To Assess the Knowledge and Attitude of Non-Professionals Regarding COVID-19 Vaccination: A Descriptive Study

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ABSTRACT

Introduction: COVID-19 being emerged as pandemic, caused many severe problems, need to be controlled and prevented by vaccination. Vaccines are designed to develop immunity without the dangers of getting the disease. But vaccine acceptance and hesitancy are the major barrier to control disease outbreak. Poor knowledge is considered responsible for negative attitude and poor vaccine acceptance among individuals. So, assessment of knowledge and attitude is crucial to change their attitude towards administration of COVID-19 Vaccination.

Material and methods: A quantitative approach with descriptive research design was adopted for 60 non-professionals working in selected colleges of BFUHS, Faridkot by convenient sampling techniques. A self-structured knowledge questionnaire and self-structured 5-point attitude scale were selected to assess the knowledge and attitude of study subjects respectively.

Results: The study result revealed that 67% (40) study subjects had average knowledge, 32% (19) had good knowledge and 1% (01) had poor towards COVIO-19 vaccination. Whereas, 80% (48) non-professionals had positive attitude and 20% (12) had negative attitude towards vaccination.

KEYWORDS: *Knowledge, Attitude, Non-Professionals, COVID-19 Vaccination*

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Mild infections include common cold, whereas lethal infections may include SARS, MERS and COVID-19. This virus is generally fatal for the elderly or those with comorbidities such as cardiovascular disease, diabetes, chronic respiratory conditions, cancer and kidney disease. Anyone can get sick with COVID-19 and become seriously ill or die at any age.[1]

COVID-19 is a contagious disease with initial symptoms: cough, throat infection, fever, shortness of breath, muscle pain and fatigue and later severe symptoms could be severe pneumonia, kidney failure and respiratory distress syndrome (ARDS).[2]

The first case of COVID-19 was identified in Wuhan, China in December 2019.[3] In India first case was reported on January 30, 2020.[4] As the COVID-19 outbreak lead to a public health emergency therefore it was declared as pandemic by WHO.[3]

With rapidly increasing COVID-19 cases worldwide, there is an emergent need of vaccine against COVID-19 to decrease and prevent the spread of COVID-19. In India four COVID-19 vaccinations are approved so far: Covaxin, Covishield, Sputnik V and Covovac.[5]

Vaccination is often cited as an effective way of controlling infectious diseases. However, while most of people vaccinate according to the recommended schedule, still some individuals choose to delay or refuse vaccines.[6] Therefore, the study determined the knowledge and attitude of non-professionals towards COVID-19 Vaccination. So as to identify the need of educational campaign to enhance the awareness regarding COVID-19 Vaccination among general population

MATERIAL AND METHODS

Design

A Quantitative research approach with descriptive design was used to assess the knowledge and attitude of Non-professionals regarding COVID-19 vaccination working in selected colleges of Baba Farid University of Health Sciences, Faridkot, Punjab.

Sample

Convenient sampling technique was used to select 60 non-professionals. Data was collected by using self-structured knowledge questionnaire and 5-point attitude scale regarding COVID-19 vaccination.

Inclusion criteria include non-professionals who were present at the time of data collection and willing to participate.

Exclusion criteria include non-professionals who were not present at the time of data collection.

INSTRUMENTATION

Development of tool- the self-structured knowledge questionnaire, and self-structured 5-point attitude scale was constructed to assess the knowledge of non-professionals regarding COVID-19 Vaccination and attitude towards COVID-19 Vaccination.

PART A- This part consists of socio-demographic variables: Age, Gender, Educational Status, Education Status, Residency, Designation, Monthly income, Previous source of information, and COVID-19 Vaccination status.

PART B- Self-structured Questionnaire to assess the knowledge of non-professionals regarding COVID-19 Vaccination.

The study was conducted at selected colleges of BFUHS (University College of Nursing, University College of Physiotherapy, University Institute of Pharmaceutical Sciences and Research, Dashmesh Dental College, Dashmesh College of Nursing, Dashmesh College of Physiotherapy, Baba Banda Bahadur College of Nursing), Faridkot.

