

# A Descriptive Study to Assess Knowledge and Attitude of Adults Regarding Organ Donation in Selected Community Area at Gurugram, Haryana

Anju Kasana<sup>1</sup>, Paras<sup>2</sup>, Sonal<sup>3</sup>, Anuradha Panchal<sup>4</sup>, Dr. Arti<sup>5</sup>, Lovely Thapar<sup>6</sup>

Department of Nursing, Amity University, Gurugram, Haryana, India

**Abstract:** A descriptive design with a quantitative research approach was used to collect data from 100 adults in selected community, Gurugram, Haryana to assess the knowledge and attitude of adults regarding Organ Donation by using convenient sampling technique. Data was collected by using structured knowledge questionnaire and attitude scale. The aim was to assess the knowledge and attitude of adults regarding Organ Donation. In the present study quantitative approach and descriptive survey research design were used. The research variable was the knowledge and attitude regarding organ donation. The sociodemographic variables were age (in years), gender, religion, residence, education, marital status, occupation, previous knowledge, and family history of organ donation. The population was early-aged adults. The sampling technique was Convenient sampling technique. The results showed that 53% of adults were between the ages of 20-24 years, 61% were male, all belonged to the rural community, 67% were Hindu, 32% were matrix passed, 32% were homemakers, 64% were single, 53% had some knowledge regarding organ donation and 68% had no history of organ donation. Results reveal that 91% of adults had average knowledge and only 1% of samples had good knowledge regarding organ donation and 71% had positive attitude regarding organ donation.

**Keywords:** adults, knowledge, attitudes, selected community

## 1. Introduction

*“Organ donation is not a tragedy but it can be a beautiful light in the midst of one”.*

For all those who are born, there is one event that is certain and inevitable and that is death. Yet we all live as if we are immortal when faced with death in the family or in the cause of professional work we are completely unprepared and rudely shocked out of our illusions. Organ donation is a noble work as it has helped in saving lives of those who would have died otherwise.<sup>2</sup>

There is a great need for human organs for transplantation. Perhaps the most common is that people are hesitant to donate organs because they don't have adequate knowledge regarding it.

Thousands of lives are lost in India annually from heart and liver failure since transplantation of unpaired organs like heart, liver, and pancreas is either difficult or impossible from living donors this is only possible on a large scale if these organs are available from cadaver donors.

Hence urgent action is required on several fronts if the acute shortage of human organs in India has to be met. Awareness should be increased about the benefits of organ donation by communication among people should be fought by way of religious injunction.<sup>1</sup>

Organ donation is the process of surgically removing an organ or tissue from one person (the donor) and transplanting it into another person (the recipient) who needs it. Organ donation can save and improve the lives of people suffering from serious and often life-threatening conditions such as heart failure, liver failure, kidney failure, lung diseases, and more.

There are two types of organ donation: living donation and deceased donation. Living donation occurs when a person donates one of their organs while they are still alive, usually to a family member or friend who needs it. Deceased donation occurs when a person donates their organs after they have died.<sup>3</sup>

Organ donation is an important way to help people in need of life-saving treatments and can be a powerful way to leave a legacy of kindness and generosity. If you are interested in becoming an organ donor, you can sign up on your country's organ donor registry or speak with your family about your wishes.

Organ transplantation is the most preferred treatment for many end-stage organ diseases as it increases life expectancy.

Besides long-term survival benefits, organ donation also improves the quality of life in many circumstances.<sup>4</sup>

## 2. Methodology

Research methodology is defined as the design or a plan a strategy of a research study that gives guidelines, which direct the research steps, and the research study process, and enables systematic data collection, logical data organization, and accurate data analysis and data interpret.

## 3. Research Approach

The research approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis, and interpretation. It is, therefore, based on the nature of the research problem being addressed.

A quantitative research approach was used to assess the knowledge and attitude of adults regarding organ donation in selected community area at Gurugram, Haryana

### Research Design

Chowdhury Sunanda S. Roy (2013) defines research design as a blueprint to conduct a study that involves the description of research approach, study setting, sampling size, sampling technique, tool and method of data collection, and analysis to answer the specific research questions or for testing research hypothesis.

