

Why is Pakistan trailing behind in the implementation of childhood immunization:

Inequalities between two South Asian Countries,
Pakistan and Bangladesh



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INTRODUCTION:

1. Immunization is the most important public health intervention to fight against vaccine-preventable diseases. Presently, it prevents an estimated 4–5 million deaths every year.
2. Although the uptake of underused vaccines is increasing worldwide, immunization uptake issues remain an obstacle in low- and middle-income countries (LMICs), especially in Pakistan.
3. Pakistan is among the countries with the highest infant and childhood mortality rates, half due to vaccine-preventable diseases controlled in similar countries. In Pakistan, the EPI program was established in 1978, but immunization coverage has been low.(1)
4. Both Pakistan and Bangladesh have large populations, and they share many similarities. Both countries have a Muslim majority, and their populations are predominantly rural; agriculture is the main economic activity, and many regions of both countries lack infrastructure. These similar factors suggest that both countries should have faced similar challenges in their large populations.(2)
5. The main goal of this study was to understand the gaps in Pakistan's national immunization program and to identify the factors that negatively impact immunization uptake. To compare this with Bangladesh, a country that is very similar in culture, religion, and socioeconomic status but which has fared better. This understanding is very important to achieve global goals for the eradication of vaccine-preventable diseases.

Pakistan	Bangladesh
230 million Population	166 million Population
2% growth rate	0.98% growth rate
Female literacy rate 45%	Female literacy rate 71.8%
Muslims	Muslims
EPI 1978	EPI 1979
1% GDP on health services	2 % GDP on health services



Figure 1: Pakistan has four Provinces Sindh, Punjab, Baluchistan, and Khyber Pakhtunkhwa



Figure 2: Bangladesh is divided into seven administrative districts, namely Dhaka, Chittagong, Rajshahi, Khulna, Silhet, and Barisal and Rangpur

METHODOLOGY:

A mixed method study was carried out consisting of In-Depth Interviews and literature review

- ❖ The literature review aimed to provide a general context of the present situation and standard practices; for this published research, blogs, the WHO Joint Reporting Forum, and reports were included. Relevant sections of the countries national immunization policy and the situational analysis section of the comprehensive multiyear plans were reviewed.
- ❖ In total, twelve in-depth interviews were conducted with EPI heads, policymakers, and researchers in both countries. The interviews were thematically analyzed. Interviews were conducted in different regions of Pakistan and Bangladesh. To capture the perspective of stakeholders on:
 - The barriers behind the low immunization level in children in Pakistan.
 - The key success factors for the EPI program in Bangladesh.

IN- DEPTH INTERVIEWS :

Key Issues

Inadequate utilization of immunization services.

Program management.

Suboptimal immunization service delivery.

To deal with Government of pakistan/ provincial governments started few activities

- Enhanced outreach activities
- Synergy among Polio & EPI staff and joint monitoring plans
- Referral mechanism
- Birth dose vaccination at labor rooms
- Developing database for uniform reporting
- Integrated health camps

Activities strategies that had improved bangladesh immunization coverage

- Strong political will
- Promote female education
- Formation of community group
- Screening checklist
- Participation of NGOs
- Community mobilization and participation
- Disemination of information through mass media
- Robust data management system and tracking of defaulters
- REC microplanning etc

Impact of Covid-19 on Routine Immunization in Pakistan

- Interrupted vaccine & logistics supplies during initial months thus built a back log
- Myths related to Covid-19 & Immunization
- EPI vaccinators assigned for COVID-19 vaccination centers thus compromising the EPI
- Less clients turn over at Health facilities

Impact of Covid-19 on Routine Immunization in Bangladesh

- EPI vaccinators assigned for Covid-19 vaccination centers thus compromising the EPI
- Less clients turn over at Health facilities
- All the planned immunization campaign postponed
- Introduction of new vaccines and staff recruitment for tribal areas got delayed

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RESEARCH AIMS:

Aim 1: To understand the gaps in Pakistan's national immunization program and to identify the factors that negatively impact immunization uptake and early adaptation of new vaccines.

Aim 2: To recognize the interventions implemented by Bangladesh to increase utilization and improve the availability of immunization services for the betterment of routine immunization coverage

Aim 3: To assess the impact of the current Covid-19 pandemic on routine pediatric immunization activities and coverage (within health facilities and outreach) and identify the factors associated with its disruption in Pakistan and Bangladesh.

