

COVID VACCINATION : -19

Where we stand and the challenges ahead?

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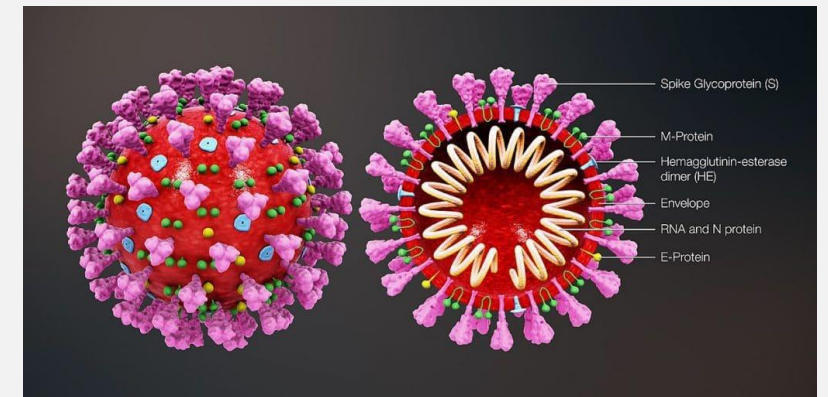
CONCLUSION



REFERENCES

INTRODUCTION

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- Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus.
 - The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads.
 - Protect yourself and others from infection by washing your hands or using an alcohol-based rub frequently and not touching your face.
 - The availability of a safe and effective vaccine for COVID-19 is well-recognized as an additional tool to contribute to the control of the pandemic.
 - As till date 3 vaccines has been successfully launched i.e., COVISHIELD, COVAXIN and SPUTNIK V.
 - Till now, 2624733776 people are vaccinated in India and the vaccination drive is going on at an enormous rate.



Covishield vs Covaxin vs Sputnik V

Vaccine	Type of Vaccine	Dosage and Time gap between doses	Storage and expiry	Efficacy Rate	Price in INR (Rs.)
COVISHIELD (Oxford-AstraZeneca vaccine's SII)	Viral vector	2 doses, 12-week gap	2 to 8 degrees Celsius, 6 months	70%	Rs. 780/-
COVAXIN (Bharat Biotech)	Inactivated Virus	2 doses, 4-8week gap	2 to 8 degrees Celsius	81%	Rs. 1,410/-
SPUTNIK V (Moscow's Gamaleya Institute)	Viral Vector	2 doses, 21 days to 3 months	-18.55 degree Celsius (liquid form) and 2 to 8 degrees Celsius (dry form)	92%	Rs. 1,145/-

LITERATURE REVIEW

S.NO	TITLE & AUTHOR/ NEWSPAPER & DATE/ YEAR	KEY FINDINGS
1.	Ravina, K. (2021, June 03). Covaxin Vs Covishield Vs Sputnik V: Which one is better? Retrieved from https://timesofindia.indiatimes.com/life-style/health-fitness/web-stories/best-coronavirus-vaccine-covaxin-vs-covishield-vs-sputnik-v-which-one-is-better/photostory/83205740.cms	COVAXIN :- It contains the dead virus which triggers the immune response but does not make the person sick. Efficacy rate is 81%. COVISHIELD :- Made from a weakened version of common cold virus from chimpanzee. Efficacy rate is 70%. SPUTNIK :- Based on an adenovirus. Efficacy Rate is 92%. Two slightly different versions of vaccine are administered. Each of the two doses uses a different type of adenovirus: first dose with type-26 (Ad26), then a booster dose with type-5 (Ad5).
2.	Coronavirus Vaccine Side Effects: Why do some people get side-effects and some don't?. The Times of India. (2021). Retrieved 2 July 2021, from https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-vaccine-why-do-some-people-get-side-effects-and-some-dont/photostory/83511534.cms	1.Different vaccines showcase different responses. 2.Covaxin tends to dole out 'fewer' inflammatory reactions in comparison to Covishield. 3.Women, more than men, tend to experience harsher, and more intense side-effects from the vaccine doses.
3.	Wake, AD. (2021, June 21). The Willingness to receive COVID-19 vaccine and its associated factors: "Vaccination refusal could prolong the war or this pandemic" Retrieved 21 June 2021, from https://www.dovepress.com/the-willingness-to-receive-covid-19-vaccine-and-its-associated-factors-peer-reviewed-fulltext-article-RMHP	There was insufficient level of willingness to receive COVID-19 vaccine, and several factors were associated with it. Health education should be provided concerning this vaccine to improve the willingness of the community.
4.	Kai Xing, Yi Jiang. (2021, March). "Efficacy and safety of COVID-19 vaccines". Retrieved from https://pubmed.ncbi.nlm.nih.gov/33691913/	Most of the COVID-19 vaccines appear to be effective and safe. Double dose vaccination is recommended. However, more research is needed to investigate the long-term efficacy and safety of the vaccines and the influence of dose, age, and production process on the protective efficacy.

