

COMPARATIVE STUDY OF COVID-19 VACCINE ADMINISTERED IN INDIA:

COVISHIELD VS COVAXIN

By:

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(0989)

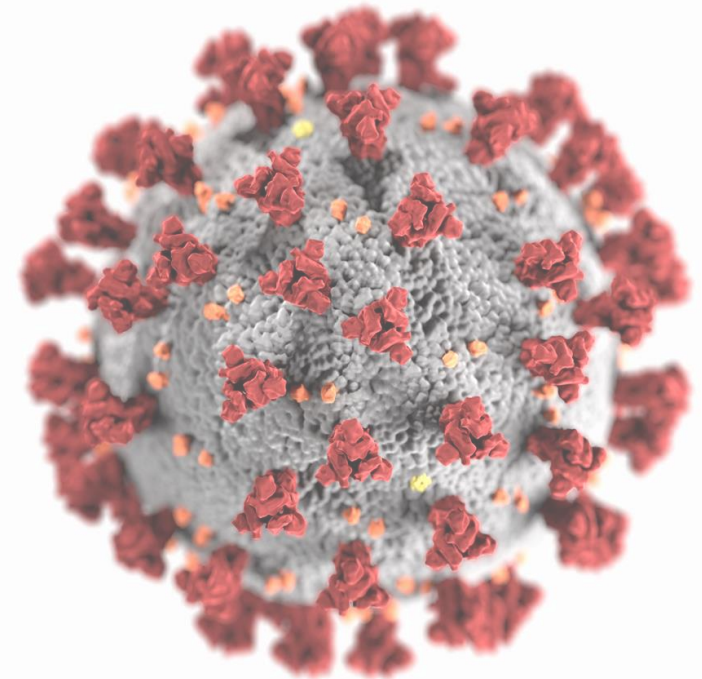
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Under the guidance of:

Dr.Susmit jain

What is known about COVID-19?

- ❑ Infection with SARS-CoV-2, the virus that causes COVID-19, can result in a range of illness, from mild symptoms to severe illness and death.
- ❑ We don't know how SARS-CoV-2 will affect each person.
- ❑ Some people, such as adults 65 and older or people with certain medical conditions, are more likely than others to become severely ill.



How to prevent COVID-19

- ☐ Wear a mask that covers your mouth and nose.
- ☐ Avoid close contact with others. Stay at least 6 feet (about 2 arm lengths) from other people.
- ☐ Avoid crowds and poorly ventilated spaces.
- ☐ Wash hands often with soap and water.
- ☐ Use an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not available.
- ☐ Avoid touching your eyes, nose, and mouth with unwashed hands.
- ☐ Clean and disinfect frequently touched surfaces daily.
- ☐ Get a COVID-19 vaccine.

PREVENTION



What is known about COVID-19?

- ❑ Getting the virus that causes COVID-19 may offer some natural protection, known as an antibody or immune. But experts don't know how long this protection lasts.
- ❑ The risk of severe illness and death from COVID-19 far outweighs any benefits of natural immunity.
- ❑ COVID-19 vaccination will help protect you by building immunity without the risk of severe illness.



Pandemic

Total cases 3.04Cr	Recovered 2.95Cr	Deaths 3.99L
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Key facts about COVID-19 vaccination



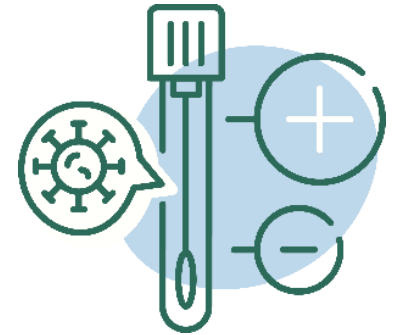
Getting vaccinated can help prevent getting sick with COVID-19



People who have already gotten sick with COVID-19 may still benefit from getting vaccinated



COVID-19 vaccines cannot give you COVID-19



COVID-19 vaccines will not cause you to test positive on COVID-19 viral tests*

COVID-19 vaccinations

COVISHIELD :