In this study, Descriptive Survey Research Design was used to assess the knowledge and attitude of adults regarding organ donation in a selected community area in Gurugram, Haryana.

### Research setting:

The location for conducting research selected area of Panchgaon (Gwalior), Haryana.

**Population:** Population is the entire set of individuals of adults of 20 to 40 years

**Sample:** Sample is the sub-set of population or of situation that has been selected to make them participate in the respective research study. The sub-set of population or objects or of situations represents the entire population or objects or situations to which it belongs. The sample of this study consists of early and middle adults

**Sample size** – 100 adults

**Sampling technique** –convenient Sampling Technique.

### Sampling Criteria:

#### Inclusion criteria:

The adults who were:

- available during the period of data collection.
- 20 to 40 years of age.

#### Exclusion criteria:

Who were not willing to participate in the study

**Demographic Variables:** It consists of 9 items for obtaining baseline information from the adults like age, gender, religion, residence, education, marital status, occupation, previous knowledge, family history of organ donation

### Section B:

Structured knowledge questionnaire regarding organ donation

### Section C:

- This includes rating scale to assess the attitude of adults regarding organ donation.
- The tool consists of 20 items including agree, neutral, and disagree.

### Validity

Tool validity was established by obtaining valuable opinions and suggestions from experts from various fields such as

medical and surgical nursing. This helped the investigator to know the adequacy, appropriateness, and completeness of the content of the instrument and to correct the mistakes before conducting the research study and to get better results.

- Content validity of the tools was established by 7 experts in nursing fields.
- Tool was validated by 7 experts from Amity University and changes were done in the tool to the expert's and Guide and Co Guide's suggestions.

### Reliability

- The tools were tested by administering them to participants.
- The reliability was calculated by the Karl Pearson formula.
- The value of reliability was 0.9 which indicates that it was found reliable.

**Method of data collection** - Interview and questionnaire method.

## 4. Data collection procedure

Prior written permission were obtained from sarpanch of Mokalwas and Panchgaon for Pilot Study and Main Study and Mokalwas and Panchgaon village respectively of Gurugram, Haryana. Informed consent were taken from the samples.

### Period of data collection:

The data were collected in the month of April 2023. During this period researchers had collected data.

### Data collection process:

Data collection is the process of gathering information regarding to a research problem. After identifying the sample, the purpose of the study will be explained, and the confidentiality of their responses was assured. Then consent was taken, and the necessary instructions had been given before administering the tool. Data was collected from the adults in Gurugram.

### Plan for data analysis:

Analysis is the systematic organization and synthesis of research data and testing of the research assumption using the data. The analysis of data was completed on the basis of objectives, frequency, and percentage and computed to describe the demographic data.

Data analysis was planned based on the objectives of the study by using descriptive and inferential statistics. Descriptive statistics were useful for summarizing empirical information and inferential statistics, which is based on the laws of probability, provides a means for drawing conclusions about the population from which the data is obtained.

The data will obtain is analyzed in terms of the objectives of the main study using descriptive and inferential statistics.

### 5. Major Findings of the Study

- **According to age:** The demographic variable indicates 53% of adults were between age of 20-24 years,19% were 25-29 years, 16% were from the age of 30-34 years, 12% were 35 or above.
- **According to gender:** The majority of the 61% samples were males and 37% were females.
- **According to residence:** All the samples belong to rural communities.
- **According to religion:** The majority of samples 67% were Hindu and 7% were Sikh religion.
- **According to education:** In most of the samples 32% of adults were matrix passed, and 13% were complete or doing post-graduation and more.
- **According to occupation:** The majority of the samples 32% were homemakers,26% were had self-business,16% were government employees, and 26% had private jobs.
- **According to marital status:** In most of the samples 64% were single, and 32% were married.
- **According to previous knowledge:** In most of the samples 53% had some knowledge and 42% had no previous knowledge.
- **According to family history of donation:** The demographic variables show that 18% had donated an organ, 68% had not donated an organ and 14% were not aware of it.

