



A descriptive study to assess the COVID-19 vaccination coverage at selected rural areas of greater Noida, Uttar Pradesh. A narrative review

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Abstract

Introduction: COVID-19 is defined as an illness caused by a novel corona virus called severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). COVID-19 was first discovered in Wuhan city, Hubei Province, China in December 2019 and it was identified as the cause of a cluster of pneumonia case ^[1]. It was initially reported to the WHO on 31st December (2019). WHO declared the COVID-19 outbreak a "Global Health Emergency" on 30th Jan 2020 and similarly declared COVID-19 is a "Global Pandemic" on 11th March 2020. The first case of COVID-19 in India which originated from China, was reported on 30 January 2020 ^[2].

Aim: The aim of the narrative review is to assess the COVID-19 vaccination coverage at selected rural areas of Greater Noida.

Methodology: Intervention- COVID-19

Types of Studies: Descriptive study

Types of Participants: selected rural area with 120 participants

Setting: Ranhera Village of Greater Noida

Outcome: This narrative review result will be appeared that more percentage of people in the community will be vaccinated.

Keywords: COVID-19, vaccination, covishield, covaxin

Introduction

COVID-19 is defined as an illness caused by a novel corona virus called severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). COVID-19 was first discovered in Wuhan city, Hubei Province, China in December 2019.

Vaccines are the most important public health measure and most effective strategy to protect the population from COVID-19, since SARS-CoV-2 is highly contagious virus and affects populations widely and globally. The competition for COVID-19 vaccine invention and development against the spread and catastrophic effects of the disease is ongoing ^[3].

A COVID 19 vaccine was launched on 16th January 2021. Of the two vaccines approved, Covishield is the better known. It's a version of the Oxford University AstraZeneca vaccine that was found to have an average efficacy of 70.4% in a peer reviewed study. Covishield is an Indian version made by the world's largest vaccines manufacturer, the Serum Institute of India, and phase III trials on an Indian cohort have begun, with 1600 people enrolled in November. COVID 19 vaccine being distributed based on potential availability of vaccines the Covaxin is India's first home produced vaccine against covid-19. It was developed by Bharat Biotech in collaboration with the Indian Council of Medical Research and the National Institute of Virology. On 21 January, The Lancet published Covaxin's phase I trial data, giving it a green light for safety and stating that it generates adequate immune response, but said further efficacy trials were warranted. Covidshield uses a weakened version of adenovirus, while Covaxin uses an inactivated SARS-CoV-2 virus extracted from an asymptomatic patient ^[4].

Malorie Perry, *et al.* Conducted a study on "COVID-19 vaccination coverage" The COVID-19 pandemic has highlighted existing health inequalities for ethnic minority groups. and those living in more socioeconomically deprived areas in the UK. With higher levels of severe outcomes in these groups, equitable vaccination coverage should be prioritised. The aim of this study was to identify inequalities in coverage of COVID-19 vaccination in Wales, UK and to highlight areas which may benefit from routine enhanced surveillance and targeted interventions. Records within the Wales Immunisation System (WIS) population register were linked to the Welsh Demographic Service Dataset (WDS) and central list of shielding patients, held within the Secure Anonymised Information Linkage (SAIL) Databank. Ethnic group was derived from the 2011 census and over 20 administrative electronic health record ^[5].

Georgios Marinos, *et al.* conducted a study on covid 19 vaccination coverage. There are limited data on the prevalence and determinants of COVID-19 vaccination coverage among physicians. A cross-sectional, questionnaire-based, online study was conducted among the members of the Athens Medical Association (I.S.A.) over the period 25 February to 13 March 2021. All members of LSA. Were invited to participate in the anonymous online survey. A structured, anonymous questionnaire was used. Overall, 1993 physicians participated in the survey. The reported vaccination coverage was 85.3% The main reasons of no vaccination were pending vaccination appointment followed by safety concerns. Participants being informed about the COVID-19 vaccines by social media resulted in lower COVID-19 vaccination coverage than health workers being informed by other sources ^[6].

Findings

The findings of the study revealed that the 90% of population are vaccinated and 10% of population are not vaccinated. The majority of population was of male (51.7%) and female (48.3%.) 70% population vaccinated with covid shield and 13.3% vaccinated with covaccine and 4.2% vaccinated with other vaccine and 12.5% population are not vaccinated. 40.8% persons were administered with both 1st and 2nd dose and 31.7% were administered with 1st dose and 11.7% were administered with 2nd dose and 5.8% were administered with booster dose and 10.0% were not administered with vaccine.

Discussion

The finding of the study were discussed in terms of objectives and hypothesis of the study. The present study is aimed to assess the COVID-19 vaccination coverage at selected rural areas of Greater Noida.

The study was conducted with a Descriptive approach. The study was conducted in the Ranhera village of Greater Noida.

Data collection period was for 5 days. The tool divided into two sections. Section A dealt with the demographic variables in terms of gender, age, marital status, number of family members, type of family, religion, monthly household income, level of education, occupation, family with medical background. Section B dealt with the vaccination coverage of the participants against corona virus. It specifies the 1st, 2nd and prevention dose vaccination against corona virus. The name of the vaccine administered and the percentage of vaccination administered. The study consists of 120 participants. The finding of the study were discussed in terms of objectives and hypothesis of the study.

Conclusion

From the result of the study it was concluded that more than half of the population selected was vaccinated against COVID-19.

90% of population are vaccinated and 10% of population are not vaccinated. Therefore investigator should know that covid-19 vaccination is covered within the community people. Hence vaccines are the most important public health measure and most effective strategy to protect the population from COVID-19 as we know that Covid-19 disease is a preventable disease.

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