

Side effects of Sinopharm COVID -19 vaccine

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Abstract

The aim of this study to evaluate the side effects of Sinopharm as Covid -19 vaccine. About 50 individuals agreed to participate in this study. All of them they are followed during the three doses of Sinopharm vaccination. The demographic data and side effects of Sinopharm vaccination were collected via specific questionnaire, which designed for this purpose. The study shown that prevalence of males and females who included in the study is 46% & 54% respectively, the side effect for mild fever found 44% and severe fever found 14%, the prevalence of mild weakness found 46% and severe weakness found 16%, the prevalence of nausea found 28%, the prevalence of headache found 6%, the prevalence frequent urination found 24% and this conseded unexpected.

Key words: Sinopharm, COVID – 19, Vaccination, Side effects.

1. Introduction

SARS-CoV-2 virus spreads a disease termed as Covid-19, because the first case was found in 2019. Corona-virus disease, was reported as a pandemic disease on 11 March 2019 by the World health organization (WHO) [1]. Moreover, Covid-19 infected billions of people around the world, and resulted in millions of deaths around [2]. The syndromes for this virus (attacking the respiratory system), which appeared firstly in Wuhan, China [3]. Moreover, this virus can attack all different ages. On the other hand, the most people at risk are older people and people with low immune system, such as the chronic diseases and immune system diseases [1]. To control this pandemic, vaccines were prepared to develop herd immunity in the people globally. However, in UAE total (1, 060, 030) cases of Covid-19 have been diagnosed to date, and around (24, 922, 05) vaccines have been given to the community [4]. Moreover, vaccination considered a safe way to prevent diseases by given the pathogen of COVID-19 as (dead or weak) to healthy people to activate the immune system to producing the antibodies for this virus [3]. The relapse by the vaccination considered as a

rare in general [5]. Sinopharm COVID-19 vaccine was made by Chinese pharmaceutical comapny. The aim of this study to evaluate the side effects of Sinopharm vaccine for covid -19.

2. Materials and methods

A survey of 50 people has been done in the present study to observe the vaccination trend among the people of different ages. Thus, they were followed during the time of vaccination with three doses of Sinopharm, demographic data and side effects of this vaccine were collected via specific questionnaire, which designed for this purpose. Moreover, prior commencement to the study a written consent was collected from everyone. The information included the age, gender, sex, and other questions regarding the side effects of the vaccine. Data were analyzed by statistical methods.

3. Results

A survey of 50 people has been done in the present study to observe the vaccination trend among the people of different ages, and the data in Figure 1 & Table 1, showed that people of 15-30 age group has the highest vaccination rate followed by the 30-45 age group. While the people aged \geq 75 have the lowest vaccination trend in the target sample.

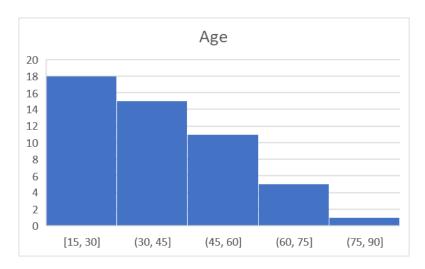


Figure 1: Age distribution

Table 1: Distribution of age among vaccinated individuals

Age	15 - 30	30 - 45	45 - 60	60 - 75	75 - 90	Total
Distribution	18	16	10	4	2	50
Percentage	36 %	32 %	20%	8%	4%	100%

Morover, studies also showed that people of different gender, marital status, and employment status were likely to have free covid-19 vaccination provided by the government to attain herd immunity. The gender are shown in table 2, the percentage of males in this study was found 46% while the percentage of females was found 54%. Morover, The fever, weakness, headache, nausea, frequent urination and Diarrhea are displayed in table 3. The study found the percentage of mild fever is 44% and 14% for sever fever. Moreover, the study found 23 individuals (46%) were suffered from mild weakness, while 8 individuals (16%) were suffered from severe weakness. The study revealed 14 individuals were suffered from mild nausea (28%). The prevalence of Diarrhea was found 10%. The study found the prevalence of headache 6%. Also, the study found 12 individuals (24%) were suffered from frequent urination.

Table 2: Gender among vaccinated individuals

Gedar	Males	Females	Total
Distribution	23	27	50
Percentage	46%	54%	100%

Table 3: Distribution of Normal, fever, weakness, headache, nausea, urination and Diarrhea among vaccinated individuals

Parameters	Normal	Mild	Sever
Fever	21 (42%)	22 (44%)	7 (14%)
Weakness	19 (38%)	23 (46%)	8 (16%)
Nausea	36 (72%)	14 (28%)	-
Diarrhea	45 (90%)	5 (10%)	-
Headache	47 (94%)	3 (6%)	-
frequent urination	38 (76%)	12 (24%)	-

4. Discussion:

The health infrastructure inadequacies in some nations are brought to light by this pandemic illness, We must be well-prepared since COVID-19 could resurface with updated viruses or another pandemic sickness could break out. Overall, the data indicate a uniform vaccination distribution among the people of different ages in UAE target sample Ahamed et al (2021) [6]. On the other hand, a side effect is typically thought of as an unwanted impact that happens when a person takes certain medications or receives a vaccination. Moreover, side effects may vary from person to person depending on the individual's illness state and other demographic factors such as gender and age. Also, the severity of these side effects is determined by the immune system reaction. The majority of these Sinopharm adverse effects, such as fever, weakness, headaches, nausea, and

diarrhea, were observed and were thought to be typical reactions of the immune system to this vaccine. In the meantime, the commonness and continuous of the side effects lasting for several months after receiving the vaccination is still until now not clear [7]. Furthermore, the study discovered that an unanticipated side effect of the Sinopharm vaccination is frequent urination, which requires further investigation to understand why this occurs.

References:

- WHO. 11 March 2020. Coronavirus disease (COVID-19) situation report 51. https://www.who.int/docs/default-source/coronaviruse/situation-reports/ 20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_4.
- 2. United Arab Emirates, the Supreme Council for National security, National Emergency Crisis and Disasters Management Authority, https://covid19.ncema.gov.ae/en/page/about-the-vaccine (Accessed on 12the April, 2023
- 3. Rohankumar O, Ameema A, Farah Y, Shehryar S, Hiba K, Simran B, Muhammed R, Syed F, Rajkumar O, Mohammad H, Arjan K, Salim S. COVID-19 pandemic: from origins to outcomes. A comprehensive review of viral pathogenesis, clinical manifestations, diagnostic evaluation, and management. Infez Med. 2021. 1;29(1):20-36.
- 4. United Arab Emirates, the Supreme Council for National security, National Emergency Crisis and Disasters Management Authority, https://covid19.ncema.gov.ae/en/page/about-the-vaccine (Accessed on 12the April, 2023
- Balsam Q, Rula A, Shaikha S, Zainab M and Ahmed O. Side effects and perceptions following Sinopharm COVID-19 vaccination. International Journal of Infectious Diseases. 2021; 111:219-226.
- 6. Ahamed F, Ganesan S, James A, Zaher WA. Understanding perception and acceptance of Sinopharm vaccine and vaccination against COVID-19 in the UAE. BMC Public Health. 2021 Aug 30;21(1):1602. doi: 10.1186/s12889-021-11620-z. PMID: 34461846; PMCID: PMC8404750.
- 7. Aryan K, Fereshteh A, Saba N, Iman A, Vahid S, Zahra K, Sina A, Maryam R, Shahbanoo M. Safety of Sinopharm vaccine for people with Multiple Sclerosis: Study of adverse reactions and disease activity. Mult Scler Relat Disord. 2022; 61:103708.