



CODEN [USA]: IAJPBB

ISSN : 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**

SJIF Impact Factor: 7.187

<http://doi.org/10.5281/zenodo.4275998>Available online at: <http://www.iajps.com>

Research Article

**A CROSS SECTIONAL SURVEY: ATTITUDE TOWARDS  
ADULT VACCINATION**Rehana Nawaz<sup>1</sup>, Rashida Bibi<sup>2</sup>, Tahira Shaheen<sup>3</sup><sup>1</sup>Head Nurse, Jinnah Hospital Lahore<sup>2</sup>Charge Nurse, Rural Health Centre Tulamba Tehsil Mian Chunnu District, Khanewal<sup>3</sup>Nursing Instructor, Post Graduate College of Nursing Punjab Lahore**Article Received:** September 2020    **Accepted:** October 2020    **Published:** November 2020**Abstract:**

**Introduction:** Infections continue to be a cause of concern for health care providers especially in the context of growing anti-microbial resistance. **Objectives:** The main objective of the study is to analyse the attitude of patients towards adult vaccination in Pakistan. **Material and methods:** This cross sectional study was conducted in Jinnah Hospital, Lahore during March 2019 to December 2019. The data was collected from 100 participants of different age groups. The data was collected through a systematically designed questionnaire. This questionnaire include demographic data, general concept about vaccination and information regarding diseases and adult vaccination. **Results:** The data was collected from 100 participants. The mean age was  $38.91 \pm 5.56$  years. Out of 100 participants, a large majority (88.4%) had received information about vaccination from a variety of sources, including physicians (79.5%), mass media (18.9%), and the internet (11.6%). **Conclusion:** It is concluded that the perceptions and the attitudes of the adult patients responding to this survey were basically positive and indeed showed that there is room for improvement.

**Corresponding author:**

Rehana Nawaz,

Head Nurse, Jinnah Hospital Lahore

QR code



Please cite this article in press Rehana Nawaz et al, A Cross Sectional Survey: Attitude Towards Adult Vaccination., Indo Am. J. P. Sci, 2020; 07(11).

**INTRODUCTION:**

Infections continue to be a cause of concern for health care providers especially in the context of growing anti-microbial resistance. The only silver lining is the availability of vaccines for common infections. Wide spread data collection on infections and their prevention strategies have revealed that vaccines are the only cost-effective method to combat infections. Vaccination in children has been in practice for a long time [1]. Adult vaccination can act as a booster for vaccines administered in childhood and can also prevent life threatening infections in immune compromised patients and ageing population. According to a study in Netherland, Pneumococcal vaccine 13 (PCV 13) gives protection to 45 in 100 healthy individuals from pneumonia. Similarly, the 23-valent pneumococcal vaccine gives protection to 50-85 in 100 healthy individual [2].

Several vaccination programs have been implemented all over the world for the individuals who due to epidemiological, health, occupational, or behavioral conditions are at higher risk of contracting infectious diseases [3]. Among these groups, it is well known that adults, especially those older or with chronic health conditions, are at higher risk of severe illness or complications from infection with rates of vaccination coverage also considerably lower than those established by the objectives of the immunization programs [4].

The success of childhood immunization programs on the global scale caused a paradigm shift in vaccine-preventable diseases (VPDs). In 2015, 86% of infants worldwide had received the required 3 doses of diphtheria-tetanus-pertussis containing vaccines (DTP3) recommended by the WHO, which is an indicator of immunization program performance [5]. Transmission of poliovirus and measles and rubella viruses has been eliminated in the U.S. and smallpox

has been eradicated worldwide. Declines were 80% or greater for cases and deaths of most vaccine-preventable diseases targeted since 1980, including hepatitis A, acute hepatitis B, Hib, and varicella. However, vaccine coverage rates (VCRs) in adult populations still remain below the targets and outbreaks of VPDs continue to occur even in countries with well-established vaccination programs. They are not just “childhood diseases” and many of them have even more impact on adult populations [6].

**Objectives**

The main objective of the study is to analyse the attitude of patients towards adult vaccination in Pakistan.

