

STUDY OF DIFFERENT CORONA VACCINE MARKET AND CUSTOMER SATISFACTION

by

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Under the Supervision and Guidance of

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled “STUDY OF DIFFERENT CORONA VACCINE MARKET AND CUSTOMER SATISFACTION”, is the proof of my record of my original primary and secondary research . I declare that I am not willing submit to any other college or institution for completion of my course or degree .

Signature

Sameer khanna

CERTIFICATE

This is to certify that the Dissertation project titled “. **STUDY OF DIFFERENT CORONA VACCINE MARKET AND CUSTOMER SATISFACTION**” is totally based on my work under my mentor Dr.Ashok Peepliwal and any part of my report has not been copied from any other available report or studies . Content wherever used has been acknowledged in this report

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ABSTRACT

The study aimed to analyze the “different corona vaccine market and customer satisfaction who are using vaccines”

The introduction of various vaccine for corona virus is a major step by government in reducing the spread of COVID and this results in reducing the severe disease and deaths associated with covid infection.. The government has made every effort to make this vaccination drive effectively and for seamless delivery of Vaccines of covid 19 by prioritizing the groups like healthcare professionals , old aged people and general public . recently in this covid era , government is continuously aware people to adopt this appropriate and important behavior of wearing masks everytime , washing hands , maintaining distance like “2 foot ki duri”.

A research was organized which is based on vaccine market of various top or most selling vaccines in India. The study considers various individuals who are concerned with covid vaccines . The study’s sample size consists of 25 Normal individuals having some or no knowledge of corona vaccines across India. The study has been prepared using secondary data. So, the dataset is both cross-sectional and time-series data.

The results obtained from the study are informative and helped us to understand the behavior and lack of understanding about the covid vaccines and the social stigma with which everyone is living and also helped us in developing a proper strategy and solution for enhancing the knowledge of people by big pharma vaccines companies, they will drive the strategies for the covid vaccines education among the people and in turn guide doctors to follow the same

ACKNOWLEDGEMENT

Firstly , I am thankful to my mentor Dr. Ashok Peepliwal, for giving me this opportunity to work under him through this project..

I would also want to express my gratitude and thankful to all individuals who helped me and have been very kind to spare their valuable time for helping me during this project work which motivate me in making this project very efficiently and great outcome.

I also want to acknowledge the assistance given by some of our other faculty who are having more knowledge and expertise , my friends and my family for motivating me and for always available to clear my doubts and queries.

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Finally, I wish to thank all my classmates at IIHMR university for their motivation and support which helped me in making this project a better outcome

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CHAPTER 1

INTRODUCTION

A disease like coronavirus infection 2019 in this case vaccines can help you from getting affected thus prevent you from this COVID-19 infection or it also saved you from seriously illness or mortality caused by COVID-19.

Every covid vaccine makes the immune response generate more antibodies in response to fight COVID-19

India's COVID-19 vaccination market is expected to grow over 2.3 Billion US dollars by the end of year 2027 with an approximate growth of more than 25% during forecasting .

The main reasons that are expected for this growth of India corona virus vaccine market during forecasting is;

- Approval of new vaccines in market
- focus on various immunization programs
- Main factor is increase in government support of development of vaccines in India

vaccines which are currently available for use in India or being researched are :

- **Messenger Ribosomal nucleic acid (mRNA) vaccine**

This type of vaccine uses mRNA to transmit cells instructions for how to generate the protein which is S which is found on the COVID-19 virus itself .

- **vector vaccine**

- **Protein subunit vaccine**

The top players in vaccine Market for their Products, Services, and Continuous Product Developments are;

- Bharat Biotech International Limited
- Serum Institute of India
- Zydus Cadila
- Biological E. Limited
- Gennova Biopharmaceuticals Limited
- Dr. Reddy's Laboratories Ltd.

All vaccines will not cost the same in the open market. There is likely to be wide disparity in the pricing and availability.

Here is tentative price of different vaccines in the Indian market.

