



A Survey to assess acceptance of Covid-19 vaccination in Bathinda region

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Abstract: Corona virus disease has become a major health concern worldwide from its outbreak since 2019. Till today, it accounts for the 3.4% deaths around the world from its reported cases. The pandemic leads to development of various Covid-19 vaccines such as Covaxin, Covishield, Covovax, Sputnik V, Moderna etc. from worldwide pharmaceutical companies. Despite the usefulness of covid-19 vaccines and their protective action against severe infection still these are refused by many individuals. Some people have still not accepted the efficacy of covid-19 vaccines in their everyday life. However, some individuals accept covid-19 vaccines eventually. This study explores the covid-19 vaccination acceptance and enthusiasm among community members for vaccination drive.

In this cross-sectional qualitative study, one hundred and thirty four individuals of Bathinda and nearby area were included. People were interviewed as per a semi structured questionnaire and the collected data was analysed statistically.

One hundred and thirty-four patients were included in this study: 63.4 % female and 36.6 % male. Most of the volunteers i.e. 64.9 % were belong to 20-30 age group and same percentage community members belong to urban background. Nearly 70 % were educated from all 134 individuals. 91.8 % were fully vaccinated while only 84.3% people considered Covid-19 vaccination safe.

Among all included members, 73.1% thought that corona virus vaccine effective however, 22.4% disagreed. The individuals thought that benefits of vaccination are more than its risks (71.6%), while 20.1% disagreed and 8.2 % had no idea about this. Some people (11.9%) were not agreed that vaccination could help to reduce further covid-19 infection but most of the members (79.1%) agreed to this notion. Almost one fourth individuals thought that vaccination could not prevent from future variants of covid-19 virus. However, still more than 80% people considered that vaccination should be mandatory for all human beings and they would also motivate other community members to get the covid-19 vaccination.

Our most significant finding is that 85.8 % people thought that they would also motivate other community members to get the covid-19 vaccination. This finding in return suggested the acceptance of covid-19 vaccination among community. However, still more awareness regarding vaccination of Corona virus is needed to reach the 100% milestone.

Index Terms - Corona virus; vaccination; pandemic.

I. INTRODUCTION

Covid-19 vaccination has been boomed all over the world from last year. It has been arise as a major preventive measure against the deadly viral disease (Biswas M et al; 2022). There are number of different branded Covid-19 vaccines available in market nowadays such as Covaxin, Covishield, moderna, sputnik V etc (Rays S; 2022). National governments and other health organizations also been involved in vaccination drive and awareness against this infectious disease. Despite all of the uses, advantages of various corona vaccines from different countries, still people have some doubts in their role (Paul E, Steptoe A and Fancourt D; 2021). This present study explores the major factors which influence the acceptance of corona vaccine among community and also check their enthusiasm for vaccination drive.

II. MATERIAL AND METHODS

The cross-sectional qualitative study was conducted on community level in Bathinda and surrounding areas. Individuals of age equals or higher than 20 years were included in this study belonging to both male and female gender. A well prepared semi-structured questionnaire was used in this study having various questions of different categories about acceptance of corona vaccine and zeal to aware other community members about vaccination. Face to face interview of more than hundred community members was taken using this questionnaire. The data was entered in the Microsoft Excel sheet. The collected data was analysed statistically.

III. RESULT

About one hundred and thirty-four people were included in this qualitative study. Among them, 63.4 % female and 36.6 % were male. The age range of the volunteers was 20-60 years from which 64.9 % were belong to 20-30 age group. The socio demographic data of all the people included in study is shown in Table 4.1. Maximum members (65%) belong to urban background and majority of population (70 %) was educated from all 134 individuals.

Table 4.1: Socio-demographic data (n=134)

| Socio-Demographic data | n(%) |
|---------------------------|-----------|
| Gender | |
| Male | 49(36.6%) |
| Female | 85(63.4%) |
| Age | |
| 20-30 | 87(64.9%) |
| 30-40 | 23(17.2%) |
| 40-50 | 10(7.5%) |
| 50-60 | 14(10.4%) |
| Educational Status | |
| Illiterate | 14(10.4%) |
| Primary | 10(7.5%) |
| Secondary | 17(12.7%) |
| Graduate | 93(69.4%) |
| Background | |

Responses of questions asked about acceptance of Covid-19 vaccine effectiveness are stated in Table 4.2. Around 91.8 % volunteers were fully vaccinated however, only 84.3% people considered the vaccination safe. Acceptance about various corona vaccines effectiveness was found to be even lower i.e. 73.1% while 22.4 % had no idea about this feature and rest were disagreed. More than two third members (71.6%) accepted that benefits of vaccines are higher than risks while 8.2% were disagreed that remaining have no idea. Maximum people (79.1%) accepted that vaccine can reduce covid-19 variant infection while 24.6% were disagreed about prevention against infection caused by future variants of corona virus. Almost similar proportion of people (25.4%) has doubt on future prevention raised by covid-19 vaccination.