CRITERIAN MEASURE

Data was collected by self-structured knowledge questionnaire to assess the knowledge of non-professionals. Total 20 items were included. Correct answer awarded with 1 mark and 0 for incorrect.

Criterion for measure of self-structured 5-point attitude scale include: 10 statements regarding concerns towards COVID-19 vaccination. Based upon the response score ranging from 5 to 1 were awarded according to the statement.

ETHICAL CONSIDERATION

Written permission was obtained from the principal and research committee of the university college of nursing, Faridkot, Punjab and Principals of selected colleges of Baba Farid University of Health Sciences, Faridkot. Informed written consent was obtained for each study subject for participation in study.

Data was analyzed by using both inferential and descriptive statistics frequency and percentage, mean and standard deviation.

RESULTS

The socio demographic profile of 60 non-professionals who were enrolled in study is summarized in table number 1 below. The data was described with the help of percentage.

Table-1: Frequency and percentage distribution of health care workers according to their socio-demographic variable. N=60

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	**AGE (in years)**		
	20-30	07	11.7
	31-40	23	38.3
	41-50	24	40
	Above 51	06	10
2	**GENDER**		
	MALE	30	50
	FEMALE	30	50
3	**EDUCATIONAL STATUS**		
	PRIMARY LEVEL	07	11.7
	SECONDARY	23	38.3
	SENIOR SECONDARY	24	40
	GRADUATE	06	10
4	**RESIDENCY**		
	URBAN	32	53.3
	RURAL	28	46.7

5	**DESIGNATION** CLERK GUARD HELPER CLASS IV HELPER	19 04 08 29	31.7 6.7 13.3 48.3
6	**MONTHLY INCOME (In Rs)** ≤ 10000 10001 – 15000 15001 – 20000 ≥ 20000	19 18 05 18	31.7 30 8.3 30
7	**PREVIOUS SOURCE OF INFORMATION** MASS MEDIA INTERNET NEWSPAPER ANY OTHER INDIVIDUAL OR MEDICAL PROFESSIONAL	13 25 02 20	21.7 41.7 3.3 33.3
8	**COVID-19 VACCINATION STATUS** 1ST DOSE ONLY 2ND DOSE NON-VACCINATED	17 26 17	28.3 43.3 28.3

It shows that majority of study subjects 40% were in age group of 41-50, and 48.3% were Class IV workers, maximum 40% were senior secondary educated, 53.3% had urban residence. Most of 43.3% were vaccinated with both doses of COVID-19 Vaccination.

Table-2: Frequency and percentage distribution of knowledge scores of non-professionals.

N=60

Level of knowledge	Criteria measure	Frequency	Percentage
Good	14-20	19	32%
Average	8-13	40	67%
Poor	1-7	01	1%

Study findings depicted that 67% of non-professionals were having average knowledge and 32% had good knowledge scores regarding COVID-19 Vaccination.
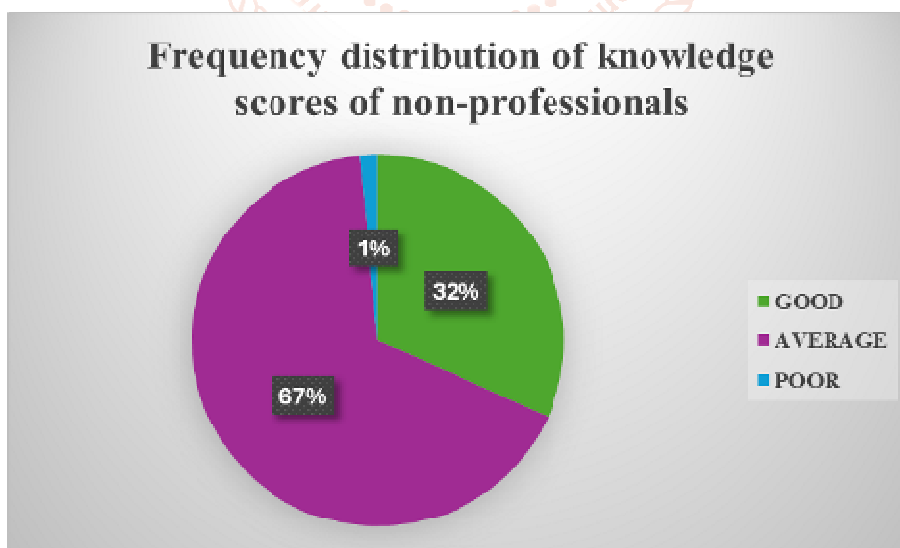