This list is made according to the rough estimates made by the companies developing the vaccines in India :

- Less than Rs 100 for Bharat Biotech's Covaxin.
- Rs 250 for a shot of the Novavax vaccine.
- Rs 250-300 for one shot of the COVAX vaccine.
- Rs 500 to Rs 750 for a single shot of Russia's Sputnik V vaccine. Dr Reddy's Laboratories will be the phase-III trials of Sputnik and producing the same.
- Rs 1000 for Serum Institute of India's Oxford-Astrazeneca two-dose vaccine. This vaccine will be sold as Covishield in India.
- Rs 2,700 for a single shot of the Moderna mRNA vaccine.
- There are no rates available for the Pfizer vaccine as yet. But it will cost \$20 per dose in the international market.

India and the Vaccine Marketplace

India is the largest hub for vaccines worldwide and supplies vaccines to all over the world . Currently one -third of its vaccine production in india is exported, while somewhat of them is used domestically

Epidemiology of COVID-19

COVID-19 virus was first discovered in small city in China which is Wuhan, in December 2019.

World health organization announced to make it a public health emergency on 30 January 2020 and this result in a beginning of this a pandemic on 11 March 2020.

The estimated period starting from infection to ending to onset of first symptoms is between two to fourteen days with a average of around five days. Infection sometimes does not show any symptoms in patient but still the infection in that case is highly transmissible .

Various different symptoms in different patients is observed in COVID-19 patients , the most common symptoms are throat pain , cold, cough and most severe cases shortness of breath.

Initially Loss of sensations like smell or taste are also observed as symptoms in some patients which again very common in this covid times as compared to other symptoms of covid 19.

Vaccine efficacy and effectiveness

All vaccines which is either available in india or outside is approved which is basically emergency approved COVID-19 by World health organization , they must be sure about their quality, safety, efficacy and various side effects also .

For approval of vaccines needs efficacy rate of more than 50% in there result . even after approval the vaccines are monitored in pateits who took vaccine for safety and effectiveness purpose .

CHAPTER 2

LITERATURE REVIEW

- “Effectiveness of corona virus disease-19 (COVID-19) vaccines used in India is unexplored and need to be substantiated. The present case-control study was planned to elicit the effectiveness of COVID-19 vaccines in preventing infection and disease severity in the general population”
Chandramani Nanda Naik,^{1,*},^{1,*} Bijit Biswas,^{1,*} Binod Kumar Pati,²
Prabhat Kumar Singh³
- Ella R, et al. (2021) *Efficacy, safety, and lot to lot immunogenicity of an dead SARS-Corona Virus -2020 vaccine which is double-blind, random, and in controlled for phase 3 trial not in phase 1 or 2*
- Mettu and BH University along with Mr. Tsegaye Workneh Fego (MA Candidate) conducted a study by a consecutive sampling technique at her private clinic
- NGSM which is Institute of Pharmaceutical sciences, , Mangalore researched on various covid patients . The average age of patient was

around 55 years.KAP score was less and most of the covid patients had not controlled their heart beats .

CHAPTER 3

RESEARCH QUESTION

Should pharmaceutical vaccine market or government should work more on awareness of covid 19 vaccine to make people more acceptable towards covid 19 vaccines ?

CHAPTER 4

OBJECTIVES

- To assess the knowledge and understanding the perception of people towards covid 19 vaccines
- To analyses how much public is aware of covid 19 vaccines available in Indian market
- To analyses the acceptance of covid 19 vaccine by different age group

CHAPTER 5

METHODOLOGY

5.1. Study design:

A cross-sectional study is conducted to understand the satisfaction level of consumer that may be influenced by the Price , adverse effects and any other reason for the use of covid 19 vaccine .

The research reveals satisfaction level of the customers on covid 19 vaccines available in India .

5.2. Method:

The data for the study is collected by means of proper structured questionnaire in the google form and will be distributed to the 100 people of different age and different locations through google forms to get best and diversified responses.