RATIONALE

- India launched world's largest vaccination drive against COVID- 19 across 3006 vaccination sites in the beginning of 2021.
- The vaccine will help us achieve two things - one it will bring down the number of cases and decrease mortality ratio.
- However, the biggest challenge at the moment lies in logistic of dispensing vaccines to vast population.
- As for now it seems that the challenges with the "known knowns" (covid cases, hospitalization, and effective management) are being dealt with, and with India transitioning through "known unknowns" (managing vaccine logistics and unforeseen complications).
- The real test will lie in dealing with the "unknown unknowns" (short term and long-term vaccine efficacy, capacity to control the pandemic and boosting the economy and health care).

OBJECTIVES

To study about the COVID-19 Vaccination process at the Apollo Hospitals, Jubilee Hills, Hyderabad and about the challenges that hospital personnel and general public are facing during this vaccination process.

- ☐ To study in detail the whole vaccination process from the beginning (when an individual enters the vaccination center) to the end (when he leaves the center).
- ☐ Turnaround time of vaccination or how much time the whole vaccination process is taking.
- ☐ Likelihood of people towards a particular vaccine whether they choose covishield, covaxin or sputnik V.
- ☐ Side effects of the vaccines so that potential risks can be minimized in future.
- ☐ Availability of vaccines.

METHODOLOGY

The study was conducted at the APOLLO HOSPITALS, JUBILEE HILLS, HYDERABAD and the department assessed for this study is Operations Department (Vaccination Center).

RESEARCH QUESTION

What is the vaccination process, when people are developing side-effects, which age group is getting vaccinated and why is it important to manage the vaccination process and where we are doing this research?

STUDY DESIGN

Cross sectional Survey based Descriptive Study

SAMPLE SIZE

19,246 people were surveyed for this study

DATA COLLECTION

Questionnaire was filled in google form by asking the questions from general public who were coming for vaccination. Both new and existing information was monitored to collect reliable data about how many doses of COVID-19 vaccines have been delivered (distribution) and how many people have been vaccinated with those doses (administration). It was done through records documented by hospital plus through software inputs.

DATA ANALYSIS

Content analysis and narrative analysis

SAMPLING TECHNIQUE

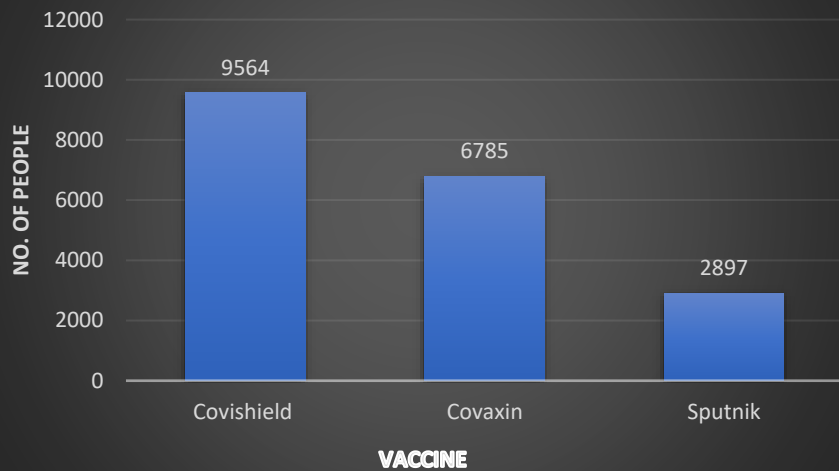
Non-Probability Sampling technique is used in this study.