LITERATURE REVIEW:

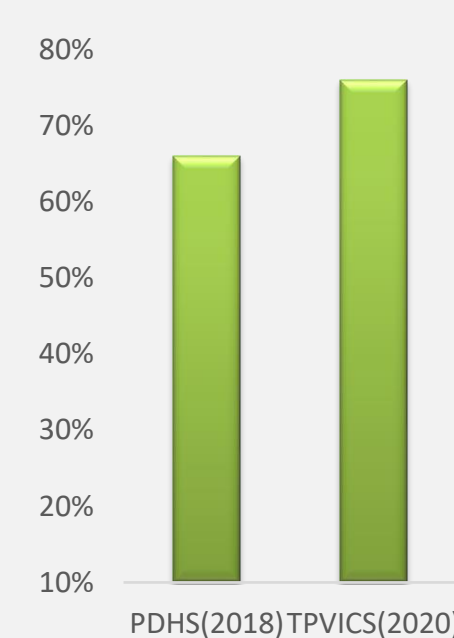


Figure 3: In Pakistan, full immunization coverage has increased from 66% to 76% during the last two years. (3)

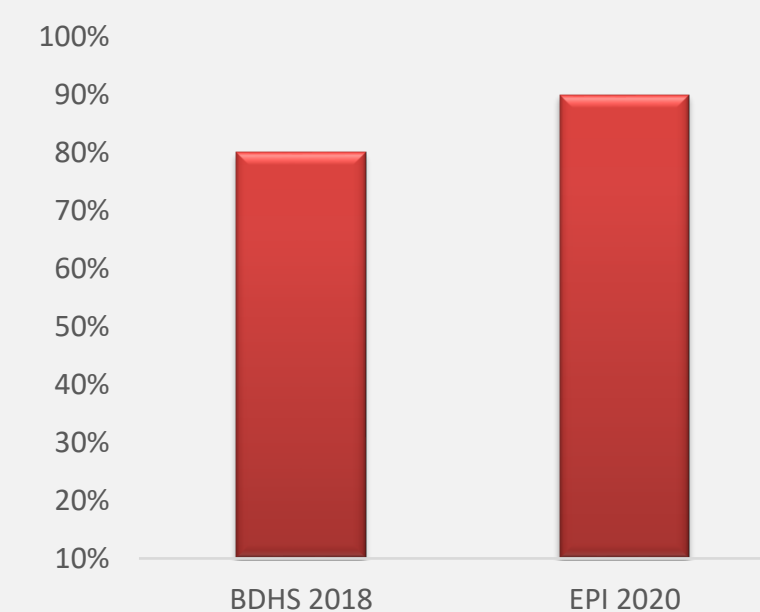


Figure 4: In Bangladesh, full immunization coverage has increased from 80% to 90% n during the last two years. (3)

Pakistan Immunization Coverage: 2018 – 2020

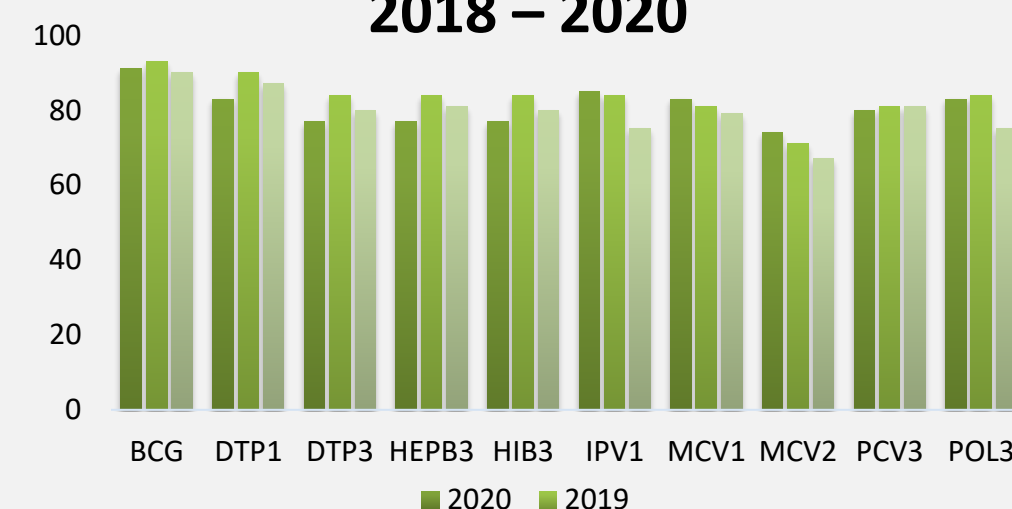


Figure 5: Pakistan Individual Antigen Coverage 2018-2020, revealed improvement if compared between 2020 and 2018; BCG 91%, IPV1 85%, MCV1 and MCV2, 83 and 84%, OPV3 75% but if compared with 2019 the coverage has been dropped.(4)

