



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 8.4  
IJAR 2022; 8(7): 106-112  
[www.allresearchjournal.com](http://www.allresearchjournal.com)  
Received: 18-04-2022  
Accepted: 23-05-2022

**Renu Bala**

Assistant Professor, Himalayan  
Institute of Nursing, Kala Amb,  
Ambala, Haryana, India

**Shabnam Banoo**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Misba Liaqat**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Dushyant Sehrawat**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Lalita Kumari**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Neha Kumari**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Akanksha Dhiman**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Kanika Dhiman**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Meenu Kumari**

B.sc Nursing 4th Year Students of  
Himalayan Institute of Nursing,  
Kala Amb, Ambala, Haryana,  
India

**Corresponding Author:**

**Renu Bala**

Assistant Professor, Himalayan  
Institute of Nursing, Kala Amb,  
Ambala, Haryana, India

## A cross-sectional study to assess the knowledge attitude and perception toward COVID-19 vaccinations among general population of Naraingarh district Ambala (Haryana)

**Renu Bala, Shabnam Banoo, Misba Liaqat, Dushyant Sehrawat, Lalita Kumari, Neha Kumari, Akanksha Dhiman, Kanika Dhiman and Meenu Kumari**

### Abstract

Our aim of the study was to assess the knowledge, attitude and perception toward COVID-19 vaccinations among general population of Naraingarh District Ambala, Haryana. The objectives of this study were as follows:

- To assess the knowledge, attitude and perception regarding COVID-19 vaccinations among general population of Naraingarh District Ambala, Haryana.
- To find the association between the knowledge, attitude and perception with selected social demographic variables of general population toward COVID-19 vaccinations.

The tool used for the study was consist of section I (Socio Demographic Variables) section II (Structured Knowledge Questionnaire) section III (Check List Designed) and section IV (Rating Scale Designed) for assessing the knowledge, attitude and perception toward COVID-19 vaccinations. In this study related to the socio-demographic variables of the general population, out of 60 people majority 41.6% people were in the age group of 20-30 years, 33.33% people were in the age of 30-40 years, 25% people were in the age of 40-50. Majority of people 66% married 25% people were unmarried and 8.33% were widow Majority of people 25% had primary education 16.67% had middle education 16.67% had secondary education and 33.33% had graduation and above Majority of people 50% homemaker 25% are daily worker, 8.33 are government worker, and 16.67 are private job. Majority of people 45% had nuclear family and 15% had joint family. Majority of 50.1% people are Hindu 33.33% people are Muslim, 16.67 are Sikh. Majority of people 66, 67% were rural and 33.33% were semi urban. Majority of people 58.33% had above 10-20 thousand income, 16.67% had 15 thousand, 16.67% had <10 thousand and 8.33% had above 20 thousand. Majority of people 83.33 had knowledge about vaccination, 8.33 had no knowledge and 8.33% people are don't know about vaccination. Majority of people 16.67% friend and neighbor source of knowledge, 25% had mass media 33.33% had health worker 8.33% social media, 8.33% newspaper and 8.33% had internet source of the knowledge about COVID-19 vaccination.

**Keywords:** Knowledge, attitude, perception, vaccination, popu population COVID-19 ARS, MERS, immunity

### Introduction

“Prevention is better than cure”

Countries are beginning to deploy COVID-19 vaccines, bringing new hope to the fight against the global pandemic. WHO, UNICEF, Gavi and many other partners are working together to support countries in pre-paring for COVID-19 vaccine introduction. With careful planning, countries can ensure infrastructure is in place and the technical support available to safely delivered COVID-19 vaccines. Safe and effective vaccines are a game-changing tool: but for the foreseeable future we must continue wearing masks, cleaning our hands, ensuring good ventilation indoors, physically distancing and avoiding crowds.

The COVID-19 vaccine introduction toolkit equips all countries to prepare for and implement COVID-19 vaccination by giving guidance, tools and training. This toolkit is intended to support Ministries of Health, health workers, partner organizations and other stakeholders.