This has also been discovered that most of the people (83.6%) accepted covid-19 vaccination should be mandatory all over the world and maximum volunteers (85.8%) agreed to enthusiastically involved in future covid-19 vaccination awareness programs to motivate the community and people belong to lower age groups (<20 years).

Table 4.2: Participant's responses to questions asked

| Sr. No. | Questions | Agree | | Disagree | | No idea | |
|---------|---|-------|-------|----------|------|---------|-------|
| | | n | % | n | % | n | % |
| 1. | Do you think Covid-19 vaccine is safe? | 113 | 84.3% | 4 | 3% | 17 | 12.7% |
| 2. | Do you think Covid-19 vaccine is effective? | 98 | 73.1% | 6 | 4.5% | 30 | 22.4% |
| 3. | Do you think benefits of vaccination of corona are more than its risks? | 96 | 71.1% | 11 | 8.2% | 27 | 20.1% |
| 4. | Do you think covid-19 vaccination can reduce chances of corona virus infection? | 106 | 79.1% | 12 | 9% | 16 | 11.9% |
| 5. | Do you think covid-19 vaccination can reduce chances of infection of future variants of corona virus? | 88 | 65.7% | 13 | 9.7% | 33 | 24.6% |
| 6. | Do you think covid-19 vaccination will help you to stay healthy in future? | 91 | 67.9% | 9 | 6.7% | 34 | 25.4% |
| 7. | Do you think covid-19 vaccination should be mandatory for everyone? | 112 | 83.6% | 8 | 6% | 14 | 10.4% |
| 8. | Will you motivate other people to take covid-19 vaccination? | 115 | 85.8% | 7 | 5.2% | 12 | 9% |

IV. DISCUSSION

From the past 2 years covid-19 disease has been become a threat to common person. It occurs due to attack of corona virus, which majorly affect respiratory system and leads to death also (Sood A and Bedi O; 2022).

After so many attempts, now few vaccines are available for prevention of this disease such as covaxin, covishield, moderna, sputnik V etc. Still, there are some individuals who have doubts on these vaccines capability (Di Giuseppe G; 2022).

The present qualitative study was conducted to assess the acceptance of covid-19 vaccines on local community level. Around 134 people participated in this study.

About two third members were male and one third were females. This was found that 91.8% were fully vaccinated at time of questioning and 84.3 % considered the vaccine was safe. This result shows that some community members still do not found vaccine safe however they take it might under influence of any pressure. The effectiveness result was even lower than safety result that is 73.1%. This result shows that there is still more to do to enhance the people consideration in Covid 19 vaccine's effectiveness. This may carried out by aware the community about facts of effectiveness of covid-19 vaccines. Major portion of participants accepted that benefits are greater than risks of vaccines. However, more than 8% did not find so. Dis-agreeness about prevention against infection caused by future variants of corona virus was found to be even 24.6% which should be an alarming reason for scientists and pharmacists who manufacture vaccines. Same proportion of participants thought that covid vaccines are incapable in future prevention of covid-19 disease and its future variants.

Even after disagreement about covid-19 vaccines in participants, still more than 80% thought they would involved in awareness programmes of vaccines in future.

Thus, the present cross sectional qualitative study shows that people are on the path of accepting covid-19 vaccines however, their doubts should be removed either by increasing awareness about vaccine's mechanism or by providing facts of safety.

V. CONCLUSION

The belief that only providing covid-19 vaccines in market would be sufficient, is a major barrier to acceptance of covid-19 disease treatment. Empowering and educating people about effectiveness, safety, action against future variants and benefits risk ratio should be given top priority.

The physicians, scientists, pharmacists and majorly corona warriors can play important role in enhancing acceptance level of corona vaccines in people. The need to explore individual's attitude and thought process about vaccine and its type, mechanism is obvious and crucial than only increasing percentage of vaccinated individuals around the world.

VI. REFERENCES

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