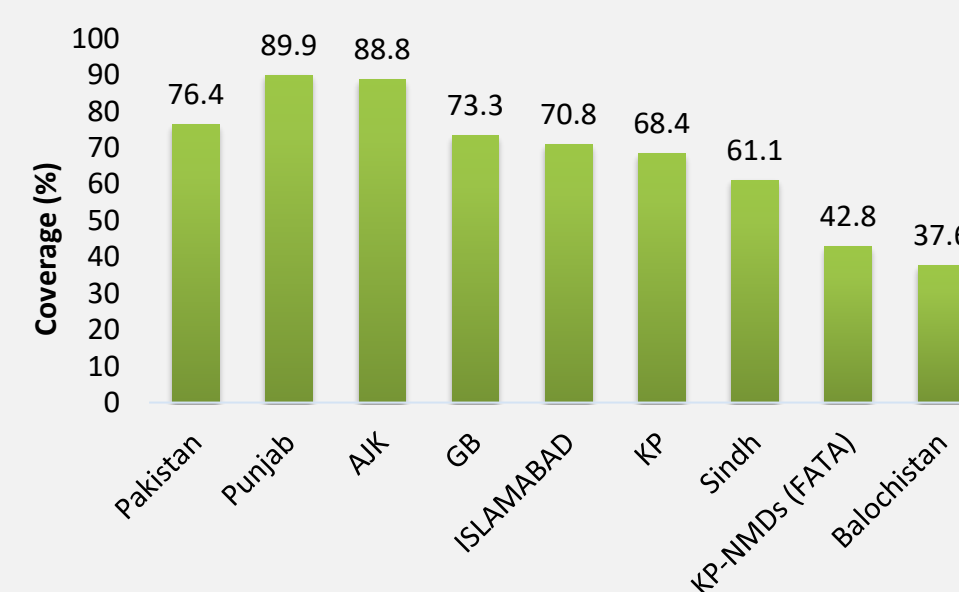


Figure 7: Immunization Coverage across Pakistan in 2020: Punjab and Azad Jammu and Kashmir, with 89.9 and 88% of children under two years are fully immunized; this percentage is 61.1% percent for Sindh, and 68.4% in Khyber Pakhtunkhwa, and only 37.7% in Baluchistan.(3)