Being vaccinated does not mean that we can throw caution to the wind and put ourselves and others at risk, particularly because research is still ongoing into how much vaccines protect not only against disease but also against infection and transmission.

A COVID-19 vaccine is a vaccine intended to provide acquired immunity against severe acute respiratory syndrome coronavirus 2. In 2019 the virus causes corona virus disease. It was first isolated from three people with pneumonia connected to the cluster of acute respiratory illness cases in WUHAN. In 2020 the knowledge accelerated the development of various vaccines. The initial focus SARS-CoV-2 vaccine was on preventing symptomatic, often severe illness. The COVID -19 vaccines are widely used for reducing the spread, severity, death caused by COVID-19. In Phase III trials, several COVID-19 vaccines have demonstrated efficacy as high as 95% in preventing symptomatic COVID-19 infections.

Many countries have implemented phased distribution plans for those who are at highest risk of complication such as the elderly and those at high risk of exposure and transmission such as healthcare workers. India started administration of COVID-19 vaccines on 16 January 2021. As of 14 October 2021, India has administered 971 million doses overall including first and second doses of the currently approved vaccines.

As of 16 August 2021, 4.76 billion doses of COVID-19 vaccine have been administered worldwide based on official report from national public health agencies. AstraZeneca anticipates producing 3 billion doses in 2021, Pfizer-BioNTech 1.3 billion doses, and Sputnik V, Sinopharm, Sinovac, and 1 billion doses each. Moderna targets producing 600 million doses and Convidecia 500 doses in 2021. By December 2020, more than 10 billion vaccine doses had been preordered by countries, with about half of the doses purchased by high income countries comprising 14% of the world's population.

Prior to COVID -19, a vaccine for an infectious disease had never been produced in less than many years – and no vaccine existed for preventing a coronavirus infection in humans. However, vaccines have been produced against many animal diseases caused by coronaviruses, including (as of 2003) infectious bronchitis virus in birds, canine coronavirus, and feline coronavirus. Previous projects to make vaccines for viruses in the family Coronaviridae which affect humans have been aimed at severe respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). Vaccines against SARS and MERS have been tested in non-human animals.

According to studies published in 2005 and 2006, the identification and development of novel vaccines and medicines to treat SARS was a priorities of governments and public health agencies around the world at the time. There is no cure or protective vaccine proven to be safe and effective against SARS in human beings and there is also no proven vaccines against MERS. When MERS became prevalent, it was believed that existing SARS research might provide a useful template for making vaccines and therapeutics against a MERS-COV infection.

As of March 2020, there was one (DNA- based) MERS vaccine which completed phase I clinical trials in humans, and three others in progress, all being viral-vectored vaccines: two adenoviral-vectored (ChAdOx1-MERS, BVRS-Gam-Vac) and one MVA-vectored (MVA- MERS-S).

### Types of vaccines

1. Novavax. NVX-CoV2373. Phase 1.
2. Serum Institute of India. COVOVAX. Phase 1.
3. Zydus Cadila. ZyCoV-D. Phase 1.
4. Gamaleya. Sputnik V. Phase 1.
5. Oxford/AstraZeneca. AZD1222. Phase 1.
6. Serum Institute of India. Covishield (Oxford/AstraZeneca formulation) Phase 1.
7. Bharat Biotech. Covaxin. Phase 1.

Safe and effective vaccines are a game- changing tool: but for the foreseeable future we must continue wearing mask, cleaning our hands, ensuring good ventilation indoors, physically distancing and avoiding crowds.

The COVID-19 vaccines authorized in the United States are highly effective at preventing severe disease and death, including against the Delta variant. But they are not 100% effective and some fully vaccinated people will become infected (called a breakthrough infection) and experience illness. Being vaccinated does not mean that we can throw caution to the wind and put ourselves and other at risk, particularly because research is still ongoing into how much vaccines protect not only against disease but also against infection and transmission.

