Clinical Health Complications Associated with Covid-19 Vaccination

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This research aimed to investigate the health problems caused by Covid-19 vaccination. The study participants were comprised of vaccinated constables of Punjab Motorway police Lahore Pakistan. Among the participants of the study, 100 respondents were conveniently selected as sample of the study. For the collection of data, the researcher developed a self-made questionnaire according the various parameters of the study and thus personally distributed by the researcher among the respondents and collected back after getting it filled by the respondents. The collected data were tabulated and analyzed by using statistical package for social sciences (SPSS, Version-26). Based on analysis the researcher arrived at conclusion that various physiological and psychological health complication were reported by respondents associated with covid-19 vaccination.

Keywords: Clinical; health; complications; covid-19; vaccination.
1. INTRODUCTION

Covid-19 is one among the serious health problems around the globe. A huge number of people loss their life due to this global health problem. Instead of adopting different safety measures, the problem is still increasing day by day. Various health complication such pain in muscle, legs, head and psychological problems are associated with covid-19 and its vaccinations. What type of health complication associated with covid-19 vaccination? To discover the fact, the researcher intends to conduct a researcher study under the title clinical health complications associated with covid-19 vaccination.

Covid-19 is one among the major health concern in present era. Millions of cases are reported world widely [1]. Corona virus spread through different ways such as cough or sneezes aerosols, nasal discharge, saliva, urine & stool, and close contact with the infected person [2,3].

In December, 2020, 1st covid-19 vaccines are introduced and used in United States [3,4]. Majority of people worldwide get vaccinated [5]. Along with health benefits, different health consequences have been reported [6,7]. Many studies shown that vaccination of covid-19 may cause different health complications such as fatigue, headache, muscle or joint pain with rare serious adverse event [7,8].

Common clinical symptoms of covid-19 among the children includes sore throat, headache, dizziness, vomiting, and abdominal pain. In addition, many children do not exhibit fever, but only manifest cough or diarrhea, and even fewer can be asymptomatic carriers [9].

Since 2019, a huge number of people have been infected. Many health problems have been reported after covid-19 infections and thus many health consequences are also raised after covid-19 vacation. Likewise, many of infected people reported that after vacation and during the initial period they different health problems such as headache, muscle or joint pain with rare serious adverse event [10,11].

Corona virus is a global spread problem from last 2 years and hence it effects all perspectives of our daily routine life. In addition, everyone got physically and psychologically unsatisfied due to this global health problem [12].

Novel Corona virus is declared by world health organization on 11 March 2020. A huge number of people from 222 countries of world got affected due to this global pandemic. In addition, as per the latest survey organized by who on 17 august 202, more than 208 million people have been affected and thus 4.4 million people lost their life due to this global problem [13]. Different preventive measures such quarantine, using of mask, social distancing, and handwashing the problem is still raising day by day [13,14,15].

1.1 Statement of the Problem

As a result of all the above discussion, now it is clear to say that covid-19 is a series health concern. But unfortunately many of the people refused to get vaccination due physical and psychological health consequences. What health consequences reported or associated with covid-19 vaccination. To discover the fact, the researcher intended to conduct a research study under the title" clinical health complications associated with covid-19 vaccination".

1.2 Objective of the Problem

➢ To assess the physiological health concerns associated with covid-19 vaccinations.
➢ To assess the psychological health concerns associated with covid-19 vaccinations.

1.3 Significance of the Study

This particular research study will help in clarification of concepts about covid-19 vaccination and clinical health complications associated with covid-19 vaccination.

1.4 Research Questions

➢ Does covid-19 vaccination cause physical health complications?
➢ Does covid-19 vaccination cause psychological health complications?

2. METHODS AND MATERIALS

The below procedures were adopted by the researcher for reaching at certain findings and conclusion.

2.1 Population of the Study

Population of the study was consisted of players of vaccinated constables of Punjab Motor way Lahore Pakistan.
2.2 Sample and Sample Size

100 respondents vaccinated constables of Punjab Motor way Lahore Pakistan were selected as sample by using available sample technique.

2.3 Tools for Data Collection

A self-made closed ended questionnaire comprised of 10 questions related to physiological and psychological perspectives of the problem by the researcher. The developed scale was processed through the procedures of validity and reliability before application for data collection.

2.4 Mode for Data Collection

After the process of validity and reliability the questionnaire was personality distributed by the researcher among the selected population and gathered back after filling it by the respondents.

2.5 Data Analysis

The collected data were tabulated and analyzed by using Statistical Package for Social Sciences (SPSS, Version-26) and thus percentage was used as statistical tool.

3. PRESENTATION AND ANALYSIS OF DATA

The Table 1 show that the respondents (N-100) aging 20-25 year were 39 (35.1%), respondents aging 26-30 years were 36 (32.4%) and more then 30 years aging respondents were 25 (22.5%).

The Table 2 show that the respondents having (N-100)qualification (FA/FSc) were 31 (27.9%) respondents having Bachelor were 58(52.3%), respondents having Master Degree were 11 (9.9).