The questionnaire will be designed to extract the data to keep in the point of view and objective of the study. Generally the questions are closed ended short questions or multiple-choice questions for the convenience of respondents

The data is collected from the people of different parts of India

5.3. Study tool:

For the aim of the study, a form was designed and distributed to get the information concerning satisfaction level of customer for different covid vaccine available in Indian market

5.4. Study Sample and setting:

The size of this study was 100 which was collected online through the response of google forms and they were given the consent form regarding the confidentiality of their response which is to be maintained

CHAPTER 6

RESULTS AND FINDINGS

Satisfaction level of customer for different covid vaccine

Age of respondents

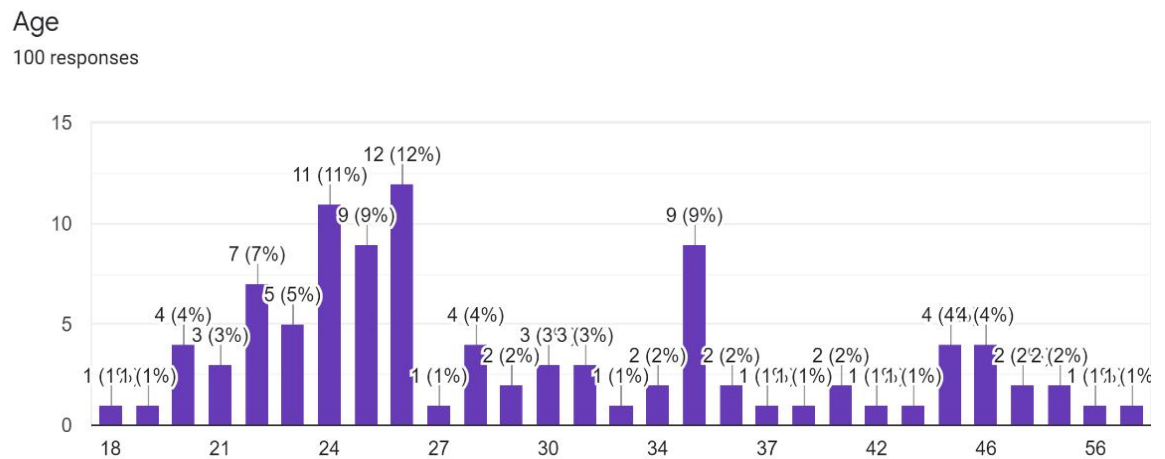


Figure 1: Age of respondents

According to the survey people of different age groups from 18 to 56 took part in this survey so that we can analyse perception of people from different age groups

Vaccination status of respondents

Are you fully vaccinated?
100 responses

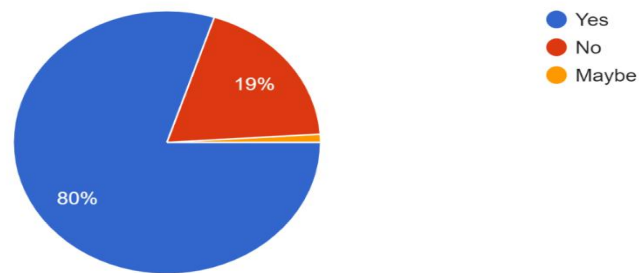


Figure 2: vaccine score percentage

According to the survey most of the people are vaccinated that is 80 % of people which took part in this survey are vaccinated either fully or partially. Remaining 19% of people are not vaccinated and 1% of people are not sure whether they are vaccinated or not.

Have you been diagnosed of Covid-19?

Have you been diagnosed of Covid-19?
100 responses

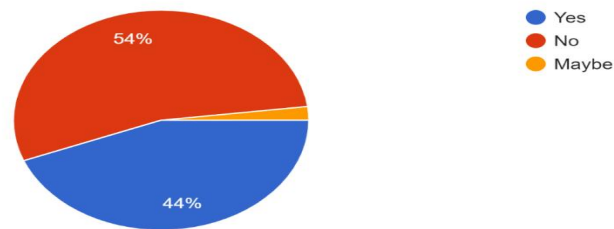


Figure 3: People diagnosed with covid 19

Around 44% of public in india are diagnosed with covid 19 infection in their lifetime remaining 54 % of people are never diagnosed with covid 19 virus infection

Do you trust that the vaccine will prevent you from COVID-19?