It is not vaccines that will stop the pandemic, it's vaccination. We must ensure fair and equitable access to vaccines, and ensure every country receives them and can roll them out to protect their people, starting with the most vulnerable.

Vaccine protection and timing. It receives time before protection reaches its peak level a few weeks after the second dose. For a one-dose vaccine, people will have built maximum immunity against COVID-19 a few weeks after getting vaccinated.

The Vaccination Centre is responsible for generating the certificate and for providing a printed copy post vaccination on the day of vaccination itself.

### Need of the study

Since the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic back in March 2020, the virus has claimed more than 2.5 million lives globally with upwards of 113 million cases being confirmed by laboratory tests (March 2021).

The pandemic impacted almost each and every corner of life, causing global economies to stall, changing the way we work and interact with our loved ones, and stretching healthcare systems to the limit. Governments all over the world have been forced to implement harsh restriction on human activity to curb the transmission of the virus.

COVID-19 vaccines are safe. They can keep you from getting and transmission of the virus that causes COVID-19. Getting vaccinated yourself may also protect people around, particularly people at increased risk for severe illness for COVID-19. As there is not enough manufacturing capacity in 2021 to meet all global needs, not everyone will be able to take the vaccine at the same time. Countries must identify

priority populations, which WHO recommends are frontline health workers (to protect health systems) and those at highest risk of death due to COVID-19, such as older adults and people with certain medical conditions. Other essential workers, such as teachers, and social workers, should then be prioritized, followed additional groups as more vaccine doses become available.

Fully vaccinated people might be choose to mask regardless of the level of spread of virus, particularly if they or someone in their household is immune compromised or at increased risk for severe disease, or if someone in their household is unvaccinated. People who are at high risk for severe disease include older adults and those who have certain medical conditions, such as diabetes, overweight or obesity, and heart conditions.

COVID-19 is still a threat to people who are unvaccinated. Some people who get COVID-19 can become severely ill, which could result in hospitalization, and some people have ongoing health problems several weeks or even longer after getting infected. Even people who did not have symptoms when they were infected can have these ongoing health problems.

While the development of COVID-19 vaccine has been an extra ordinary success, vaccinating most of the global population is a great challenge, one for which gaining-and maintaining- public trust in COVID-19 vaccines and vaccination will be as essential as the effectiveness of the vaccines themselves.

The extent to which the government can instill and maintain public confidence in the effectiveness and safety of the vaccines. The principles and processes that guide government decisions and actions in vaccine procurement, distribution and administration.

Vaccination is the most effective way to protect against infectious disease. Vaccines strengthen to your immune system by training it to recognize and fight against specific viruses.

When you get vaccinated, you are protecting yourself and helping to protect the whole world community. The most important thing to do post vaccination is to continue maintain physical distance, avoid crowded places and avoid touching surfaces.

## Data analysis

**Table 1:** Data analysis

Sr. No.	Data Analysis	Method	Objectives
1	Descriptive statistics	Frequency and percentage distribution, Mean, Median, Mode, Standard deviation and Range.	Distribution based of demographic variables To assess the Level of knowledge on mobile and internet addiction among nursing students.
2	Inferential statistics	Chi-square test	To associate level of Knowledge on mobile and internet addiction among nursing students with their selected demographic variables.

## Result

### Organization and Presentation of data

**Section I:** Frequency and percentage distribution of sample characterized according to their socio-demographic variables.

**Section II:** Frequency, percentage mean and standard deviation of structured knowledge questionnaire on COVID-19 vaccination

## Problem Statement

A Cross-sectional study to assess the knowledge attitude and perception toward COVID-19 vaccinations among general population of Naraingarh District Ambala (Haryana).

## Objectives

- To assess the knowledge, attitude and perception regarding COVID-19 vaccinations among general population of Naraingarh District Ambala (Haryana).
- To find the association between the knowledge, attitude and perception with selected social demographic variable of general population toward COVID-19 vaccination.

