

# CLINICAL HEALTH COMPLICATIONS ASSOCIATED WITH COVID-19 VACCINATION

**Comment [R01]:** COVID (spelled together).

## Abstract

*This research was basically conducted for the purpose to assess health complications associated with covid-19 vaccination. Participants of the study was comprised of vaccinated constables of Punjab Motor way Lahore Pakistan. 100 respondents were selected as sample by using available sample technique. A self-made questionnaire was developed and used for the collection of data. 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.*

**Comment [R02]:** The abstract must be edited after the entire paper has been edited.

**Key Terms:** Health, Complications, Covid-19, Vaccination

## INTRODUCTION

**Comment [R03]:** The introduction is a little confusing. The first part of the introduction should contain general information (about the disease) and then slowly narrow down to the main topic of the paper (complications of the vaccine).

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, 1<sup>st</sup> 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].

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

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

#### 41 **Statement of the Problem**

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

#### 47 **Objective of the Problem**

48 The main objective of this research study was to assess the clinical health complications  
49 associated with covid-19 vaccination.

#### 50 **Significance of the Study**

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

#### 53 **Research Questions**

54 Does covid-19 vaccination caused clinical health complications associated with covid-19  
55 vaccination?

56

#### 57 **METHOD AND MATERIALS**

**Comment [R04]:** The goal is vaguely formulated. What is to be evaluated? Was it perhaps the occurrence of complications?

**Comment [R05]:** Does this study also look at the types of complications? Or are we looking for an answer to only one question (Were there complications or not?). From what has been written, it is only a list of answers (yes and no), and the questionnaire should then contain only one question. Of course, this must be formulated more clearly and concretely.

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

### 60 *Population of the study*

61 Population of the study was consisted of players of vaccinated constables of Punjab Motor way  
62 Lahore Pakistan.

### 63 *Sample and Sample Size*

64 100 respondents vaccinated constables of Punjab Motor way Lahore Pakistan were selected as  
65 sample by using available sample technique.

### 66 *Tools for Data Collection*

67 A self-made questionnaire was developed and used for the collection of data. The developed  
68 scale was processed through the procedures of validity and reliability before application for data  
69 collection. After the process of validity and reliability the questionnaire was personality  
70 distributed by the researcher among the selected population and gathered back after filling it by  
71 the respondents.

### 72 *Data Analysis*

73 The collected data were tabulated and analyzed by using statistical package for social sciences  
74 (SPSS, Version-26).

75

## 76 **PRESENTATION AND ANALYSIS OF DATA**

77 **Table no.1 Showing the Physiological and Psychological Impact of Covid-19 vaccination**

S.No	Statement	Response & Frequency			
		Yes	%	No	%
1.	Get fully vaccinated	100	100	00	00
2.	Get voluntarily vaccinated	40	40	60	60
3.	Get vaccinated due to official requirement	60	60	40	40
4.	Feel physically well	30	30	70	70
5.	Feel physically upset	70	70	30	30
6.	Feel fatigue	70	70	30	30
7.	Feel Pain in legs	83	83	17	17

**Comment [R06]:** Has approval been obtained from the Punjab Motorway Lahore Pakistan Ethics Committee? If yes (and it should be), then this should be stated in the methodology.

**Comment [R07]:** It is necessary to briefly describe the questionnaire. What does it consist of, what scale was used?

**Comment [R08]:** It must be stated what statistical procedures were performed and what the values are. It cannot be stated only descriptively without statistically clear values.

**Comment [R09]:** It is necessary to describe in detail the distribution of the questionnaire.

**Comment [R010]:** Specify exactly which population group is involved (vaccinated constables). Was consent obtained from the respondents to participate in the survey before filling out the questionnaire?

**Comment [R011]:** In addition to the statistical program, the type of statistical analysis used must also be indicated.

**Comment [R012]:** The data analysis is too simple. It would be good to link these data with sociodemographic data. Similarly, it would be good to see an association of health complications with respondents who did not volunteer to be vaccinated. Are they more likely to experience complications than respondents who did get vaccinated voluntarily, etc.? If there is information on the type of vaccine used to vaccinate the respondents, it would be good to indicate that as well. If different vaccines were used, they should be associated with the type of difficulty.

