

“Covid-19 Vaccine Of India: What Are the Vaccines Approved By India And What Indian Thinks About Covid-19 Vaccine”

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ABSTRACT: This study was focused about Covid-19 vaccines of India which are approved by government of India and attitudes of Indian regarding covid vaccines. As the Corona cases have afflicted millions of people in a worldwide pandemic. So, there were increasing demands for vaccines. Safe and effective vaccines are needed urgently. In an ongoing so many vaccines were developed in India and they failed also and now India is manufacturing two types of vaccines covishield and covaxin and both the vaccines approved by Indian government. At first, vaccination started for frontline health worker in phase 1 and it was started from 16th January. Recently India has approved new vaccine that is Sputnik V. According to research it is found that Indian people are showing hesitant to accept vaccine because they think it has some serious side effect and some other various mixed opinion towards the vaccines. We cannot ignore the side effect it has some side effect like fever, pain, headache etc.

Keywords: Covid-19, Vaccine, Population, Side effect

I. INTRODUCTON

The first case of corona virus disease was found in Wuhan city, China in December 2019. Initially it was not known that it is a pandemic disease that's why the disease spread very fast. WHO announced in 11th march of 2020 that corona is a pandemic disease. Before WHO announced the pandemic disease corona was spread so many countries including India. Because of corona virus disease so many people died, and people are still dying all over the world and it became the global crisis. Corona virus disease is pandemic disease, so it has spread all over the world and attacks millions of people and causes so many deaths also. To stop the corona disease spreading country took so many steps like lockdown, social distancing, use of mask but the main way to stop the disease is the

development of vaccine. On 16th January India has launched first vaccine in India for healthcare and frontline worker. Initially Indian people don't want to take vaccines because they are afraid of side effect. Outside India and in India also some citizen got serious side effect even died also.

PHSAE 1: Vaccination for healthcare and frontline worker. Phase 1 started from 16th January, 2021.

PHASE 2: Vaccination for senior citizens over 60 years old and person between 45 to 59 years old.

PHASE 3: Vaccination for the person above 18 years old. Phase 3 vaccination started from 1st may, 2021.

Discussion on Covid-19 Vaccines Approved By Government of India

In India second wave of corona disease started from February and India approved vaccine for citizen of India in January. India approved two vaccines for vaccination that are COVISHIELD and COVAXIN.

Comparison over these two vaccines (Covishield and Covaxin):

Developer and Manufacturer:

COVISHIELD: It has been developed by University of Oxford with British pharmaceutical major AstraZeneca. Serum Institute of India (SII) which is present in Pune is collaborating with university of Oxford to manufacture their vaccine in India in the name of Covishield. Serum Institute of India is the largest vaccines manufacturer in terms of number of vaccines it can manufacture 5000 dose per minute.

In April, 2020 Serum Institute of India announced its partnership with Oxford University for manufacture of covid vaccine. In May 2020 1ml vial with cellular material vaccine arrived at SII from Oxford, England. In August 2020 phase III clinical trials started in India. In September observed what adverse effects are can be occur in India. Drug controller of India issued notice to the company for the adverse effect later

got permission on the same month. November 2020 declared their vaccines was 70 percent efficient effectiveness can be increase by changing the dose. After that SII apply for license for emergency use in India.

In January, 2021 DGCI approved the vaccine for emergency use and dose transported to several part of the country. Jan 16, 2021 first dose of vaccine was administered in India.

Covishield developed by a technology where a chimpanzee adenovirus ChAdoxI has been modified to enable it to carry the covid-19 spike into the cell of human. This cold virus is basically incapable of infecting the receiver but very well teach to the immune system to prepare a mechanism against such virus.

Precautions: Pre-existing allergy, blood thinning medications and one who is planning to conceive should advise to wait for 3 to 4 weeks to get vaccine.

COVAXIN: India's first domestically developed covid-19 vaccine. Covaxin developed by Bharat biotech (Hyderabad). this vaccine also approved in January, but it faced some controversy because it was approved without publishing phase III data, but later data was published.

