

Addressing the Resurgence of Measles: A Global and Pakistani Perspective

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Measles is a highly contagious disease and according to a report on the data and statistics of measles by *Centers of Disease Control and Prevention*, 9 out of 10 people who are unvaccinated (or under vaccinated) will contract measles if exposed to the virus(1).

From 2000 to 2019, the global measles vaccine coverage increased up to 86% but it dropped to 81% in 2021(2). Measles cases are increasing across many countries mainly due to missed doses of vaccines during Covid-19 pandemic as the healthcare systems were facing immense strain due to the pandemic. Outbreaks and death rates are higher in poor countries with limited access to healthcare resources (3). Developed countries are also at risk of measles outbreaks as a result of spread from countries with large measles outbreaks.

Pakistan ranks among the top 10 countries of the world with significant measles outbreaks as of March 2024, according to WHO (1). This recognition highlights the substantial challenge the country is facing in controlling the spread of measles and minimizing its impact on public health. Measles outbreaks have predominantly occurred in rural areas of Pakistan where healthcare infrastructure is particularly lacking (4). In 2021, Government of Pakistan partnered with UNICEF, GAVI and WHO to ensure effective availability and administration of vaccines to contribute towards global eradication of measles and

rubella and reducing the overall child mortality across Pakistan (5).

However, there has been a surge in the number of measles cases in Karachi recently and in 2023, more than 106 children succumbed to measles at just two hospitals within Karachi. Moreover, measles has been quite challenging in the country due to a number of reasons including suboptimal vaccination coverage as a result of failure of immunization programme, vaccine hesitancy, patients presenting to hospitals after development of complications such as encephalitis and pneumonia, and importantly, lack of testing facilities and malnourishment of children(6).

A recent study conducted on children with measles presenting to hospitals in Peshawar, revealed lower vaccination rates for both doses with only 35% receiving the first dose and 17% receiving the second dose(7). This indicates a significant gap in immunization coverage, leaving a substantial portion of population vulnerable to measles infection.

Pakistan merely spent 1.2% of its gross domestic product (GDP) on the public health sector in 2020-2021 in contrast to the WHO global standard of 5 % GDP. Higher budgetary allocation in the healthcare system for robust primary health care, revamping of LHW program at the community level would yield better results, as all children deserve to be vaccinated against measles and other preventable diseases. Surveillance systems need to be enhanced to detect and respond to outbreaks promptly. Also, public health

awareness campaigns regarding the importance of vaccination to ensure timely vaccination and hence effectively combat the resurgence of measles

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