Do you trust that the vaccine will prevent you from COVID-19?
100 responses

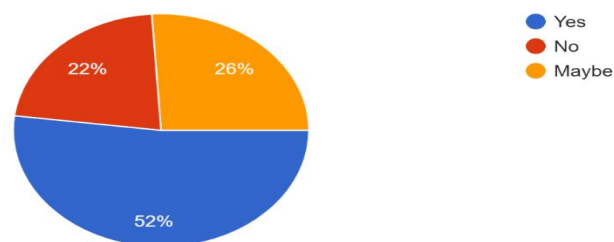


Figure 4: Respondents for trusting vaccine

According to the survey 22% of people do not trust the vaccines which are available in india

Would you trust the vaccine if someone close to you would vaccinate?

Would you trust the vaccine if someone close to you would vaccinate?*

100 responses

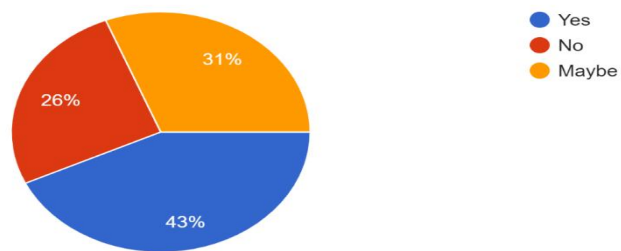


Figure 5: Respondents trustness towards vaccinated people

How accessible do you think COVID-19 vaccines will be?

How accessible do yo think COVID-19 vaccines will be ?
100 responses

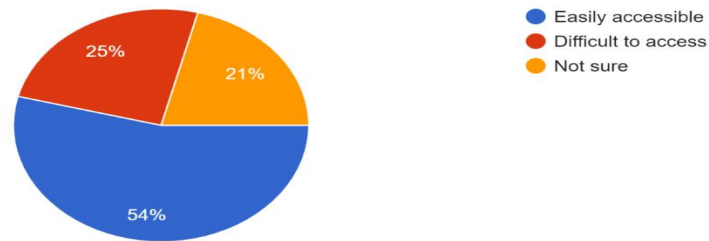


Figure 6: Accessibility of covid 19 vaccines

54% of the people know the vaccines where it is found. But still 25% of the population find it difficult to asses vaccines.

Is there enough awareness and information about COVID-19 vaccines?

Is there enough awareness and information about COVID-19 vaccines?
99 responses

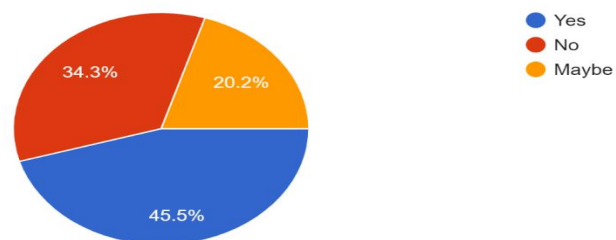


Figure 7: Awareness about vaccines

Why did you choose to take the vaccine?

Why did you choose to take the vaccine? (select all that apply)

100 responses

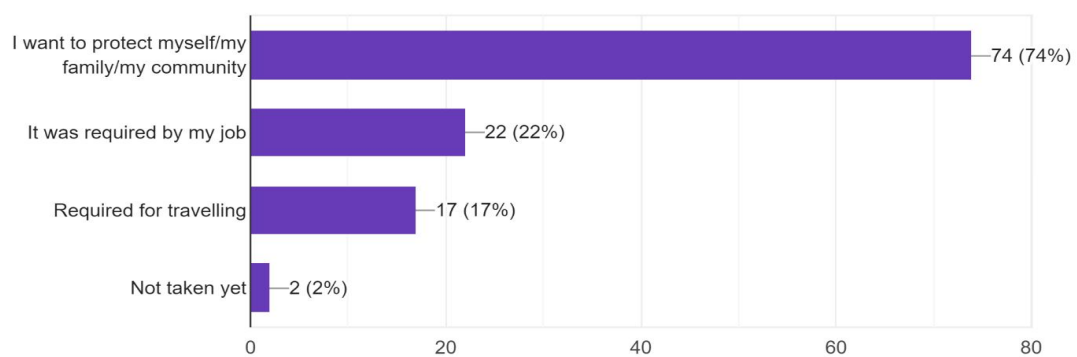


Figure 8: Reason of vaccine preference

Which vaccine do you prefer?