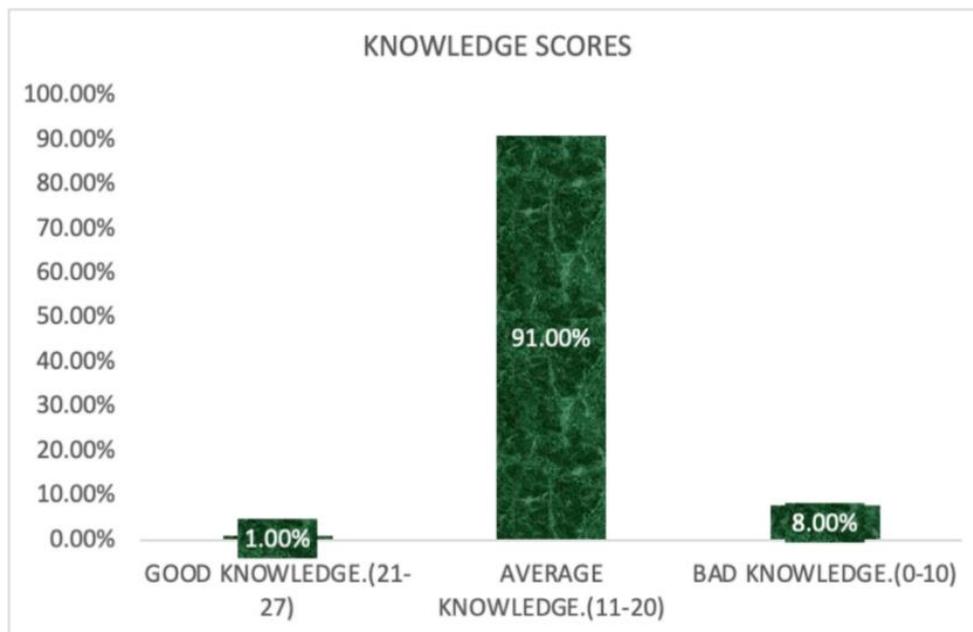


Figure 1: Bar diagram showing the percentage distribution of knowledge

#### Findings related association of knowledge scores with selected demographic data.

Table No. 01 Table Showing Association of Scores and Demographic Variables

This section deals with the findings related to the association between knowledge score and selected demographic variables. The chi-square test was used to determine the association between the score levels and selected demographic variables

Variables	categories	Above Mean f(42)	Below Mean F(58)	Total	Chi Square Test	df	P value	Result
Age	20-29 years	30	41	71	0.00646	1	0.936	Not significant
	30-40 years	12	17	29				
Gender	Male	25	38	63	0.375	1	0.540	Not significant
	Female	17	20	37				
Religion	Hindu	32	35	67	2.77	1	0.096	Not significant
	Muslim, Christian, Sikh	10	23	33				
Education	Matric, Senior secondary	24	34	58	0.0218	1	0.883	Not significant
	Graduation and post-graduation	18	24	42				
Occupation	Home maker, self-business	16	16	32	1.24	1	0.266	Not significant
	Government, private employee	26	42	68				
Marital status	Single	29	35	64	0.801	1	0.371	Not significant
	Married, divorced	13	23	36				
Previous knowledge regarding organ donation	Yes	23	35	58	0.312	1	0.577	Not significant
	No	19	23	42				
Family History of organ donation	Yes	6	12	18	0.677	1	0.411	Not significant
	No	36	46	82				

Table no. 01 depicts that there is no association between knowledge scores with socio- demographic data.

- The majority percentage 53% of adults belonged to the age group 20-24 years and all adults belongs to the rural community and were educated. The majority of adults were male (61%).
- Majority of adults had average knowledge (91%) and minority had good knowledge (8%).
- Attitude regarding organ donation shows that the majority of adults 71% had a positive attitude.