Bangladesh Immunization Coverage: 2018 - 2020

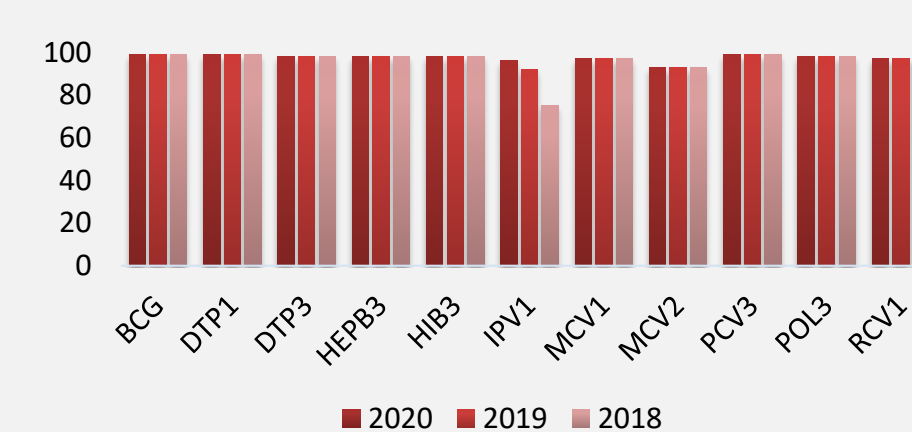
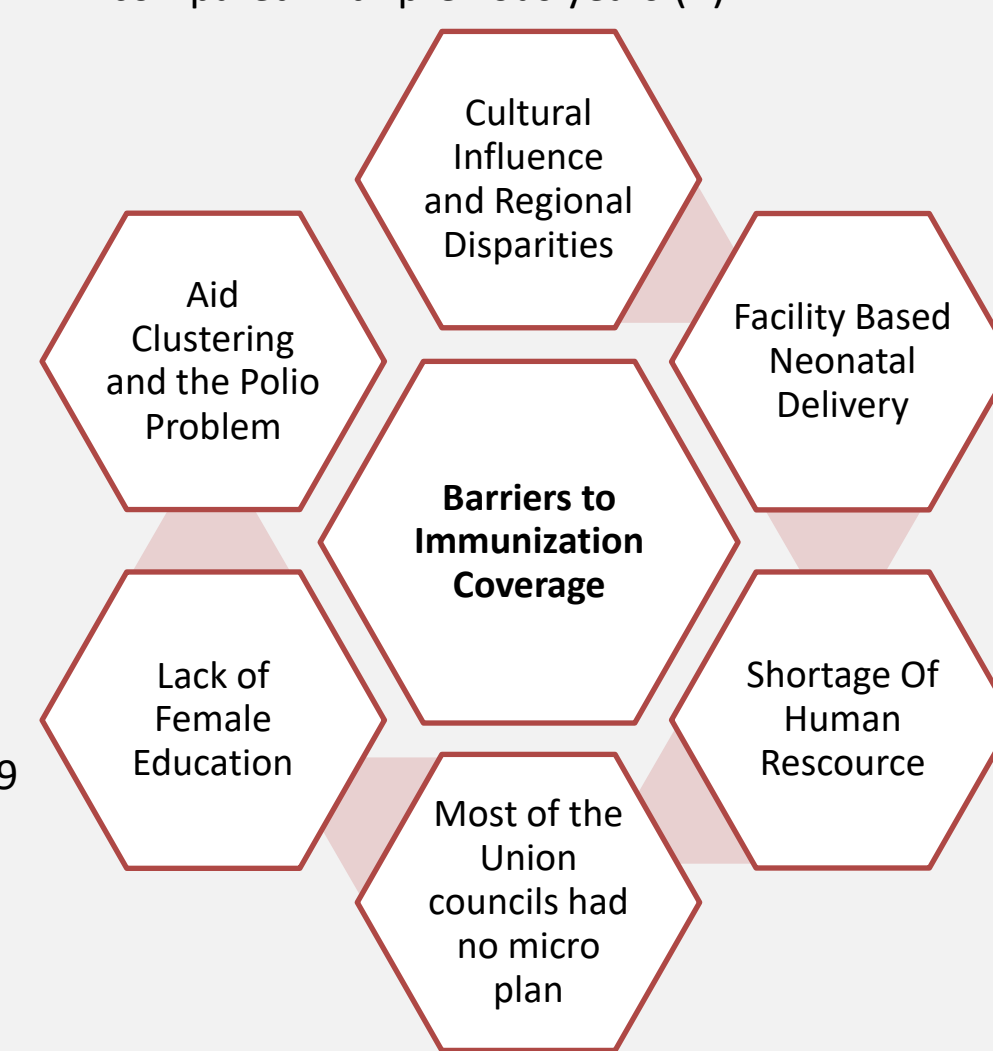


Figure 6: Bangladesh Immunization Coverage 2018 – 2020, Bangladesh has maintained its coverage, IPV coverage has increased compared with previous years.(4)



CONCLUSION:

- ❖ This study concludes that there are few barriers in Pakistan contributing to the inadequate utilization of immunization services, thus there are pockets of low immunization coverage.
- ❖ The EPI in Pakistan has not totally failed, but the rate at which they are achieving targets is slow. There are regions that are very close to achieving the Millennium Development Goal, but some other regions need special attention.
- ❖ Religious, cultural, and social grounds are not the only reasons for low immunization coverage in Pakistan. However, parental perception and lack of female education were the key reasons.
- ❖ The political will, openness to external collaboration, and investment in research are putting Bangladesh ahead of its sibling country.
- ❖ To deal with the bottlenecks, the government of Pakistan started a few activities and strategies, such as enhanced outreach activities, the building of fixed sites, the enrolment of staff, and the development of an EPI MIS database for uniform reporting. Punjab has already launched a Synergy application supported by a web portal based on real-time reporting; in addition to these EPI and PEI joint monitoring plans, and a referral mechanism for unvaccinated children by polio teams that can be implemented across the country.

