**Journal of Medicine and Medical Sciences** 

https://doi.org/10.3126/mjmms.v2i3.47757

**Opinion** 





# Time for South Asian Countries to Accept Life-Course Immunization Concept and Develop National Immunization Guidelines for Adult Vaccination Rano Mal Piryani<sup>1®</sup>, Suneel Piryani<sup>2®</sup>

<sup>1</sup>Professor of Pulmonology and Medical Education, Director Medical Education, Bilwal Medical College, Liaquat University of Medical and Health Sciences, Jamshoro, Sindh, Pakistan

<sup>2</sup>Public Health Professional, Karachi, Pakistan

#### ARTICLE INFO

Article history: Received: 24 May 2022 Revised: 16 June 2022 Accepted: 19 June 2022

## \*Correspondence:

Prof. (Dr.) Rano Mal Piryani Professor of Pulmonology and Medical Education, Director Medical Education, Bilwal Medical College, Liaquat University of Medical and Health Sciences, Jamshoro, Sindh, Pakistan.

## E-mail:

rano.piryani@gmail.com

#### Citation:

Piryani RM, Piryani S. Time for South Asian Countries to Accept Life-Course Immunization Concept and Develop National Immunization Guidelines for Adult Vaccination. MedS. J. Med. Sci. 2022;2(3):99-100.

## INTRODUCTION:

The Vaccination is a successful intervention preventing individual from getting several diseases and curing many diseases prevalent in the world. Vaccine is a harmless and efficient medicine used to prevent people (children, adults and elderly) from life-threatening illnesses [1]. The Expanded Program of Immunization (EPI) was launched by the World Health Organization (WHO) in 1974. Subsequently, countries all over the world including countries of South Asia launched their National Immunization Programs (NIPs) focusing on vaccination during childhood [2]. Since the launching of the EPI program, vaccination coverage worldwide increased. After creation of Global Alliance for Vaccines and Immunization (GAVI) in 2000, new, life-saving vaccines against an increasing number of vaccine-preventable diseases (VPD) have

## ABSTRACT

Vaccine, a cost-effective medicine saves lives. Vaccination during childhood has been implemented worldwide through the expanded program of immunization (EPI) since 1974. It has saved million lives till 2019 globally. South Asian countries have equally benefitted from the EPI executing this strategy through their national immunization programs. The life-course immunization concept aims to extend the vaccination from birth to elderly; some counties have already started focusing on it. Adult vaccination is the process of vaccinating to peoples of 19 years and above. Most of the developed countries have their national policy guidelines on adult immunization but no such national policy for adult vaccination exists in most of the developing and underdeveloped countries including countries of South Asia. South Asian countries have to accept the concept Life-Course Immunization and develop National Adult Immunization Guidelines and vaccinate adults from vaccine preventable diseases highly prevalent in their countries. This could improve quality of human health at all stages of life.

**Keywords:** Adult immunization, childhood vaccination, EPI, life-course immunization, South Asia, vaccination.

been added to program. It is estimated that this have saved at least 37 million lives between 2000-2019[3]. Vaccination is among the most economical public health interventions [2,3]. Therefore, it is recommended throughout life (childhoodadulthood-old age).

Adult immunization: There is a concept of lifecourse immunization focusing on benefits of the vaccination beyond the childhood. It aims to extend vaccination from birth to elderly. Some countries like Italy, France, Australia have already taken steps in this direction. This could improve quality of human health at all stages of life [4-5]. Adult vaccination is the process of vaccinating to peoples of 19 years and above. The reasons to immunize people above 19 years of age are 1) waning immunity: immunity produced by certain vaccines during childhood may wear off over time; 2) age related factors: a- there is continued dysregulation and dysfunction of natural and adaptive immune responses, b- some diseases are more common in adults and elderly, c- immunocompromised status increases the chances of getting VPD, d- peoples remain unimmunized due to low coverage of vaccines in several underdeveloped and developing countries including countries of South Asia and 3) epidemiological shift- certain VPD are affecting the adults instead children [5].