- ❑ Covishield is one of the most important vaccine that is used these days predominantly and which is approved by India as a conditional use. Nationwide COVID-19 vaccination was administered in India during a phased manner from 16 Jan 2021 with COVISHIELD. This vaccine was indegeniously prepared by the Serum Institute of India in lines with the Oxford-AstraZeneca, ChAdOx1 (COVISHIELD) developed at Oxford.
- ❑ Covishield has been developed by the Oxford-AstraZeneca and is being manufactured by the Serum Institute of India (SII).
- ❑ Covishield has been prepared using the viral vector platform which is a totally different technology.
- ❑ Covishield vaccines second dose is 84 days or 12-16 weeks after the first dose.
- ❑ Mode of administration: Intramuscular vaccine



COVAXIN:

- ❑ Covaxin has been developed by Hyderabad-based Bharat Biotech International Ltd in association with the Indian Council of Medical Research (ICMR) and the National Institute of Virology (NIV).
- ❑ Covaxin is an inactivated viral vaccine. This vaccine is developed with Whole-Virion Inactivated Vero Cell-derived technology. They contain inactivated viruses, which can not infect a person but still can teach the immune system to prepare a defence mechanism against the active virus.
- ❑ The second dose of Covaxin is scheduled after 4-6 weeks after the first dose
- ❑ Mode of administration: Intramuscular vaccine



BEFORE THE VACCINATED:

People before getting vaccinated should have to provide required information to their vaccination provider; that includes

- patients medical history such as diabetes, co-morbidities, allergic reactions
- pregnancy or lactating
- any other COVID-19 vaccine taken
- presence of blood disorder
- medicament history

AIM AND OBJECTIVE

The primary aim and objective of this study is to evaluate the efficacy, safety, and immunogenicity of COVID-19 vaccines in India.

Review of Literature

AUTHORS & YEAR PUBLISHED	STUDY LOCATION	SAMPLE SIZE/ SOURCE OF DATA	KEY FINDINGS
S. Mahendra Dev, Rajeswari Sengupta, 2020	Mumbai, India	Government database, Market Research reports	Assess the probable impact of the shock on various segments of the economy, analyse the policies announced thus far by the central government and the Reserve Bank of India to mitigate the economic shock, and propose a set of policy suggestions for specific sectors
Emily Schueller, Eili Klein, Gary lin 2020	India	Government database analysis	Before, during, and after the 21-day lockdown is removed, the impact of the lockdown on the spread of COVID-19 in India.

Lloyd A. C. Chapman, Poojan Shukla, Isabel Rodríguez-Barraquer, Priya B Shete, Tomás M. León, Kirsten Bibbins-Domingo 2021	Worldwide	28,175 COVID-19 deaths	Over the first 6 months of vaccine rollout, age-based targeting prevented the most fatalities (65 percent for 5 million people immunised) and DALYs (40 percent). Strategies targeting a single risk factor and critical workers averted the least deaths (33 percent) and DALYs (25 percent). However, treating two or more risk variables at the same time prevented up to 40% more DALYs.
Devan V. Mehrotra, Holly E. Janes, Thomas R. Fleming, 2021	Worldwide	Online database, Government database	A basic set of clinical objectives is proposed, together with considerations to guide the selection of the primary endpoints based on clinical and statistical reasons, to promote harmonised evaluation and comparison of the efficacy of these vaccinations.
Khan Sharun, Kuldeep Dhama 2021	India	COVID-19 vaccine portal, Online database	India's ability to develop and manufacture cost-effective COVID-19 vaccines on a large scale will help to meet the global vaccine requirements without causing an additional economic burden.
Kamala Thiagarajan, 2021	Tamilnadu, India	Online database	Efficacy rate of Covaxin and Covishield

METHODOLOGY

The methodology used for the study is explorative and is split into 2 stages. within the initial stage, the observation of COVID-19 candidate vaccines below development round the world, through access to reports and public databases, was sought-after and a study database was generated.

In this study,

Research Approach: An inductive approach is chosen.

Research Philosophy: In this literature, Positivism philosophy is considered

Research Design: Exploratory

Research Methods: Qualitative, Quantitative

Data collection: Secondary, Books, Journals, Website

RESEARCH QUESTION:

- A COMPARATIVE STUDY OF COVID-19 VACCINE ADMINISTERED IN INDIA.