Which vaccines do you prefer?
99 responses

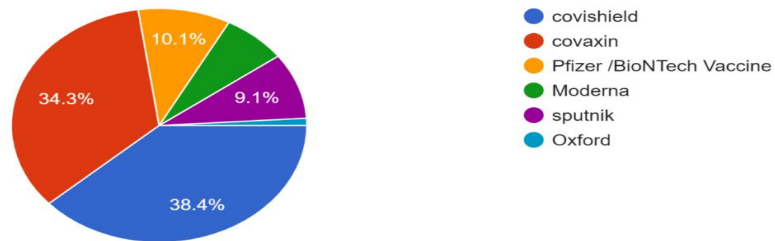


Figure 9: Vaccine preference

Using scale of 1- 10, How would you rate vaccines available in India (based on vaccines effectiveness)

Using a scale of 1-10, with 10 being the best possible score, how would you rate vaccines available in India (based on vaccines effectiveness)

100 responses

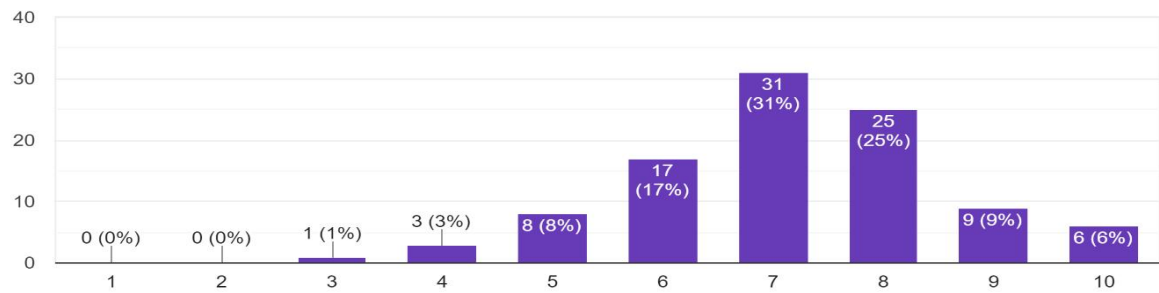


Figure 10: Vaccine availability in India

Using scale of 1- 10, How would you rate vaccination drive by Indian Government

Using a scale of 1-10, with 10 being the best possible score, how would you rate vaccination drive by indian government

100 responses

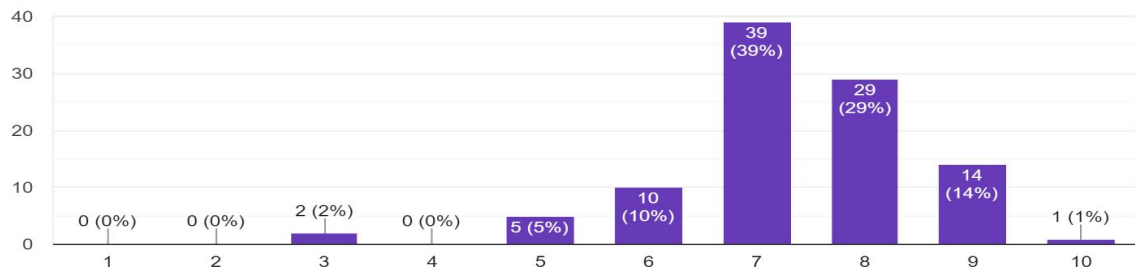


Figure 11: Vaccination drive by Indian Government

CHAPTER 8

CONCLUSION

- The survey aimed at targeting the vaccination status among the people around different age groups.
- It was found that 80% of the people were vaccinated and around 19 % of the people are still not vaccinated.
- There have been three waves of covid and almost 44% of the people had been diagnosed with covid in the past times and thrust worthiness towards vaccine is also low , around 22% of the people trust vaccines though it has been assured that the vaccine is effective.