Even though the several outbreaks of VPD have been reported in adults from countries of South Asia but there is scarcity of reliable data on the incidence of VPD among adults in South Asian countries including India and Pakistan [1, 5]. The vaccination of the adult is based on the preceding vaccination received during childhood, so, the guidelines for adult vaccination are developed keeping consideration of immunization guidelines of its National Immunization Program for children [6]. Center for Disease Control and Prevention (CDC) United States of America (USA) has a state of art Adult Immunization Guidelines which have been updated every year. The 2022 Recommended Adult Immunization Schedule for ages 19 years and older robustly elaborates 4 steps to use schedule: 1) determine recommended vaccine by age; 2) assess needs for additional recommended vaccinations by medical condition/s or other indication/s; 3) review

types, vaccine frequencies, intervals, and consideration of special situations and; 4) review contraindications and precautions for vaccine types [7]. Most of the developed countries have their national policies on adult immunization program but there is no such National Guidelines for Adult Vaccination are existing in most of the developing and underdeveloped countries including countries of South Asia. There might be some dedicated centers in the countries for providing adult immunization [1,5]. Dash et al have recommended steps to improve adult vaccination and overcome the barrier to promote life course immunization in India; several of these steps are equally applicable to other countries of South Asia. The important steps are; 1) do pilot studies to collect data of VPD burden in adults; 2) develop national guidelines through multidisciplinary consensus; 3) introduce coordinated adult immunization program and; 4) create awareness about adult vaccination among the healthcare professionals and the public at large [5].

## **CONCLUSION:**

It is high time for the countries of South Asia to accept the concept Life-Course Immunization and develop National Adult Immunization Guidelines and vaccinate them from VPD highly prevalent in the country. This cost-effective intervention saves lives and money and improve quality of life of peoples.

## ADDITIONAL INFORMATION AND DECLARATIONS Author Contributions:

Both authors wrote, edited and reviewed the opinion .: RMP; SP.

Funding: No funding required

#### REFERENCES

- 1. Zaki S, Usman A, Tariq S, et al. Frequency and Factors Associated with Adult Immunization in Patients Visiting Family Medicine Clinics at a Tertiary Care Hospital, Karachi. *Cureus*. 2018; 10(1): e2083.
- 2. Lahariya C. Bhardwaj P. Adult vaccination in India: status and the way forward. Human Vaccines & Immunotherapeutics.2020; 16 (7): 1508-1510.
- **3.**Lindstrand A, Cherian T, Chang-Blanc D, Feikin D, L O'Brien K, The World of Immunization: Achievements, Challenges, and Strategic Vision for the Next Decade, The Journal of Infectious diseases,2021; 224 (supplement 4):S452-S467.
- Philip RK, Attwell K, Breuer T, Di Pasquale A, Lopalco PL. Life-course immunization as a gateway to health. Expert Rev Vaccines.2018;17(10):851-864.
- Dash R et al. Towards adult vaccination in India: a narrative literature review. Human Vaccines & Immunotherapeutics.2020;16(4):991-1001.
- Guidelines for vaccination in normal adults in India. Indian J Nephrol. 2016;26(Suppl 1): S7-S14.
- Center for Disease Control and Prevention, Recommended Adult Immunization Schedule 2022. Available at: <u>https://www.cdc.gov/vaccines/</u> <u>schedules/downloads/adult/adult-combinedschedule.pdf</u> Accessed on April 29, 202

Competing Interests: Authors have no competing interest. Authors ORCID:

 Rano Mal Piryani:
 Image: 0000-0003-2574-7226;

 Suneel Piryani:
 Image: 0000-0003-2639-6018

Publisher's Note MJMMS remains neutral with regard to jurisdictional claims published in materials and institutional affiliations. CCREACH will help you at every step for the manuscript submitted to MJMMS. We accept pre-submission inquiries. o We provide round the clock custome support • Convenient online submission o Plagiarism check Rigorous peer review o Indexed in NepJOL and other indexing services • Maximum visibility for your research Open access Submit your manuscript at Website: <u>www.medspirit.org</u> e-mail: <u>editormjmms@gmail.com</u>