## Development of tool

This section consists of 10 variables to collect socio-demographic information such as age, marital status, educational status, occupation, type of family, religion, area of residence, monthly family income in rupees, knowledge about COVID-19 vaccination, and source of knowledge.

**Section 2:** It consists of structured knowledge questionnaire to collect information from general population regarding COVID-19 vaccinations.

**Section 3:** It consists of checklist to assess the perception of general population related COVID-19 vaccination.

**Section 4:** It consists of rating scale for assessing the attitude of general population related COVID-19 vaccinations.

## Tools for data collection

The tool consists of 3 parts

- Demographic data profile sheet:** Demographic data profile sheet was used for assessment of demographic variables such as age (years), gender, religion, education of father, education of mother, occupation of father, occupation of mother, previous knowledge, time spend on mobile and internet per day.
- Self-structured Questionnaires:** Self-structured questionnaires was used to assess the knowledge of Nursing Students regarding mobile and internet addiction in Himalayan School of Nursing Kala-Amb District Sirmour, Himachal Pardesh.

**Section III:** Frequency, percentage, mean and standard deviation of rating for assessing the attitude of general population related COVID-19 vaccination.

**Section IV:** Frequency, percentage, mean and standard deviation of checklist assessing the perception of general population related to COVID-19 vaccination.

**Section V:** Association of level of knowledge of general population with the socio-demographical variables.

**Section 1:** Frequency and percentage distribution of sample characterized according to their socio-demographic variables

Sr. No.	Selected variables	Frequency (f)	Percentage (%)
1	Age in year		
1.1	20-30	25	41.6%
1.2	30-40	20	33.33%
1.3	40-50	15	25%
2	Marital status		
2.1	Married	40	66.67%
2.2	Unmarried	15	25%
2.3	Widow	5	8.33%
2.4	Divorced	-	-
2.5	Separated	-	-
3	Educational status No		
3.1	Formal education	-	-
3.2	Primary education	15	25%
3.3	Middle education	10	16.67%
3.4	Secondary education	10	16.67%
3.5	Graduation and above	20	33.33%
4	Occupation		
4.1	Homemakers Daily	30	50%
4.2	Worker	15	25%
4.3	Government job	5	8.33%
4.4	Semi-government job	-	-
4.5	Private job	10	16.67%
5	Type of family		
5.1	Nuclear	45	75%
5.2	Joint	15	25%
5.3	Extended	-	-
6	Religion		
6.1	Hindu	30	50.1%
6.2	Muslim	20	33.33%
6.3	Sikh	10	16.67%
6.4	Christian	-	-
6.5	Other	--	--
7	Area of residence		
7.1	Urban	-	-
7.2	Rural	40	66.67%
7.3	Semi-urban	20	33.33%
8	Monthly family income in rupees		
8.1	10-20 thousand	35	58.33%
8.2	15 thousand	10	16.67%
8.3	<10 thousand	10	16.67%
8.4	above 20 thousand	5	8.33%
9	Knowledge about COVID-19 vaccination		
9.1	Yes	50	83.33%
9.2	No	5	8.33%
9.3	Don't know	5	8.33%
10	Source of knowledge of COVID-19 vaccination		
10.1	Friends and neighbors	10	16.67%
10.2	Mass media [TV, Radio]	15	25%
10.3	Health care worker	20	33.33%
10.4	Social media	5	8.33%
10.5	News paper	5	8.33%
10.6	Internet	5	8.33%

The table depicts that out of 60 people majority 41.6% people were in the age group of 20-30years, 33.33% people were in the age of 30-40 years, 25% people were in the age of 40-50. Majority of people 66% married 25% people were unmarried and 8.33% were widow Majority of people 25% had primary education 16.67% had middle education 16.67% had secondary education and 33.33% had graduation and above Majority of people 50% homemaker 25 % are daily worker, 8.33 are government worker, and 16.67 are private job. Majority of people 45% had nuclear

family and 15% had joint family. Majority of 50.1% people are Hindu 33.33% people are Muslim, 16.67 are Sikh. Majority of people 66.67% were rural and 33.33% were semi urban. Majority of people 58.33% had above 10-20 thousand income, 16.67% had 15 thousand, 16.67% had <10 thousand and 8.33% had above 20 thousand. Majority of people 83.33 had knowledge about vaccination, 8.33 had no knowledge and 8.33% people are don't know about vaccination. Majority of people 16.67% friend and neighbor source of knowledge, 25 had mass media 33.33% had

health worker 8.33% social media, 8.33% newspaper and 19 vaccination. 8.33% had internet source of the knowledge about COVID-