- People find the assesibility of covid vaccines are good around 54% of the people know the vaccines where it is found. But still 25% of the population find it difficult to asses vaccines.
- Awareness of vaccine is also upto half percent.
- People mainly took vaccine to protect their life and family. The most easily accessible vaccine was covishield followed by covaxine by Indian government.
- 31% of people think that the availability of vaccine has no problem and 39% people think that the vaccine drive by Indian government was good.

CHAPTER 9

DISCUSSION AND RECOMMENDATION

DISCUSSION

- People find the assesibility of covid vaccines are good around 54% of the people know the vaccines where it is found. But still 25% of the population find it difficult to asses vaccines.
- Awareness of vaccine is also upto half percent.

- People mainly took vaccine to protect their life and family. The most easily accessible vaccine was covishield followed by covaxine by Indian government.
- 31% of people think that the availability of vaccine has no problem and 39% people think that the vaccine drive by Indian government was good

RECOMMENDATION

- The no. of people who are vaccinated is around 80% but there is still 20% of people are unvaccinated observe there behaviour and know the reason of being unvaccinated
- Most of the people do not find it accessible to take vaccines in India even after Indian government runs a largest vaccination drive research on the reason why they face difficulties in accessing vaccines and at which level
- Most of the people are not fully aware of safety and use of vaccines also , according to this study we have to give proper knowledge of vaccines either by running a campaigns or something
- Acc to research in this report most of people found it difficulty in availability of vaccines. research on there location and know the exact reason behind this

REFERENCES

- Effectiveness of COVID-19 vaccine in preventing infection and disease severity: a case-control study from an Eastern State of India
“Effectiveness of corona virus disease-19 (COVID-19) vaccines used in India is unexplored and need to be substantiated. The present case-control

study was planned to elicit the effectiveness of COVID-19 vaccines in preventing infection and disease severity in the general population”

Chandramani Singh,^{1,*} Bijaya Nanda Naik,^{1,*} Sanjay Pandey,^{1,*} Bijit Biswas,^{1,*} Binod Kumar Pati,² Manisha Verma,¹ and Prabhat Kumar Singh³

<https://www.iata.org/en/publications/newsletters/iata-knowledge-hub/vaccines-and-the-india-market/>

- Ella R, et al. (2021) *Efficacy, safety, and lot to lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): a, double-blind, randomised, controlled phase 3 trial*. Infectious Diseases (except HIV/AIDS) clinical efficacy against COVID-19 infection of BBV152, a whole-virion inactivated SARS-CoV-2 vaccine formulated with a Toll-like receptor 7/8 agonist molecule adsorbed to alum (Algel-IMDG)
<https://www.researchandmarkets.com/reports/5264358/india-covid-19-vaccines-market-growth-demand>
- Mettu and BH University along with Mr. Tsegaye Workneh Fego (MA Candidate) conducted a cross-sectional study by a consecutive sampling technique at Bedele Hospital from 15 December 2019 to 22 January 2020. Response rate was 92% and The study reveals the behaviour of customers who are fully vaccinated were 132 (67.3%), 113 (57.6%), and 123 (62.8%), receptively, which implies that good knowledge, a favorable attitude, and good practice to covid 19 vaccine (Workneh Melese, 2019/2020)
<https://www.medindia.net/news/growing-covid-19-vaccine-market-202303-1.htm>

- NGSM Institute of Pharmaceutical sciences, Nitte (Deemed to be University), Mangalore researched on various covid patients . The average age of patient was around 55 years. The results showed that the mean KAP score was 65.05, which is less and most of the patients had not controlled their blood pressure levels. (Sunny Anu, Volume 12, 2021)

<https://www.globaldata.com/media/pharma/biological-e-carved-place-indias-covid-19-vaccine-market-following-corbevaxs-approval-says-globaldata/>