CHAPTER: 07

WILLINGNESS, KNOWLEDGE AND PERCEPTION OF COVID-19 VACCINE AMONG INDIAN URBAN ADULT POPULATION

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INTRODUCTION

The COVID-19 pandemic has markedly affected the physical, social, emotional, and behavioral well-being of individuals. There is a strong desire to bring an end to the pandemic, and mass vaccination emerges as a feasible solution. In India, the initiation of COVID-19 immunization took place on January 16, 2021, primarily targeting healthcare workers and frontline workers. As of May 28, 2021, a total of 208,902,445 vaccine doses, encompassing both the initial and follow-up doses of approved vaccines, have been administered in India [1].

India has two approved vaccines available for emergency use: Covishield, a brand of the Oxford AstraZeneca vaccine, manufactured by the Serum Institute of India, and Covaxin, produced by Bharat Biotech. The vaccination rollout began on January 16, 2021, initially targeting frontline and healthcare workers. Subsequent eligibility criteria were established, with the vaccine becoming available to individuals over 60 years of age and those aged 45 to 59 with comorbid conditions starting from March 1, 2021. On April 1, 2021, the eligibility expanded to include individuals above 45 years of age (born before January 1, 1977). By May 1, 2021, all eligible citizens above the age of 18 became eligible to receive the COVID-19 vaccine [2].

As of May 28, 2021, a single dose of either Covaxin or the Oxford AstraZeneca vaccine has been administered to 164,779,253 individuals, constituting 12% of the Indian population. Additionally, 44,123,192 people, or 3% of the population, have received both doses of these vaccines. The vaccination coverage, while a significant effort, highlights that a relatively low proportion of the Indian population has been partially or fully vaccinated, considering the overall population size. These figures emphasize the ongoing challenges and the need for continued efforts to accelerate the vaccination program and achieve broader coverage [3-5].

RESEARCH QUESTION

What was the attitudes, awareness levels, and perspectives of the adult urban population in India towards the COVID-19 vaccine?

RESEARCH OBJECTIVES

1. To evaluate the understanding and perspectives of the Indian population regarding COVID-19 vaccination.
2. To evaluate the inclination of individuals toward the COVID-19 vaccine.
3. To identify obstacles associated with reluctance and access to vaccination.

RESEARCH METHODOLOGY

The research focused on the urban population of India aged 18 and above. It employed an observational descriptive cross-sectional study design [5]. The study sample comprised urban individuals aged 18 and above, and the sampling technique used was convenience sampling. Primary data was collected through an online Google Form questionnaire during the COVID-19 pandemic, aiming to assess people's knowledge, perceptions, and acceptance of COVID-19 vaccination. The questionnaire was distributed to urban adults across various locations in the country, including Delhi, Mumbai, Bhubaneswar, and others, meeting the eligibility criteria for COVID-19 vaccination in urban India. The online form was shared with over 300 adults, resulting in 169 complete responses. Personal and social contacts were utilized to distribute the form to participants residing in different regions of India. The study employed an online Google Form as the primary data collection tool.

RESULTS & DISCUSSION

Participants in this study exhibited a somewhat lacking knowledge of the COVID-19 vaccine, with only 52% aware that the vaccine is not legally mandatory. Comparative studies, such as Archana Kumari et al, reported similar knowledge levels around 59%. Knowledge gaps were notable in understanding vaccine eligibility for recovered COVID patients and those with co-morbidities. Additionally, misconceptions about the timeline for achieving immunity after vaccination were observed. Lack of information poses a potential

obstacle to the success of immunization campaigns, leading to non-compliance with COVID-19 protocols and the spread of misinformation, particularly among females and across various sociodemographic categories.

While willingness to get vaccinated is high, perceptions regarding vaccine efficiency and safety are only slightly positive. A significant portion (60-80%) believes that wearing masks is still necessary post-vaccination, and that vaccination alone won't end the pandemic but will reduce its severity. In contrast to some studies where skepticism was prevalent, this study showed a higher perception of vaccine effectiveness (70-80%). Acceptance rates were notably high, with approximately 90% expressing willingness to get vaccinated, surpassing rates reported in other studies. Factors influencing willingness included family/friends' vaccination, and doctor recommendations, addressing concerns such as vaccine shortages and side effects in the 18-30 age group, particularly among females. Overcoming hesitancy is crucial for the success of mass vaccination programs in India.

CONCLUSION

The study indicates a low level of knowledge among participants, ranging from 31% to 75%. Specifically, only 31%-34% were aware of vaccine eligibility criteria for chronic disease patients and the vaccine's negative result in PCR tests. To address this, measures should be implemented to educate and enhance awareness among the population about the COVID-19 vaccine. Various mediums and programs can be employed to disseminate information effectively. Furthermore, the study notes a positive perception among participants towards the COVID-19 vaccine. Therefore, efforts to improve awareness and understanding can be considered successful conclusions of the study.

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