**MATERIAL AND METHODS:**

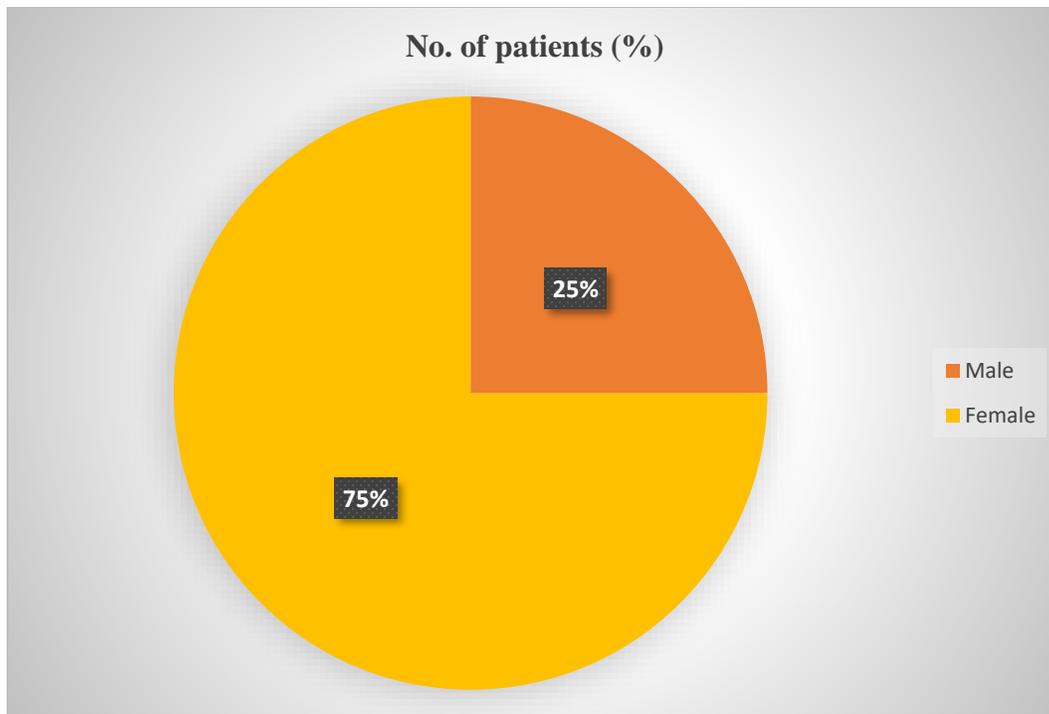
This cross-sectional study was conducted in Jinnah Hospital, Lahore during March 2019 to December 2019. The data was collected from 100 participants of different age groups. The data was collected through a systematically designed questionnaire. This questionnaire include demographic data, general concept about vaccination and information regarding diseases and adult vaccination. Some questions enquiring other than normal routine activities such as smoking, sleep disorders, anxiety, depression and use of anti-depressive or steroids were also asked to have an idea about the possible impact of these factors. The data was collected and analysed using SPSS version 19. All the values were expressed in mean and standard deviation.

**RESULTS:**

The data was collected from 100 participants. The mean age was  $38.91 \pm 5.56$  years. Out of 100 participants, a large majority (88.4%) had received information about vaccination from a variety of sources, including physicians (79.5%), mass media (18.9%), and the internet (11.6%).

**Table 01:** Gender wise distribution of selected participants

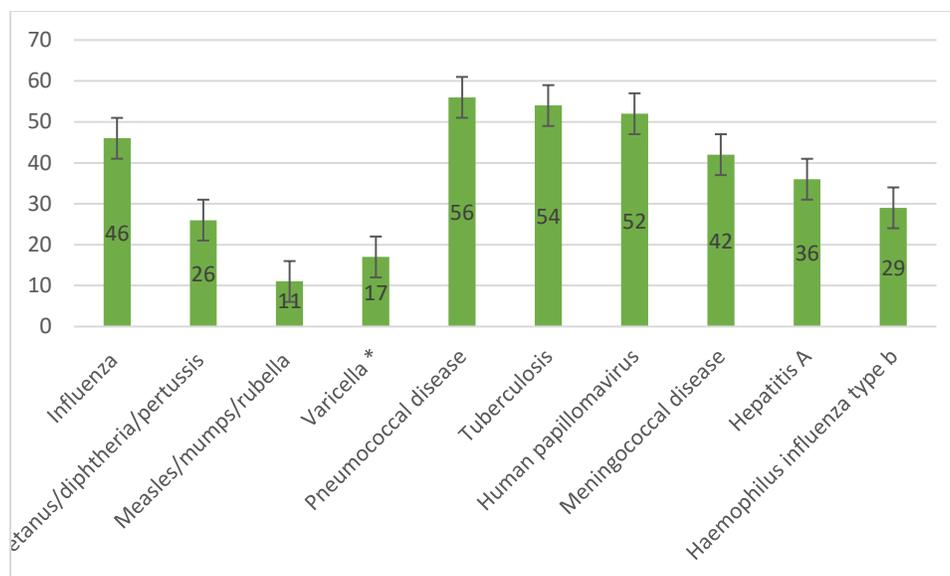
Gender	No. of patients (%)
Male	25
Female	75



Moreover, more than half (53.4%) reported that they needed more education on the vaccinations recommended during adulthood. Moreover, a large majority were aware regarding the existence of the vaccines against human papillomavirus (66.3%), hepatitis A (63.6%), and tuberculosis (51.5%), and only one quarter (25%) indicated the vaccine against herpes zoster. Only a small proportion incorrectly answered that vaccines against hepatitis C (34.9%) and HIV (8.2%) are available.