8.	Feel pain in muscles	83	83	17	17
9.	Feel pain in neck	85	85	15	15
10.	Feel psychological well	10	10	90	90
11.	Feel psychological upset	90	90	10	10

The above table depicts that 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.

## 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.

## Recommendations

On the basis of data and conclusion, the researcher recommended that awareness may be created among the masses about the benefits of covid-19 vaccination. In addition, facilities of vaccination may be provided to people.

## References

- Weekly epidemiological update-24 Nov 2020  
[<https://www.who.int/publications/m/item/weekly-epidemiological-update%2D%2D-24-november-2020>]. Accessed 1 Dec 2020.
- Wang C, Horby PW, Hayden FG, Gao GF. A novel coronavirus outbreak of global health concern. Lancet. 2020;395(10223):470 3. [https://doi.org/10.1016/S0140-6736\(20\)30185-9](https://doi.org/10.1016/S0140-6736(20)30185-9).
- Islam MS, Rahman KM, Sun Y, Qureshi MO, Abdi I, Chughtai AA, et al. Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: a global analysis. Infect Contr Hosp Epidemiol. 2020;41(10):1196206. <https://doi.org/10.1017/ice.2020.237>.
- US Food and Drug Administration. Pfizer-BioNTech COVID-19 vaccine emergency use authorization. Accessed May 21, 2021. <https://www.fda.gov/media/144412/download>
- US Food and Drug Administration. Moderna COVID-19 vaccine emergency use authorization. Accessed May 21, 2021. <https://www.fda.gov/media/144636/download>

**Comment [R013]:** How do you know that the problems were caused by psychological consequences? Where is the connection?

**Comment [R014]:** There is a lack of discussion on this topic and comparison with previously published research on this topic.

**Comment [R015]:** The conclusion must be clear and concrete. If the statistical analysis of the data is strengthened, the conclusion will also be stronger.

**Comment [R016]:** The recommendations are not consistent with the entire paper. The benefits of vaccination were not mentioned in the paper.

**Comment [R017]:** It is necessary to check the writing style of the references and harmonize them. Some references are technically written incorrectly.

6. Holder J. Tracking coronavirus vaccinations around the world. *The New York Times*. Accessed June 3, 2021. <https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html>
7. Kirzinger A, Kearney A, Hamel L, Brodie M. KFF/The Washington Post Frontline Health Care Workers Survey. Published March 19, 2021. Accessed June 3, 2021. <https://www.kff.org/report-section/kff-washington-post-frontline-health-care-workers-survey-vaccine-intentions/>
8. Baden LR, El Sahly HM, Essink B, et al; COVE Study Group. Efficacy and safety of the mRNA-1273 SARS-CoV-2 vaccine. *N Engl J Med*. 2021;384(5):403-416. doi:10.1056/NEJMoa2035389PubMedGoogle ScholarCrossref
9. Polack FP, Thomas SJ, Kitchin N, et al; C4591001 Clinical Trial Group. Safety and efficacy of the BNT162b2 mRNA COVID-19 vaccine. *N Engl J Med*. 2020;383(27):2603-2615. doi:10.1056/NEJMoa2034577PubMedGoogle ScholarCrossref
10. Lifan Y, Zhenyuan D, Mengqi D, et al. Suggestions for medical staff from department of pediatrics during the treatment of 2019-nCoV infection/pneumonia. *J N Med (PrePrint)*. 2020.
11. Ritchie, H., Ortiz-Ospina, E., Beltekian, D., Mathieu, E., Hasell, J., Macdonald, B., Giattino, C., Appel, C., Rod s-Guirao, L., & Roser, M. Coronavirus Pandemic (COVID-19). (2021).
12. Icol , M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78(June), 185–193.
13. World Health Organization. WHO Director-General’s Opening Remarks at the Media Briefing on COVID-19–11 March 2020. 2020. Available online: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-mediabriefing-on-covid-19---11-march-2020> (accessed on 17 August 2021).

- 143 **14.** World meters. Covid-19 Coronavirus Pandemic. 2021. Available online:  
144 <https://www.worldometers.info/coronavirus/> (accessed on 17 August 2021).  
145
- 146 **15.** Palmore, T.N.; Smith, B.A. Current status and future perspective of coronavirus disease  
147 2019: A review. *Scr. Med.* 2020, 51.101–109.  
148  
149  
150  
151

UNDER PEER REVIEW