold services and enforce catch up program for missed opportunities while responding to the present COVID19 crisis.

Conclusion

Future challenge is now to be taken on our table as priority list to process and formulate for adoption of child health policies in a new dimensional approach. Essential health care services should be preserved to prevent avoidable losses of maternal and child lives during the COVID-19 pandemic and to protect progress in reducing maternal and child mortality achieved over recent years.

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