After publishing of phase III data of covaxin by Bharat biotech it found that it has 78% efficacy at preventing mild, moderate, and severe corona virus infection.

This vaccine is developed by whole virus technology they contain inactivated virus which cannot infect a person but still can teach the immune system to prepare a defense mechanism against the active virus.

DOSE: We can't differentiate vaccine in case of dose. Both the vaccine follows 2 dose regimens and there should be 28 days gap between 1st dose and 2nd dose. This is for both the vaccine. But recently it has changed the schedule of second dose of Covishield, once 8 to 12 weeks have passed; the next dose can be taken whenever practicable, until six months. According to the scientist, vaccine doses will be safe no matter when they are taken but will not provide any great "boosting" if given within less than a month or so of the previous dose.

Storage condition: 2-8 degree Celsius. It can store in household refrigerator, so it easy to store both the vaccine.

Route of administration: Both the vaccines can be administered through intramuscular injection.

Precautions: This vaccine is unsafe who might be running with fever at the time of administration, or on blood thinning medications, suffering from immune disorder, bleeding problems.

AGE RESTRICTION: Covishield is approved for 18 years old or above person while Covaxin is approved for 12 years old or above. Both the vaccines effective against mutated UK/SA/Brazil virus according to Indian health care officials.

PRICING: Both the vaccines are free at government healthcare and government has kept price of minimum Rs. 250 at private healthcare for Covaxin. And Covishield Rs 400 for state government and Rs 600 for private hospitals. However, the company reduced the price by 25% for state government and is now selling its vaccine doses at Rs 300 to state government. Meanwhile, the price for the centre and private hospitals remains unchanged.

Recently India Has Approved New Russian Vaccine That Is: Sputnik V

SPUTNIK V: This vaccine India has approved because it has great efficacy with 91%. Compare to other two vaccines it has greater efficacy. This is a Russian vaccine and India has approved this vaccine for emergency use. Still it is not available for all. Sputnik V will be produced by Dr. Reddy's laboratories and India will produce 850 million doses per year.

Developer: Sputnik V is developed by the Gamaleya research institute of epidemiology and microbiology in Moscow. Sputnik V is based on a well-studied human adenoviral vector-based platform. Adeno virus used as a container to deliver the corona virus gene to cell and start the synthesis of the new corona virus envelope proteins, "introducing" the immune system to a potential enemy. Phase 3 clinical trials have been conducting in the UAE, INDIA, VENEZUELA and Belarus.

DOSE: Sputnik V is a two-dose regimen vaccine and gap should maintain of 21 days between 1st dose and 2nd dose.

Views and Attitude toward Covid-19 Vaccine

Covid has made a problem in various aspects of people's life. To stop this covid-19 infection need to get covid-19 vaccine. This covid-19 vaccine made confusion among normal people because some are telling it is good and some people are telling it is not good for health. Peoples are

getting wrong information about vaccine through various sources like social media. Some people have no idea about vaccine what kind of vaccine has been launched in India and from where they can get. Some people have idea about vaccine, but they are not taking because they are afraid of side effect of vaccine.

Some people are taking vaccine without any hesitant. Here, we can get three kinds of people-

1. People have no idea about vaccine.
2. People have idea but not taking vaccine because of side effect.
3. People have full knowledge about vaccine, and they are not taking vaccine without any hesitant. They are not getting because of shortage of vaccines.
4. According to the public point of view government should increase in the supply of vaccine, so people can get vaccine easily. Nowadays people who want to get vaccine, but they are not getting because of shortage of vaccines.

II. CONCLUSION

This is, however, Government should do more advertisement to influence people to take vaccine and should do some health campaign in the backward area so people of that area can get vaccine easily. To get rid from corona infection we must follow the protocol which has given by the health officials like-social distancing, wearing mask etc. Some people who took vaccine and they think corona will not attack them, but this is a totally wrong conception still there is chance to attack by corona virus. So, everyone should take vaccine as soon as possible to fight against covid-19 without

any hesitant. Vaccination is only the major way to stop this pandemic situation.

CONFLICT OF INTEREST STATEMENT:

We declare that we have no conflict of interest.

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