STUDY TIME

8 weeks (10th May'21 to 2nd July'21)

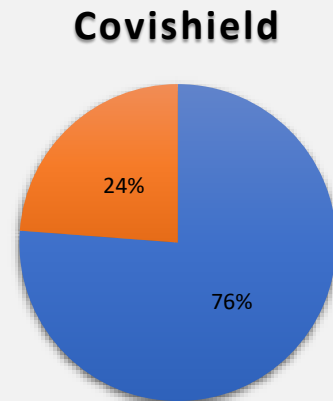
RESULTS

Vaccination



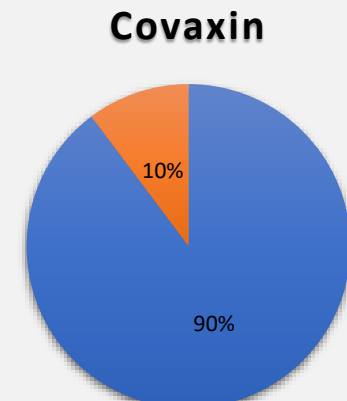
This graph represents the number of people who came for the specific vaccine i.e., Covishield, Covaxin and Sputnik V from 10th May'21 to 2nd July'21 at Apollo Hospitals, Hyderabad.

This graph represents the percentage of people who experience side effects after the first dose of **Covishield**.

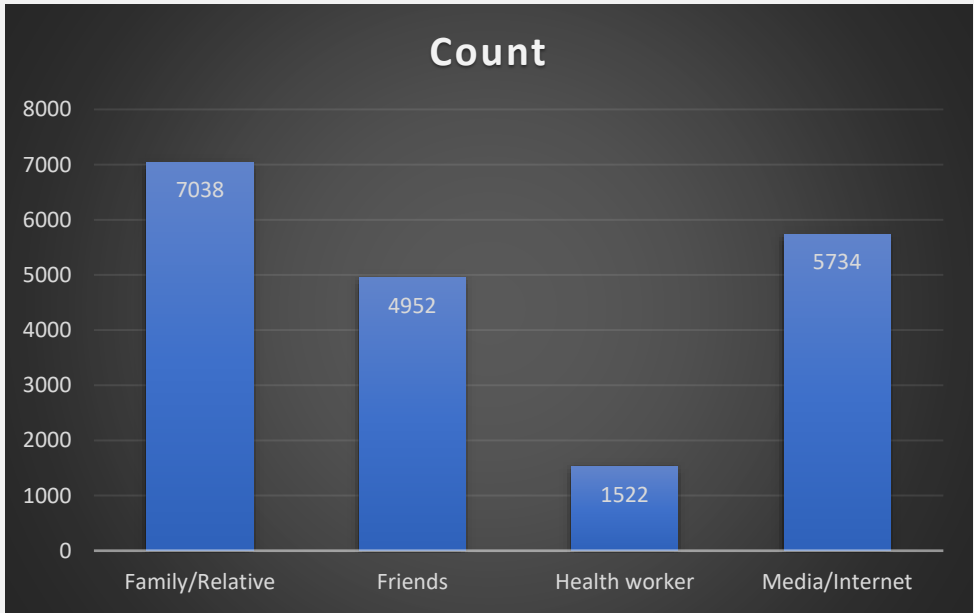


■ Total number of people ■ Side effect

This graph represents the percentage of people who experience side effects after the first dose of **Covaxin**.