SIDE EFFECTS OF VACCINE:

These side effects might have an effect on your ability to try and do daily activities, however they must flee in an exceedingly few days. Some individuals don't have any facet effects.

COVISHIELD:

Pain at the injection site, Headache, Joint pain, Fever, Feeling unwell, Itching, Swelling at the injection site

COVAXIN:

Can be painful at the injection site they may be swelling, Redness at the place of injection, there may also be dizziness and weakness rashes all over the body are also likely to increase heartbeat.

NOTES ON MORALITY:

Reports on mortality began to seem post-hoc unharmed of the vaccine wherever in Norway twenty three senior participants died post vaccination.

Prioritisation is totally different from the U.S.A. and England where attention staff are initial tier, whereas in Norway the primary tier is that the senior in danger.

Four participants died throughout clinical test of the Russian vaccine one within the placebo cluster and 3 within the vaccine cluster, however the authors denied that their death had any regard to the immunogen.

Currently, there are 2 vaccines accessible to the public- Bharat Biotech's Covaxin and Oxford University-AstraZeneca's Covishield vaccine.

Covaxin and Covishield are each native vaccines that have driven India's vaccination drives.

Covishield or the Oxford-AstraZeneca jab remains to be the favored selection, used in most countries. On the other hand Covaxin, is currently thought of to be one amongst the foremost effective and tolerant vaccines against mutant strains.

Covaxin's second dose must be given 4-6 weeks after the primary one, Covishield's second dose may well be delayed, i.e. given 6-8 weeks after.

COVID-19 VACCINE IN INDIA:

India began administration of COVID-19 vaccines on 17 January 2021 (152 days ago). As of 18 June 2021, Republic of India has administered 268,960,399 doses overall, together with initial and second doses of the currently-approved vaccines.

Doses given	Fully vaccinated	% of population fully vaccinated
32.9Cr32,90,00,000	5.77Cr5,77,00,000	4.2%

Source: Wikipedia
Updated: 1st July 2021

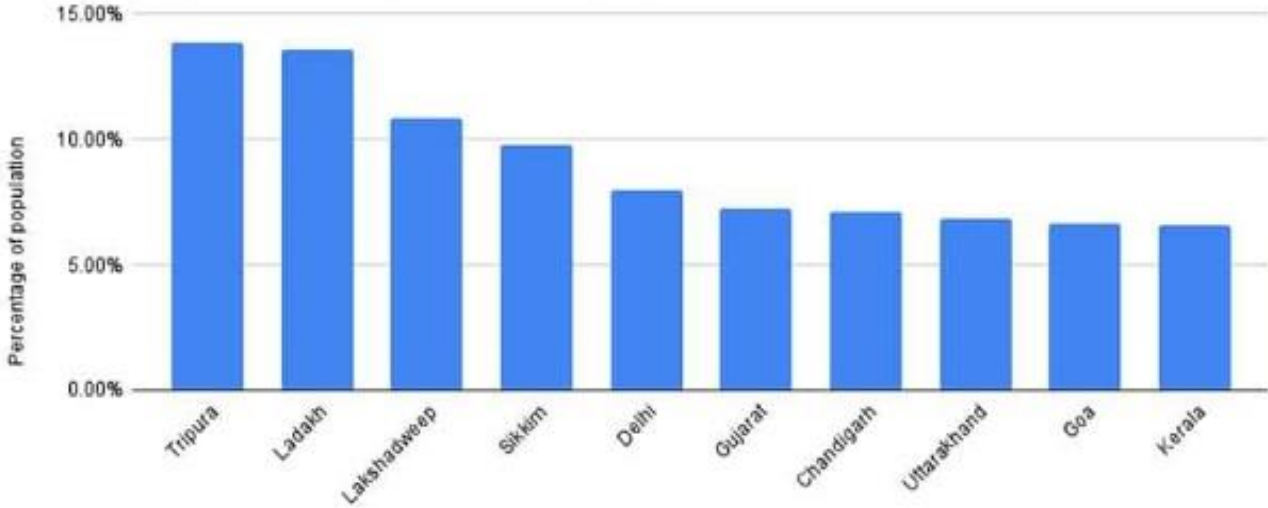
RESULT

DATA ANALYSIS:

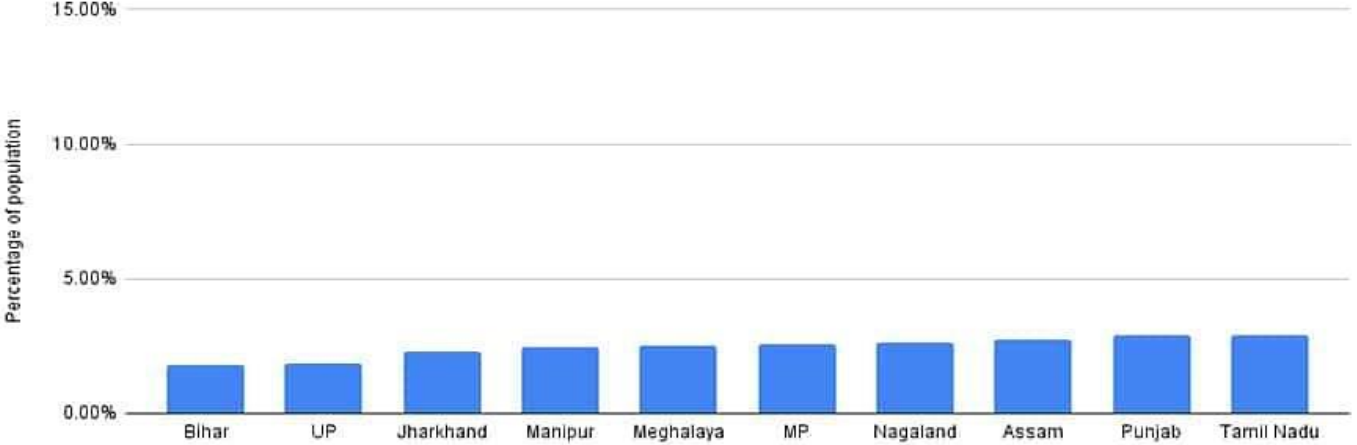
Table No. 4.3: Analysis of Covid-19 vaccine (COVISHIELD & COVAXIN) development process:

	Covishield	Covaxin	Total	Funding	Status
Phase 1	5.6	1	6.6	PM Cares	Fully utilised
Covax	1				Fully utilised
Phase 2	10	2	12	Health ministry	About 86 percent received as on May 13
Phase 3	11	5	16	Health ministry	To be delivered in June and July
Total	27.6	8	35.6		

Highest proportion of fully vaccinated people



Lowest proportion of fully vaccinated people



STUDY 1:

EFFICACY RATE BETWEEN COVISHIELD & COVAXIN:

You will be given full information about the efficacy rate of both these vaccines here.

COVISHIELD	COVAXIN
If you use this covid injection the effect is 70% - 90%	If you apply it in a phase 3 trial with Covaxin, then it will give 78% to 100% effect.
Use the vaccine only under the supervision of doctors and take advice from the doctors.	The injection should only be done under the supervision of the doctor and do not use anything without the advice of the doctors.
Covishield can only be applied to people over to 12 years of age.	This injections are applied only to over 18 years of age.
Dose gap is 12-16 weeks of the first dose	This injection is administered to you in 4 - 6 weeks.

STUDY 2:

HOW DOES VACCINE WORK? :

Developing immunity through vaccination means that there's a reduced risk of developing the sickness and its consequences. This immunity helps you fight the virus if exposed.

A vaccine works by coaching the system to acknowledge and combat pathogens, either viruses or microorganism. To do this, bound molecules from the infectious agent should be introduced into the body to trigger associate degree reaction.

CONCLUSION

The need to quickly develop an immunizing agent against COVID-19 happens at a time of nice excitement in basic scientific understanding, likewise as methods learned within the past by business and improvement of regulative pathways. It's expected that these factors, arising from the world emergency, might direct the R&D processes for brand introducing new medicine, particularly in times of pandemic.

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THANK YOU
