EXPANDED PROGRAMME ON IMMUNISATION (EPI) - GS III MAINS

Q. Bring out the achievements of the Expanded Programme on Immunisation (EPI) and also throw a light on the challenges lying ahead for the international arena in achieving universal vaccination. (15 marks, 250 words)

News: *Make EPI an 'Essential Programme on Immunisation'*

What's in the news?

- The year 2024 marks a significant milestone for immunisation programmes, both globally and in India.
- It commemorates 50 years since the launch of the Expanded Programme on Immunisation (EPI) by the World Health Organisation (WHO) in 1974.

Backdrop of Expanded Programme on Immunisation:

- The launch of the EPI in 1974 by the World Health Organisation (WHO) marked a watershed moment in global health.
- At the time, the prospect of eradicating smallpox loomed large, necessitating a concerted effort to expand immunisation coverage.
- The EPI emerged as a response to this challenge, leveraging existing infrastructure and trained healthcare workers to administer vaccines to vulnerable populations worldwide.

Achievements of EPI:

1. Progress in Reducing Disease Burden:

- The early years of the EPI were characterised by a focus on foundational vaccines targeting diseases like measles, polio, diphtheria, pertussis, and tetanus.
- These vaccines formed the cornerstone of childhood immunisation programs across the globe.
- The urgency of eradicating smallpox provided impetus for widespread vaccine distribution, leading to significant progress in reducing disease burden and mortality rates.

2. Evolution in Tandem with Vaccine Technology:

- Over the ensuing decades, the EPI evolved in tandem with advancements in vaccine technology and epidemiological insights.
- New vaccines were introduced, expanding the scope of immunization efforts to encompass a broader range of diseases.

3. Steady Increase in Vaccine Coverage Rates:

- In the early 1970s, vaccine coverage rates in low and middle-income countries were abysmally low, with only around 5% of children receiving the recommended three doses of DPT.

- However, through concerted efforts and investments in healthcare infrastructure, vaccine coverage rates soared to 84% globally by 2022, a testament to the efficacy of immunisation programs.

4. Remarkable Impact on Public Health:

- Smallpox, once a dreaded scourge, has been eradicated, marking one of the greatest achievements in the history of medicine.
- Similarly, polio, once endemic in many parts of the world, has been eliminated from all but two countries, underscoring the transformative power of vaccination.

India and the EPI:

- The launch of the EPI in 1978, subsequently renamed as the Universal Immunisation Programme (UIP) in 1985, laid the foundation for India's immunisation efforts.
- Over the past four decades, India has made significant strides in expanding vaccine coverage, with coverage rates increasing steadily each year.
- In 2019-21, 76% of children in India received the recommended vaccines, reflecting the program's impact in reaching underserved populations.

Impact of EPI in India:

- Studies have consistently demonstrated the life-saving potential of vaccines, with millions of lives saved and billions of hospital visits averted.
- Moreover, economic analyses have underscored the cost-effectiveness of immunisation programs, with every dollar invested yielding a seven to eleven-fold return.

Challenges in Achieving Universal Vaccine Coverage:

1. Declining Childhood Immunization Coverage:

- Despite decades of concerted efforts to expand vaccine coverage, recent trends indicate a concerning decline in childhood immunisation coverage rates.
- The 2021 UNICEF report revealed the first decline in coverage in more than a decade, with millions of children worldwide remaining under-vaccinated.
- This setback underscores the need for sustained investment and innovation to address barriers to vaccine access and uptake.

2. Geographic Disparities:

- Immunisation coverage rates vary widely across regions, countries, and communities, reflecting underlying disparities in access to healthcare services.
- In low and middle-income countries, marginalised populations, including those living in remote or conflict-affected areas, often face significant barriers to accessing vaccines.

3. Socioeconomic Disparities:

- Socioeconomic factors such as poverty, education, and urban-rural divide can influence vaccine uptake, exacerbating disparities in coverage.

4. Demographic Disparities:

- Demographic factors such as age, gender, and ethnicity can also impact access to immunisation services, further widening inequities.

5. Vaccine Hesitancy and Misinformation:

- Vaccine hesitancy, fuelled by misinformation and mistrust, poses a formidable challenge to immunisation efforts globally.
- Misconceptions about vaccine safety and efficacy, propagated through social media and anti-vaccine advocacy groups, contribute to hesitancy among parents and caregivers.

6. Weak Health Systems and Infrastructure:

- Fragile health systems and inadequate infrastructure pose significant barriers to vaccine delivery, particularly in resource-constrained settings.
- Limited access to trained healthcare workers, insufficient cold chain storage facilities, and weak supply chains can impede the effective distribution and administration of vaccines.

Way Forward:

1. Expanding Vaccine Coverage to Adults and Elderly:

- With increased vaccine coverage in children, attention is shifting towards vaccinating adults and the elderly, who are increasingly vulnerable to vaccine-preventable diseases.
- Governments should prioritise expanding vaccine availability for additional populations, including adults and the elderly.
- Initiatives such as the recent pilot program for adult BCG vaccination in India serve as a promising starting point.

2. Recommendations by National Advisory Bodies:

- National Technical Advisory Groups on Immunisation (NTAGIs) play a crucial role in providing recommendations on vaccine usage.
- NTAGIs should extend their purview to include recommendations on vaccines for adults and the elderly, facilitating greater uptake and coverage in these populations.

3. Comprehensive Review of Immunisation Programs:

- Periodic reviews of immunisation programs can identify gaps, assess progress, and inform strategic planning.
- Governments should conduct comprehensive reviews of immunisation programs, engaging key stakeholders and international experts to evaluate programmatic effectiveness, identify challenges, and prioritise interventions.
- This process should include an assessment of coverage disparities, barriers to access, and opportunities for innovation.

4. Political Commitment and Funding:

- Sustainable immunisation programs require robust political commitment and sustained financial investment.
- However, competing health priorities, shifting political landscapes, and funding constraints can jeopardise the continuity and effectiveness of immunisation efforts.
- Securing long-term political and financial support for immunisation programs is critical to overcoming challenges and achieving sustained progress in global health outcomes.

As the global community commemorates 50 years of the Expanded Programme on Immunisation, it is imperative to reflect on past achievements and chart a course for the future. By embracing a life course approach to vaccination and implementing targeted strategies for expanded coverage, nations can ensure equitable access to life-saving vaccines, thus safeguarding public health for generations to come.