



THE STUDY ON FACTORS HAMPERING THE ADHERENCE TO PNEUMOCOCCAL VACCINATION PROTOCOL IN A GERIATRIC CLINIC OF A TERTIARY CARE HOSPITAL IN KERALA

Dr Aswin Rajeev	Amrita Vishwa Vidyapeetham, Department of Geriatrics, Amrita Institute of Medical Sciences, Kochi, Kerala
Dr George Paul*	Amrita Vishwa Vidyapeetham, Department of Geriatrics, Amrita Institute of Medical Sciences, Kochi, Kerala *Corresponding Author
Dr Priya Vijayakumar	Amrita Vishwa Vidyapeetham, Department of Geriatrics, Amrita Institute of Medical Sciences, Kochi, Kerala

ABSTRACT

Background: Elderly patients are considered as a vulnerable group in population due to various factors. Pneumococcal vaccination has gained importance in clinical practice as various studies in recent past has shown definitive long term benefits. Hence prevention of diseases wherever possible has got significant role in geriatric health care.

Objective: To study the contributory factors hampering the regular vaccination practice in elderly patients attending a geriatric clinic.

Materials and methods: The study was done as a retrospective observational study. 233 patients who presented to the Geriatric Medicine OPD for first time and for review in the month of October – November 2018 were given vaccination advice by the nurse and later by the physician. They were counselled on benefits of pneumococcal vaccination and its cost effectiveness. They were asked their willingness to get vaccinated and vaccines were administered to those who agreed. The reasons for non willingness were asked and recorded in the case sheets.

Results: Only 5% of study population were willing to get vaccinated. The reasons for on compliance were 31% felt that the cost of vaccine was high, 11% were not aware of such a vaccination and data was not specified in charts for 58%.

KEYWORDS

BACKGROUND

Elderly patients are considered as a vulnerable group in population due to various factors. Age related physiologic changes, co existing comorbid conditions and multiple hospitalizations for ailments are some of the factors. Considerable amount of resources are being spent in health care of elderly patients. Hence prevention of diseases wherever possible has got significant role in geriatric health care.

Pneumococcal vaccination has gained importance in clinical practice as various studies in recent past has shown definitive long term benefits. Various international guidelines recommend routine immunization with pneumococcal vaccine for all adults over the age of 65 years.¹

Pneumococcal vaccine 13 (PCV 13) and pneumococcal vaccine 23(PCV 23) are the vaccines recommended for use in clinical practice. ACIP guidelines recommend vaccination in all immunocompetent adults over 65 years with first dose of PCV 13 and one year later with PCV 23 for prevention of pneumococcal diseases. If the patient was already immunized with PCV 23, the dose of PCV 13 has to be given after one year.²

Objective

To study the contributory factors hampering the regular vaccination practice in elderly patients attending a geriatric clinic.

MATERIALS AND METHODS

The study was done as a retrospective observational study as a part of a departmental clinical audit. The department protocol on vaccination is that all the patients over age of 65 years who present to the geriatric clinic are made aware of vaccination and its benefits by the geriatric nurse during the preliminary assessment. Vaccination is given as per the schedule, if the patient prefers to be immunized after consultation with the physician who also counsels about benefits of vaccination.

233 patients who presented to the Geriatric Medicine OPD for first time and for review in the month of October – November 2018 were given vaccination advice by the nurse and later by the physician. They were counselled on benefits of pneumococcal vaccination and its cost effectiveness. They were asked their willingness to get vaccinated and vaccines were administered to those who agreed. The reasons for non willingness were asked and recorded in the case sheets.

RESULTS

Data was available from total of 168 review patients and 65 new

patients. Only 7 out of 168 review patients and 5 out of 65 new patients were willing to get vaccinated.

The reasons for on compliance were 31% felt that the cost of vaccine was high, 11% were not aware of such a vaccination and data was not specified in charts for 58%.

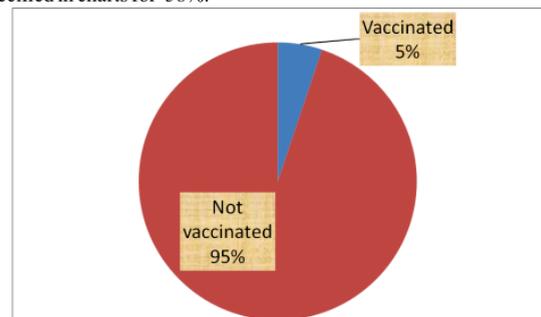


Figure 1: Vaccinated patients

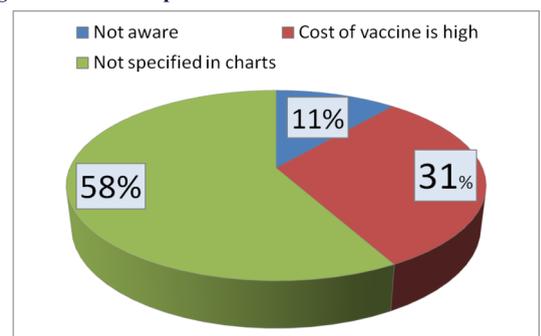


Figure 2: Reasons for non vaccination

DISCUSSION

Pneumococcal infections are an important source of morbidity and mortality mostly in two groups: children under 4 years and adults over 65 years³. Data from various studies show decline in incidence of pneumococcal infections in vaccinated individuals. Routine use of pneumococcal vaccine in adults in united states has shown steady decline in rate of infections due to vaccine serotypes⁴.

From this audit it was noted that most of the patients were unaware of this type of vaccination which warrants a need for raising awareness in public about benefits of vaccination. Few people considered the cost of vaccination was high. This problem can be tackled by raising awareness in patients about risks and cost of recurrent hospital admissions or by implementing vaccination programmes through government systems free of cost or at subsidized rates.

CONCLUSION

Necessary steps have to be taken to implement regular pneumococcal vaccination in vulnerable elderly patients since it is found to be effective in reducing the occurrence of pneumococcal diseases.

REFERENCE

- 1) Musher DM, Rodriguez-Barradas MB. Why the recent ACIP recommendations regarding conjugate pneumococcal vaccine in adults may be irrelevant. *Hum Vaccin Immunother* 2016; 12:331.
- 2) Centers for Disease Control and Prevention (CDC), Advisory Committee on Immunization Practices. Updated recommendations for prevention of invasive pneumococcal disease among adults using the 23-valent pneumococcal polysaccharide vaccine (PPSV23). *MMWR Morb Mortal Wkly Rep* 2010; 59:1102.
- 3) Kim L, Taylor T, Pondo T, et al. Impact of 13-valent pneumococcal conjugate vaccine (PCV13) on invasive pneumococcal disease (IPD) among adults in the U.S. *Pneumonia* 2014; 3:175.
- 4) Moberley S, Holden J, Tatham DP, Andrews RM. Vaccines for preventing pneumococcal infection in adults. *Cochrane Database Syst Rev* 2013; :Cd000422.