**Investigating the long-term efficacy and adverse effects of covid vaccines**

***A research proposal submitted by***

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**Abstract**

The purpose of this research is to determine the effectiveness and safety of Covid vaccinations worldwide.

Lack of adequate knowledge about vaccines makes people reluctant to be vaccinated. Through this research would like to present an accurate idea about the effectiveness of vaccines and their side effects.

To conduct this research safely to avoid contamination, this investigation will be carried out by a questionnaire distributed to individuals to obtain the relevant information. This survey will help people find out the vaccine's effectiveness, which will encourage them to take the vaccine. And by knowing about the efficiency and side effects, the government will be able to determine which vaccine is more effective according to their continent.

# **1** **Introduction**

Toxicology has discovered a novel coronavirus strain as the source of the COVID-19 disease, which is spread by direct contact between infected people and those who are not infected. The coronavirus disease pandemic of 2019 (COVID-19) has now spread to every country on earth, posing a serious public health threat. COVID-19 is a highly infectious and dangerous viral infection caused by the severe acute respiratory syndrome coronavirus. This brand-new hazardous virus originated in Wuhan, China, and swiftly spread over the world.

After extensive investigation, vaccination has been considered the most effective solution of coronavirus. Vaccines are biological substances that are used to protect humans against infections caused by bacteria and viruses. Vaccines are sometimes referred to as immunizations since they use our natural immune system's capacity to prevent infectious diseases.

Ideally, following phase 3 research, multiple vaccines that are both safe and efficacious are identified for regulatory authorization and implementation. After a lengthy analysis, numerous vaccinations have been proven effective in phase 3 and approved by WHO. The Vaccines are mentioned below:

**RNA vaccines and DNA vaccines**

* Pfizer–BioNTech
* Moderna

**Adenovirus vector vaccines**

* Oxford–AstraZeneca
* Janssen

**Inactivated virus vaccines**

* Sinopharm BIBP
* CoronaVac

Covid 19 is a novel virus that can only be eliminated by vaccination. Since 2019, the virus has spread globally, crippling economic growth. Individuals have their myths about vaccination. Inadequate knowledge about vaccination, the immune system, and recovery from COVID This will enhance vaccination awareness and ensure that the vaccine is utilized as efficiently as possible. If the vaccination is administered appropriately, all individuals will immediately revert to their prior normal state.

This research was performed to provide a realistic view of the vaccinations' effectiveness and adverse effects. This enables the individual or country to know about and select the appropriate vaccination for their condition. Individuals of all ages who receive the vaccination will be questioned about its effectiveness and adverse effects. A conclusion can be reached through the collected data.

The public should be aware of the facts concerning the vaccination, and research should be finished as soon as possible. Through this research, people will be able to know the efficiency and adverse effect of the covid vaccine.

**2** .**Research Background**

This research is focused on human health. To acquire additional knowledge on the efficiency and adverse effects of WHO-approved vaccines through this research. Individuals can assess the vaccine's efficacy and adverse effects following a particular health state and geographic location.

Readers of this research paper will be able to understand vaccination better. A vaccine is a substance that, when applied to the body, can produce antibodies against a specific disease. Which helps build immunity. Vaccination is a well-established and effective technique for preventing infectious illnesses in the general population due to the disease's immunomodulatory characteristics and immunomodulatory medication.[1]

Covid 19 is a new virus whose only possible solution is vaccination. Since 2019, the virus has spread worldwide in the form of epidemics and paralyzed the world economy. As a result of this situation, schools, colleges, and workplaces came to a standstill. To get the world back to its previous state, everyone needs to be vaccinated.

This research paper explores the effects of covid vaccines. As a result, people will know more about the vaccination, have a greater interest in vaccines, and be more enthusiastic about administering the vaccine. People will also be able to determine which vaccine is most effective for them.

# **3** .**Research questions**

Our primary objective is to determine which vaccine is more effective for a particular population or geographic location. The following are some of the significant questions discussed in this research:

* What is the effective rate of vaccines?
* Which vaccines are more effective for a particular population?
* Which Vaccines are more effective in a specific geographic area?
* What are the risks associated with particular vaccines?
* How long will a vaccine be effective?

# **4** .**Research method**

This research uses a survey methodology.

**Survey Research Method**

Although survey research is frequently used in investigations of healthcare services, its origins date back to social surveys conducted in British Society by social activists to collect data on poverty and professional life, and survey research is still the most frequently used method in adapted social research. The term survey' is used for a variety of contexts but primarily refers to the process of choosing a reasonably large group of the population from a predefined community and then collecting a comparatively small quantity of data out of those participants. As an outcome, the researcher takes data from a sample of participants to conclude the greater population.[2]

Survey questionnaires should be simple to understand and well-presented. Avoid using solely capital (upper case) letters, as this format is hard to read, preventing 'double-barrelled' questions and questions with double negatives, as well as leads or unclear inquiries. Questions should be appropriately listed with a number and grouped according to their subject. Furthermore, the questions are followed by legends that elaborate on the particular topic. The questions can be open questions or closed questions. Whether to use open or closed questions is determined by the method in which responses will be analyzed. No questions were formulated in the survey that was targeted directly at the participant. The questionnaire will be conducted online. To make the questionnaire easier to complete, precise guidelines and headings should be included.[2]

The survey supports the use of both quantitative and qualitative tools, and it analyzes the gathered information. It was possible to gain a general perspective on a given aspect (e.g., do all team members work in the exact location) by looking at the initial half of the answer (frequency scale replies).

Through quantitative analysis, we can find out what is going on in space.

This process gathers related information, categorizes it, and presents it in the form of charts. The following part is classified as the optional open-ended session in this context. Here are some forms of responses: Provides detailed comments on own word. It is feasible to do significant and precise analysis in the context of the responses received. Once the project is performed, the quality is evaluated in a standard manner to be taken into consideration and prepared for submission as a proposal.[3]

**5 . Significance of research**

The World Health Organization has approved several vaccinations for human use after conducting a lengthy and in-depth investigation. That has brought relief. Human society has benefited from such evolution. There are also questions about the vaccine's effectiveness. Is there any adverse impact? In which situations is a specific vaccine more effective?

The above, without a doubt, create a barrier for those who want to receive vaccines. There must be a clear idea about the vaccine in order to avoid all kinds of obstacles. There is no better solution than vaccination to overcome this epidemic. This research paper will play an important role in making all people interested in receiving the vaccine and providing accurate information.

A large number of people are currently misinformed about the effectiveness of vaccines, and this is a growing problem. They are more concerned with the negative effects of vaccination than with the positive outcomes. At this time of the epidemic, people cannot be more interested in getting vaccinated without realizing the importance of vaccines. They will be able to differentiate between vaccines in terms of efficacy when they learn about the benefits of vaccines and can consider efficacy effects. This will increase awareness of the vaccine and ensure that it is used as effectively as possible. All people will quickly return to their previous normal situation if the vaccine is applied correctly.

The government has already started giving vaccines to the public. This research can play a crucial role in this ongoing process. Ensuring vaccination for all people is a costly process. So accurate information about the vaccine is needed as soon as possible. Vaccines are required all over the world now. It is not possible to vaccinate all people at the same time. There is a shortage of vaccines. Choosing a vaccine considering the physical condition at this time is undoubtedly a vital task.

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# **6** .**References**

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