## 6. Discussion

The present study was conducted on 100 samples, To assess the knowledge and attitude of adults regarding organ donation in Panchgaon (Gwalior), Gurugram, Haryana. 53% of adults were between age of 20-24years, 61% were male, all belonged to the rural community, 67% were Hindu, 32% were matrix passed, 32% were homemakers, 64% were single, 53% had some knowledge and 68% had no history of organ donation.

The result of the present study shows that the majority of the adults had average knowledge regarding organ donation. These findings state that 91% of adults had average knowledge and 1% had good knowledge regarding organ donation. By assessing the attitude scale on organ donation and 71% of adults had positive attitude and 1% had negative attitudes regarding organ donation.

## 7. Objectives

### a) To compare the knowledge of adults regarding organ donation:

The result of knowledge of the study has been supported by a study conducted by **Sikha, (2023)** "A Study to assess the knowledge and attitude regarding organ donation among adults in selected Rural Areas of Kamrup District, Assam." Data was conducted by structured knowledge questionnaire and Likert scale for attitude with interview method. The result shows that 66.7% had average knowledge and 67% had a favourable attitude toward organ donation.<sup>8</sup>

### b) To compare the attitude of adults regarding organ donation:

The result of attitude of the study has been supported by a study conducted by **Kumar et.al. (2020)** conducted a study among undergraduate medical students in a tertiary care center. A 24 items semi-structured and self-administered questionnaire was used to assess the knowledge and attitude of 300 undergraduate medical students. The study shows that 85% of participants had good knowledge and 75% showed a positive attitude towards organ donation.<sup>20</sup>

### c) To determine the association between knowledge of adults with selected demographic variables in selected community area at Gurugram, Haryana:

The result of association of socio-demographic variables with knowledge scores of the study has been supported by a study conducted by **Dalvi et al. (2021)** was conducted a descriptive study on the knowledge and attitude regarding organ donation among the junior college students in the selected city. The study was conducted on 100 junior college

students by convenient sampling technique method. A structured knowledge questionnaire was used to assess knowledge and an attitude scale to assess attitude. The result shows that 52 students had an average level of knowledge and 48 students had positive attitude and no association of socio-demographic variables with knowledge scores.<sup>16</sup>

## 8. Conclusions

This present Descriptive Study was conducted to assess the knowledge and attitude of adults regarding organ donation in Panchgaon (Gwalior), Gurugram, Haryana.

The data for the study was collected for 6 to 7 days from 100 participants after taking informed consent from participants. The findings of the present study revealed that the majority of the adults had average knowledge and positive attitude toward organ donation.

Hence, it is essential to take up interventional measures for improving the knowledge among general people and eventually improving their positive attitude towards organ donation so that people can make informed choices in the future regarding organ donation.

## 9. Nursing Implications

The findings of the study has several implications for nursing practice, nursing administration, and nursing research.

### Nursing Practice

- The study findings will help the nursing personnel to understand the knowledge and attitude of community people regarding organ donation.
- Nursing personnel should also have knowledge regarding the attitudes of adults of the community, for that they should be aware more and more people regarding organ donation.
- It develops a positive attitude in the nursing field.

### Nursing Research

- The finding of the study can be utilized for conducting research using a large scale.
- It can include other people and populations as family members and other age groups.

### Nursing Administration

- Nurse as an administrator plays an important role in educating students by organizing seminars, and teaching classes for students to enhance knowledge regarding organ donation which helps the students in life.

### Nursing Education

- Educating students about organ donation and its importance in someone's life.
- To achieve this, a nurse as an educator should educate students regarding the need for organ donation, need to aware more and more people about organ donation.
- They should organize camps for organ donation to spread awareness.

## 10. Recommendations

- Based on the findings of the study, the following recommendations are stated:
- Similar study can be taken for a large sample to generalize the findings.
- A comparative study can be done between urban and rural communities regarding organ donation.
- Descriptive study can be done to assess the knowledge of healthcare workers regarding organ donation.