Figure 1: Frequency distribution of knowledge scores among non-professionals regarding COVID-19 Vaccination.

Table3: Knowledge regarding COVID-19 Vaccination among non-professionals. (N=60)

Knowledge items	Maximum possible score	Maximum Obtained Score	Minimum Obtained score	Mean	S. D
20 items	20	19	7	12.58	2.54

Study findings shown that, total mean knowledge score of study subjects was 12.58 and Standard deviation is 2.54.

Table-4: Frequency and percentage distribution of study samples according to their attitude category.
N=60

Attitude Category	Frequency (n)	Percentage (%)
Negative attitude	12	20%
Positive attitude	48	80%

Study findings depicted that 80% of non-professionals were having positive attitude and 20% had negative attitude towards COVID-19 Vaccination.
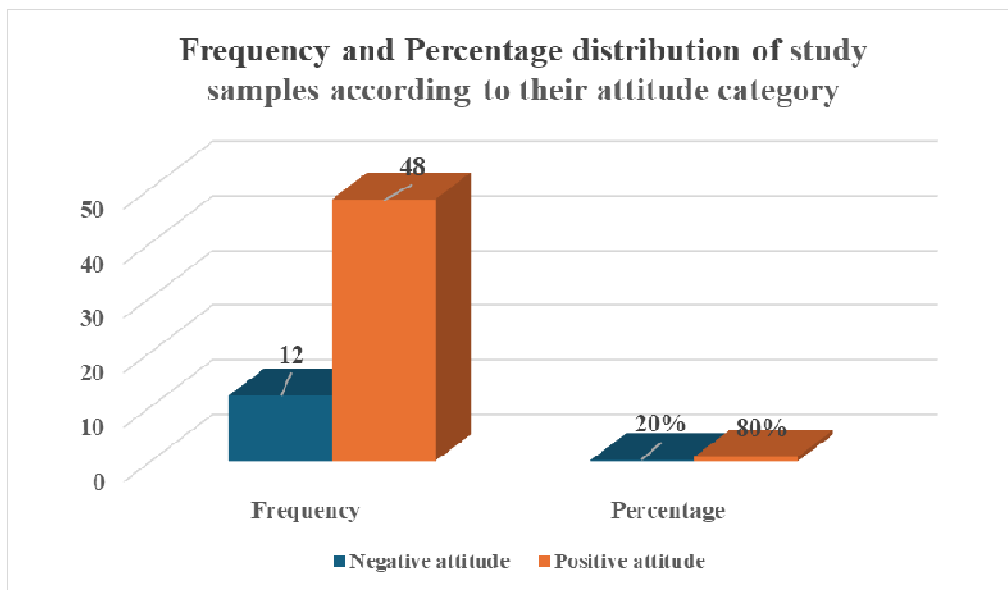

Figure 2: Frequency and percentage distribution of study samples according to their attitude category

Table3: Attitude score regarding COVID-19 Vaccination among non-professionals. (N=60)

Aspects of attitude scale	Maximum possible score	Maximum Obtained Score	Minimum Obtained score	Mean	S. D
10 statements	50	50	10	36.9	7.77

Study findings shown that, total mean attitude score of study subjects was 36.9 and Standard deviation is 7.77.

Therefore, study findings concluded that, Majority of non-professionals had average knowledge regarding COVID-19 vaccination and had positive attitude towards COVID-19 vaccination.

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