**Section 2:** Frequency and percentage mean and standard deviation distribution of structured knowledge questionnaire on COVID-19 vaccination

Sr. No	knowledge	Frequency (f)	Percentage (p)	Mean	Standard deviation
1	Poor	15	25%	20	13.22876
2	Good	35	58%		
3	Average	10	16.67%		

The table depict that the majority of 25% people had poor knowledge about COVID-19 vaccination 58% people had good knowledge and about 16.67% people had average. The mean value is 20.00, and the standard deviation value is 13.22876.

**Section 3:** Frequency and percentage, mean and standard deviation distribution of rating for assessing the attitude of general population related COVID-19 vaccination

Sr. No.	attitude	Frequency (f)	Percentage (p)	Mean	Standard deviation
1	Neutral	7	11.67%	20.00	12.52996
2	Positive	32	53.33%		
3	Negative	21	35%		

The table depict that the majority of 11.67% of people had natural attitude toward covid- 19 vaccination, 53.33% had positive attitude toward covid -19 vaccination and 35% people had negative attitude toward COVID-19 vaccination. The mean value is 20.00 and the standard deviation value is 12.52996.

**Section 4:** Frequency, percentage, mean and standard deviation distribution of checklist assessing the perception of general population related to COVID-19 vaccination

Sr. No	Perception	Frequency	percentage	Mean	Standard deviation
1	Aware	36	60%	30	8.48520
2	Confused	24	40%	30	

The table depict that the majority of 60% people are aware regarding COVID-19 vaccination and 40% people were confused about covid -19 vaccination. The mean value is 30 and the standard deviation value is 8.4852.

**Section 5:** Association of level of knowledge of general population with the demographical variables

Sr. No.	Demographic variables	Frequency	Percentage	Level of knowledge			Chi square Df P value
				Poor	Good	Average	
1	Age in year						
1.1	20-30	25	41.6%	3	21	6	8.696
1.2	30-40	20	33.33%	4	10	5	8
1.3	40-50	15	25%	6	4	1	.368586
2	Marital status						
2.1	Married	40	66.67%	8	26	9	5.870
2.2	Unmarried	15	25%	4	5	3	
2.3	Widow	5	8.33%	2	2	1	
2.4	Divorced	-	-	-	-	-	
2.5	Separated	-	-	-	-	-	
3	Educational status						
3.1	No formal education						12.905
3.2	Primary education	- 15	- 25%	6	4	2	
3.3	Middle education	10	16.67%	4	6	5	
3.4	Secondary education	10	16.67%	3	6	4	
3.5	Graduation and above	20	33.33%	1	17	2	
4	Occupation						
4.1	Home maker	30	50%	10	6	4	8.333
4.2	Daily worker	15	25%	3	11	2	7
4.3	Government job	5	8.33%				.304148
4.4	Semi- government job	-	-	1	12	2	
4.5	Private job	10	16.67%	2	6	1	
5	Type of family						
5.1	Nuclear	45	75%	6	30	4	6.684
5.2	Joint	15	25%	7	10	3	7
5.3	Extended	-	-				.462506
6	Religion						
6.1	Hindu	30	50%	3	23	4	9.6002
6.2	Muslim	20	33.33%	2	15	1	7