**Table 02:** Participant's knowledge about the recommended vaccinations.

Which Vaccination Is Recommended During Adulthood?	<i>N</i>	%
	Correct Response	
Influenza	46	35.4
Tetanus/diphtheria/pertussis	26	30.6
Measles/mumps/rubella	11	26.7
Varicella	17	19.7
Pneumococcal disease	56	13.6
Tuberculosis	54	13.2
Human papillomavirus	52	12.6
Meningococcal disease	42	10.2
Hepatitis A	36	8.7
Haemophilus influenza type b	29	7.1



**Table 03:** Response of individuals regarding safety of vaccine

	Gender	
	Male	Female
<b>Vaccines are important for adults.</b>		
Yes		
NO	71	29
	29	85
<b>Vaccines are safe for adults.</b>		
Yes		
No	89	43
	11	57

### DISCUSSION:

Infection is the leading cause of death in both the elderly people with comorbid conditions and the immune-compromised. The prevalence rate of infections in elderly patients with age greater than 65 years has been quite high in our day to day practise [7]. Vaccination has been well acknowledged as the most valued and effective public health measure in order to cope up mortality, morbidity and disability rates in adults as a result of communicable diseases such as Hepatitis A, Hepatitis B, tetanus, measles, mumps, rubella, diphtheria, influenza, pertussis, typhoid, meningitis, chickenpox and pneumonia [8]. Nevertheless, vaccines should be taken with care in certain medical conditions such as pregnancy, allergic reactions, disorders and chronic illness, past family history, prior or post blood transfusion or immunosuppressive therapy. In developing countries like Pakistan, communicable diseases are a major cause of the burden on the economy of the country [9]. Although, the spread of diseases in adults is less than in children but because of incomplete vaccination, the emergence of new diseases with severe complications has been increased. Moreover, there is no particular

focus on the vaccination of adults [10]. Even in a developed country like US, only about 2% of the population of adult has been vaccinated. A number of reasons may account for the differences in adult and childhood vaccination rates such as the ignorance of primary care physicians towards adult vaccination schedules, lack of public awareness and non-serious attitude of government health officials [11].

Although, a satisfactory level of awareness relevant to adult vaccination was observed, concerns were prevalent with respect to the cost of vaccines as 33% of the respondents considered it a reason for why someone should not be vaccinated. Our findings are in line with Zhou *et al.*, (2005) who observed that many people don't go for vaccinations due to the cost of a specific vaccine, phobia of needles or syringes, discomfort, fear of post allergic reactions etc [12]. It is significant to note that 19% of the selected individuals refused to participate in an immunization program with booster doses either because of busy schedules, fear of needles or discomfort and inadequate information regarding vaccine. This may however be improved

by disseminating the information regarding the importance of a particular vaccine [13].

### CONCLUSION:

It is concluded that the perceptions and the attitudes of the adult patients responding to this survey were basically positive and indeed showed that there is room for improvement. The level of knowledge and coverage rates for the vaccinations recommended in the adult population are a critical issue and Media campaigns and mobile immunization teams (MITs) may play a pivotal role in filling a consistent gap between childhood & adult immunization rates.

### REFERENCES:

1. Ozisik L, Tanriover MD, Rigby S, Unal S. ADVICE for a healthier life: Adult Vaccination Campaign in Europe. *Eur J Intern Med.* 2016;33:14–20.
2. Pham H, Geraci SA, Burton MJ. Adult immunizations: Update on recommendations. *Am J Med.* 2011;124:698–701.
3. Rolfes MA, Foppa IM, Garg S, et al. Estimated influenza illnesses, medical visits, hospitalizations, and deaths averted by vaccination in the United States. 2016.
4. Centers for Disease Control and Prevention. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, *Streptococcus pneumoniae*, 2014. 2014.
5. Ferlay J, Soerjomataram I, Ervik M, et al. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11. Lyon, France: International Agency for Research on Cancer; 2013.
6. Pascual FB, McGinley EL, Zanardi LR, et al. Tetanus surveillance – United States, 1998–2000. *MMWR Surveill Summ.* 2003;52:1–8.
7. Confirmed pertussis in England and Wales continues to increase, in Health Protection Report, 2012, The UK Government Web Archive
8. Carrillo-Santisteve P, Lopalco PL. Measles still spreads in Europe: Who is responsible for the failure to vaccinate? *Clin Microbiol Infect.* 2012;18(Suppl 5):50–56.
9. Centers for Disease Control and Prevention. Flu Vaccination Coverage, United States, 2015–16 Influenza Season.
10. European Centre for Disease Prevention and Control. Seasonal influenza vaccination in Europe – Overview of vaccination recommendations and coverage rates in the EU Member States for the 2012–13 influenza season. Stockholm: ECDC; 2015.
11. Williams WW, Lu PJ, O’Halloran A, et al. Vaccination coverage among adults, excluding influenza vaccination – United States, 2013. *Morb Mortal Wkly Rep.* 2015;64:95–102.
12. European Centre for Disease Prevention and Control. Surveillance of invasive bacterial diseases in Europe, 2012. Stockholm: ECDC; 2015.
13. Johnson DR, Nichol KL, Lipczynski K. Barriers to adult immunization. *Am J Med.* 2008;121:S28–35.