

Threat of a Measles outbreak amidst COVID 19 surge in Sindh, Pakistan

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Dear Editor, The impact of Coronavirus Disease 2019 (COVID 19) on routine immunizations is crucial to take note of in developing countries such as Pakistan. Pakistan's Fully Immunized Child (FIC) coverage is only at 66%, which is below the recommended 95%. Pakistan has experienced several outbreaks of vaccine-preventable diseases in the past, including measles.¹ Measles is an extremely contagious viral disease with an often reported R0 of 18.² Nine out of ten unvaccinated exposed children get infected with measles with a potential danger of both short and long term complications. World Health Organization (WHO) recommends > 95% of measles vaccination coverage in two doses. Pakistan has been well below the recommended coverage and stands at 73% and 67% for the first and second doses respectively with significant variations among different provinces and districts.³ Sindh was reported to have 60% measles vaccination coverage in 2018.³

In Pakistan, with the surge of COVID cases and the implementation of lockdown, a significant decrease in routine vaccinations was noted. In Sindh province, the overall immunization visits declined by 51.0% during the COVID-19 lockdown compared to the preceding six months.⁴ On an average over 8438 children (0-23 months) per day missed out on life-saving immunizations in Sindh, leaving them susceptible to measles, polio, and other vaccine preventable diseases.⁴ Of the 51 %, 37.8% (3193/8438) were enrollments i.e. these children had not had any prior contact with the immunization system.⁴

This decline can be attributed to various factors such as a delay in the supply of vaccines, hesitance of vaccinators to work, commute restrictions for outreach programmes, fear of infection further discouraging parents to bring their children to vaccination centers, and an overall lack of preparedness to deal with the situation. Post lockdown, a slight improvement of 9% in routine vaccinations was recorded i.e. the overall decline being 42%.⁴

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Previously made efforts to improve the immunization coverage in Sindh must not go in vain following the pandemic. Timely immunization is the only way to prevent a secondary measles outbreak similar to the one faced by West Africa during the Ebola epidemic. Despite resuming vaccination programmes, the results are not satisfactory. Reports of suspected measles cases in Sindh have been alarming and doctors fear an outbreak.^{5,6} Currently, the vast majority of government efforts are directed towards limiting the spread of COVID-19, but it is also imperative to focus on speeding up regular vaccinations. COVID-19 can indirectly have dangerous future implications that can further burden an already struggling healthcare system in Pakistan.

DOI: <https://doi.org/10.47391/JPMA.3163>

Disclaimer: None.

Conflicts of interest: None.

Funding disclosure: None.

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