6.3	Sikh	10	16.67%	2	8	2	.212384
6.4	Christian	-					
6.5	Other	-					
7	Area of residence						
7.1	Urban	- 40	- 66.67%	-	-	-	6.684
7.2	Rural	20	33.33%	10	24	5	7
7.3	Semi-urban			4	15	2	.462506
8	Monthly family income in rupees						
8.1	10-20 thousand	35	58.33%	7	14	3	9.857
8.2	15 thousand	10	16.67%	3	8	2	7
8.3	<10 thousand	10	16.67%	2	7	3	.196823
8.4	Above 20 thousand	5	8.33%	1	9	1	
9	Knowledge about COVID-19 vaccine						
9.1	Yes	50	83.33%	8	30	2	7.053
9.2	No	5	8.33%	6	5	1	8
9.3	Don't know	5	8.33%	4	3	1	.530925
10	Source of knowledge of COVID-19 vaccine.						
10.1	Friends	10	16.67%	3	8	1	
10.2	and neighbors	15	25%	2	9	2	8.652
10.3	Mass media (TV, Radio)	20	33.33%	0	18	3	7
10.4	Health care workers	5	8.33%	1	4	1	.278616
10.5	Social media	5	8.33%	0	3	2	
10.6	Newspaper Internet	5	8.33%	0	3	0	

$\chi^2 (1) = 8.696$  Non significant ( $p < 0.05$ )

The data presented in table depicts that the findings suggested that computed chi-square value of general population in age 8.696, marital status 5.870, educational status 12.905, occupation 8.333, type of family 6.684, religion 9.600, area of residence 6.684, monthly family income in rupees 9.857, knowledge about COVID-19 vaccine 7.053 and source of knowledge of COVID-19 vaccine 8.652 were found to be statistically non-significance at 0.05 level of significance. Thus there was no significant association of level of knowledge of general population with the demographical variables.

## Discussion

This chapter includes the discussion of the finding of the study interpreted from statistical analysis, and where been organized and presented under the following section.

**Section I:** Frequency and percentage distribution of sample characterized according to their socio-demographic variables.

**Section II:** Frequency, percentage mean and standard deviation of structured knowledge questionnaire on COVID-19 vaccination

**Section III:** Frequency, percentage, mean and standard deviation of rating for assessing the attitude of general population related COVID-19 vaccination.

**Section IV:** Frequency, percentage, mean and standard deviation of checklist assessing the perception of general population related to COVID-19 vaccination.

**Section V:** Association of level of knowledge of general population with the demographical variables.

**Section I:** In this first part of analysis of present studies the result shows the frequency and the percentage distribution of socio-demographic variables of general population. The table depicts that out of 60 people majority 41.6% people were in the age group of 20-30years, 33.33% people were in the age of 30-40 years, 25% people were in the age of 40-50. Majority of people 66% married 25% people were unmarried and 8.33% were widow Majority of people 25%

had primary education 16.67% had middle education 16.67% had secondary education and 33.33% had graduation and above Majority of people 50% homemaker 25 % are daily worker, 8.33 are government worker, and 16.67 are private job. Majority of people 45% had nuclear family and 15% had joint family. Majority of 50.1% people are Hindu 33.33% people are Muslim, 16.67 are Sikh. Majority of people 66, 67% were rural and 33.33% were semi urban. Majority of people 58.33% had above 10-20 thousand income, 16.67% had 15 thousand, 16.67% had <10 thousand and 8.33% had above 20 thousand. Majority of people 83.33 had knowledge about vaccination, 8.33 had no knowledge and 8.33% people are don't know about vaccination. Majority of people 16.67% friend and neighbor source of knowledge, 255 had mass media 33.33% had health worker 8.33% social media, 8.33% newspaper and 8.33% had internet source of the knowledge about COVID-19 vaccination.

**Section II:** In the second part of analysis of present study the result shows the frequency and percentage mean and standard deviation distribution of structured knowledge questionnaire on COVID-19 vaccination of general population. The table depict that the majority of 25% people had poor knowledge about COVID-19 vaccination 58% people had good knowledge and about 16.67% people had average. The mean value is 20.00, and the standard deviation value is 13.22876.