## 11. Delimitations

- Sample size was delimited to 100 adults.
- The study was delimited to selected community areas.
- The study was delimited to the adult population only

## 12. Summary

- From the findings, it can be concluded that the highest percentage 53% of adults were belong to the age group 20-24 years and most 100% of adults belong to rural communities and educated. The majority of adults were males (61%).
- Knowledge and attitude regarding organ donation show that the majority of adults i.e. 91% had average knowledge and 71% had a positive attitude.

## References

### Books and Journal

- [1] Kumar (2007), National Library of Medicine, PubMed central "death and organ donation" 24(8):2
- [2] Srivastava (2018) April. Neurology India "decreased organ donation and transplantation in India", PubMed. Volume 66, No.2:316-322. <https://pubmed.ncbi.nlm.nih.gov/29547145/>
- [3] Priyatham., 07.02.2016, introduction to organ donation, [www.slideshare.net](http://www.slideshare.net)
- [4] Abt PL et al., Knowledge about organ donation, American Journal of Transplantation. 2013;13(6):1400–1404.
- [5] Indrayan (2013), ' Basics method of medical research ', third edition , AITBS Publisher India, pg: 370
- [6] Kalita (2023 Feb.), International Journal of Science and Research;12(2):2319-7064.
- [7] AOPO (Association of Organ Procurement Organizations). Donation Service Areas.2017a. [September 13, 2017]. <http://www.aopo.org/donation-service-areas>.
- [8] Council of Europe. (2005). 8.International figures on organ donation and transplantation. Transplant Newsletter OPTN (Organ Procurement and Transplantation Network)
- [9] National Academies of Sciences(2006) National Data Reports. [Online]. Available: <http://www.optn.org/latestData/step2.asp?> [accessed March 29, 2006].
- [10] Axel Rahmel (2013), Media workshop Introduction to organ donation and transplantation, <https://health.ec.europa.eu>

- [11] Kanmani Job (2018), Organ donation and transplantation, <https://www.intechopen.com>
- [12] Sindhu et.al. (2023), knowledge and attitude regarding organ donation, Medical Journal 10(4):349-353
- [13] Jadhav (2022 October), knowledge and attitude regarding organ donation, Science direct, ethics, medicines and public health 24(2):100836
- [14] Venkatesan et.al.(28 June 2022), knowledge and attitude regarding organ donation BioMed Research International 4(20):341
- [15] Kumari et.al. knowledge and attitude regarding organ donation, Innovative Research 2022,9(8):2349-5162
- [16] Dalvi et.al. (2021 January), knowledge and attitude regarding organ donation International Journal of Scientific Development and Research12(6):2455-2631
- [17] Seetharaman (2020 November), International Journal of Contemporary Medical Research,8(6):625 -632.
- [18] Reynolds et al.(2020), "Journal of Nursing Education " 59(7):388-391
- [19] Sampaio et al., knowledge and attitude regarding organ donation, international journal of Science 12(4):241
- [20] Kumar et.al. (2020 December), knowledge and attitude regarding organ donation, International Journal of Community and medical science 8(1):311
- [21] Rani et.al. (2020 December), knowledge and attitude regarding organ donation, International Journal of Nursing Education 12(4):244
- [22] Asmita et.al. (2020), knowledge and attitude regarding organ donation, Journal of Biomedical Research and Environmental science2766-2276.
- [23] Kanti et.al (2020) January, knowledge and attitude regarding organ donation, Saudi Journal of Medicine5(1):16-19
- [24] Kaur et.al. (2019), knowledge and Attitude regarding organ donation, International Journal of Emergency and Trauma 5(1):277
- [25] Paul (2019), knowledge and attitude regarding organ donation, original research article 5(10):2456-9887
- [26] Poreedi V. et.al, knowledge and attitude regarding organ donation, International Journal of Medicines 14(2):2411
- [27] Libguides ,Research Support: Research Methodology, [libguides.wits.ac.za](http://libguides.wits.ac.za)