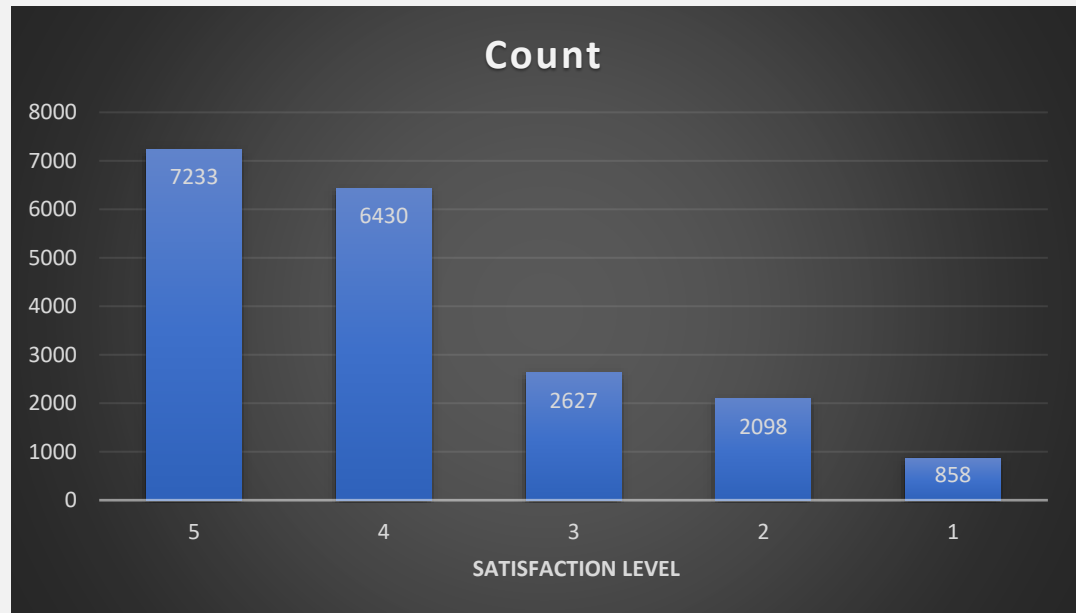


■ Total number of people ■ Side effect



This graph represents that to whom an individual turns most to when they have any query regarding the vaccination.

This graph represents the satisfaction level of the people who came for vaccination at the Apollo Hospitals, Hyderabad



FINDINGS

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- Out of 19246, 9564 (49.7%) people were registered for Covishield, 6785 (35.2%) people were registered for Covaxin, and 2987 (15.5%) for SPUTNIK V.
 - Out of total people who came for Covishield vaccine 24% people experienced side effects after first dose and only 10% people i.e., 1 out of 10 experienced the side effects after the first dose of Covaxin.
 - Majority of the people reach their family/relatives when they have any query regarding the COVID vaccine, rather than reaching out to health workers which is a matter of concern.
 - Out of total people, 7233 (37.6) people gave 5 rating to the services provided by the Apollo Hospitals, whereas on the other hand there are some downfalls too due to which 858 (4.5%) people gave 1 rating.

CONCLUSION

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- Currently three vaccines, covaxin (developed by Hyderabad based bharat biotech) and covishield (developed by oxford – astrazeneca and manufactured by serum institute of India) and sputnik v (developed in Russia, sold by dr. Reddy laboratories) are approved for the vaccination.
 - Apollo group of hospitals has emerged as single largest vaccinator in India with close to 1.5 million jabs and Apollo hospitals, Hyderabad with over 2 lakh jabs so far is the largest private vaccinator in Telangana.
 - To broaden the vaccination drive, apart from vaccinating at its hospitals in Telangana, the hospital has conducted multiple outreach camps.
 - Vaccination in India is challenging because of huge population and inherently fragile healthcare system. Presently we are in grip of second wave of pandemic seen anywhere in the world. We long to return to normal but “normal led to this”. The race is on and humanity has no option but to defeat the virus and stay ahead in the race.

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THANK YOU