**Section III:** In the third part of analysis of present study the result shows the frequency, percentage, mean and standard deviation of rating for assessing the attitude of general population related COVID-19 vaccination of general population. The table depict that the majority of 11.67% of people had natural attitude toward COVID-19 vaccination, 53.33% had positive attitude toward COVID-19 vaccination and 35% people had negative attitude toward COVID-19 vaccination. The mean value is 20.00 and the standard deviation value is 12.52996.

**Section IV:** In the fourth part of analysis of present study the result shows the frequency, percentage, mean and standard deviation of checklist assessing the perception of general population related to COVID-19 vaccination. The table depict that the majority of 60% people are aware regarding COVID-19 vaccination and 40% people were confused about covid -19 vaccination. The mean value is 30 and the standard deviation value is 8.4852.

**Section V:** In the last part of analysis of present study, the result shows the association of level of knowledge of general population with the demographical variables. The data presented in table depicts that the findings suggested that computed chi-square value of general population in age 8.696, marital status 5.870, educational status 12.905, occupation 8.333, type of family 6.684, religion 9.600, area of residence 6.684, monthly family income in rupees 9.857, knowledge about COVID-19 vaccine 7.053 and source of knowledge of COVID-19 vaccine 8.652 were found to be statistically non-significance at 0.05 level of significance. Thus there was no significant association of level of knowledge of general population with the demographical variables.

### Methodology

In presence study, qualitative research approach was adopted for the study with cross sectional research design to collect the data. The study was conducted in general population. Convenient sampling technique was used to obtain an adequate sample size. The sample size comprised of 60 peoples the tool developed and used for data collection were socio demographic variable, structured knowledge questionnaire, rating scale, checklist which is comprised of three sections.

### Assumption

In general population people have some knowledge regarding the COVID-19 vaccination.

### Conclusion

Majority of the population were having good knowledge regarding COVID-19 Vaccination.

### Implication

The findings of the study are implicated in general population of selected villages of Naraingarh. Health is a prime right of all individual. Attainment of the highest level of the health is one's own responsibility. Hence every individual must seek adequate knowledge regarding one's health within her/his capacity, capability and interest, adequate knowledge gained at the right time ensure the development positive attitude and practice towards good health.

### Recommendations

On the basis of findings of the study following recommendations are offered

- A large-scale study can be conducted to generalized the findings.
- A descriptive study can be conducted.

### References

1. Retrieved from <https://doi.org/10.3390/vaccines9060602>

2. Vergano D. COVID-19 Vaccines Work Way Better Than We Had Ever Expected. Scientist Are Still Figuring Out Why. BuzzFeed News, 2021. Retrieved 24 June 2021.
3. COVID-19 vaccine tracker (Refresh URL to update). Vac- Ishtm.shinyapps.io London School of Hygiene & Tropical Medicine. 12 July 2021. Retrieved 10 March 2021.
4. Beaumont P. COVID-19 vaccine: who are countries prioritizing for first doses? 2020. The Guardian. ISSN 0261-3077. Retrieved 26 December 2020.
5. Vaccination Statistics. www.moderngroup.in. 21 March 2021.
6. Buntz B. Which companies will likely produce the most COVID-19 vaccine in 2021?. Pharmaceutical Processing World. Retrieved 1 March 2021.
7. Mullard A. How COVID vaccines are being divvied up around the world. Nature, 2020. doi:10.1038/d41586-020-03370-6. PMID 33257891. S2CID 227246811.
8. So AD, Woo J. Reserving coronavirus disease 2019 vaccines for global access: cross sectional analysis. BMJ. 2020;371:m4750. doi:10.1136/bmj.m4750. PMC 7735431. PMID 33323376.
9. Cavanagh D. Severe acute respiratory syndrome vaccine development: experiences of vaccination against avian infectious bronchitis coronavirus. Avian Pathology. 2003;32(6):567-82. Doi:10.1080/030794503100001621198. PMC 7154303. PMID 14676007. 2021;8:1170-6