The Table 3 depicts the Number of the respondents and physiological health complication associated with COVID-19. Data were expressed through mean standard deviation variances maximum and minimum range. Results about neck pain was 1.26± .44, Variances .194, Minimum range 1.0, Maximum range 2.0. Results about fatigue was 1.33± 47, Variances .223, Minimum range 1.0 and maximum range 1.0. Results about Muscle pain was 130± .46, Variances .212, Minimum range 1.0 and maximum range 2.0. Results about Headache was 1.27± 44, Variances .199, Minimum range 1.0 and maximum range 1.0. Results about Physical Unstable was 1.29± 45, Variances .208, Minimum range 1.0 and maximum range 2.0.

### Table 1. Showing the age-wise classification of respondents

| Age of Respondents | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|-------------------|
| Valid 20-25        | 39        | 35.1    | 39.0          | 39.0              |
| 26-30              | 36        | 32.4    | 36.0          | 75.0              |
| Above 30           | 25        | 22.5    | 25.0          | 100.0             |
| Total              | 100       | 100.0   | 100.0         |                   |
| Missing System     | 11        | 9.9     |               |                   |
| Total              | 111       | 100.0   |               |                   |

### Table 2. Showing the qualification-wise classification of respondents

| Qualification of Respondents | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------------------|-----------|---------|---------------|-------------------|
| Valid FA, FSc                | 31        | 27.9    | 31.0          | 31.0              |
| Bachelor                     | 58        | 52.3    | 58.0          | 89.0              |
| Master                       | 11        | 9.9     | 11.0          | 100.0             |
| Total                        | 100       | 90.1    | 100.0         |                   |
| Missing System               | 11        | 9.9     |               |                   |
| Total                        | 111       | 100.0   |               |                   |
Table 3. Showing the physiological health complication associated with COVID-19

| Statistics              | Neck Pain | Fatigue | Muscle Pain | Headache | Feel Physical Unstable |
|-------------------------|-----------|---------|-------------|----------|------------------------|
| N Valid                 | 100       | 100     | 100         | 100      | 100                    |
| Missing                 | 11        | 11      | 11          | 11       | 11                     |
| Mean                    | 1.2600    | 1.3300  | 1.3000      | 1.2700   | 1.2900                 |
| Std. Error of Mean      | .04408    | .04726  | .04606      | .04462   | .04560                 |
| Median                  | 1.0000    | 1.0000  | 1.0000      | 1.0000   | 1.0000                 |
| Mode                    | 1.00      | 1.00    | 1.00        | 1.00     | 1.00                   |
| Std. Deviation          | .44084    | .47258  | .46057      | .44620   | .45605                 |
| Variance                | .194      | .223    | .212        | .199     | .208                   |
| Range                   | 1.00      | 1.00    | 1.00        | 1.00     | 1.00                   |
| Minimum                 | 1.00      | 1.00    | 1.00        | 1.00     | 1.00                   |
| Maximum                 | 2.00      | 2.00    | 2.00        | 2.00     | 2.00                   |

Table 4. Showing the Psychological health complication associated with COVID-19

| Statistics                      | Feel Stressed | Feel Existed Psychologically | Feel Depressed |
|---------------------------------|--------------|-----------------------------|--------------|
| N Valid                         | 100          | 100                         | 100          |
| Missing                         | 11           | 11                          | 11           |
| Mean                            | 1.2900       | 1.3400                      | 1.2800       |
| Std. Error of Mean              | .04560       | .04761                      | .04513       |
| Median                          | 1.0000       | 1.0000                      | 1.0000       |
| Mode                            | 1.00         | 1.00                        | 1.00         |
| Std. Deviation                  | .45605       | .47610                      | .45126       |
| Variance                        | .208         | .227                        | .204         |
| Range                           | 1.00         | 1.00                        | 1.00         |
| Minimum                         | 1.00         | 1.00                        | 1.00         |
| Maximum                         | 2.00         | 2.00                        | 2.00         |

The Table 4 depicts the number of the respondents and psychological health complication associated with COVID-19. Data were expressed through mean standard deviation variances maximum and minimum range. Results about stressed was 1.29±.45, Variances .208, Minimum range 1.0, Maximum range 2.0. Results about Existed Psychologically was 134±.47, Variances .227, Minimum range 1.0 and maximum range 2.0. Results about depressed was 1.28±.45, Variances .204, Minimum range 1.0 and maximum range 2.0.

4. DISCUSSION

Majority of the respondents reported that during the initial days of vaccination due to psychological consequences they were feeling different physical and psychological problems like pain in legs, muscles, neck, stress and so on. In line of this emerging findings of the study, the study conducted by Beatt et al. [16] find out that covid-19 vaccination is received in December 2020 and thus billions of people receive vaccinations. Many health concerns also reported by the vaccinated people. The finding of the study conducted by Kirzinger et al.; Baden et al. [17,18] shown that pain, redness, swelling, fatigue, headache, muscle or joint pain etc. all the associated with covid-19 vacations.

5. CONCLUSION

Based on analysis the researcher arrived at conclusion that various physiological and psychological health complication were reported by respondents associated with covid-19 vaccination.
CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Before launching this research study, ethical approval was granted by Punjab motorway police Lahore Pakistan (Ref.3642/Acctt-PHP).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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