

“A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Attitude Regarding Organ Donation Among Students of Teachers Training Colleges at Krishnagiri”.

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I. INTRODUCTION

“Live lives then give Life”

- Stacy.

Healthy life is an individual right. It exists from birth to death. Many concepts exist about life after death, but few have witnessed life through the process of organ donation. Organ donation is the process of taking healthy organs and tissues from one person for transplantation to another. Tamil Nadu was one of the first states to initiate cadaver transplants in 1995 following the passage of the Act. Numerous myths persist regarding organ donation, especially concerning age, illness, and donation while alive. Many people falsely believe that the elderly or those who are ill cannot donate organs (**Mohan Foundation, 2024**).

People of all ages and backgrounds can become organ donors. For individuals under the age of 18, a parent or guardian must provide consent; those aged 18 or older can declare their willingness to donate by signing a donor card (**NOTTO, 2024**).

Organ donation in India is a government-regulated activity under the Transplantation of Human Organs and Tissues Act (THOTA), enacted in 1994 and implemented through the National Organ Transplant Programme (**Ministry of Health and Family Welfare, 2024**).

According to the Health Resources and Services Administration (HRSA, 2023), organs from a single donor can save or help as many as 50 people. Organs that can be donated include kidneys, heart, liver, pancreas, intestines, lungs, skin, bone, bone marrow, and corneas. As part of its modernization initiative, HRSA has introduced a public dashboard and use of files to enhance transparency in the organ donation and transplantation system. Transplantation involves replacing defective cells or organs with healthy ones. Organs can be donated by individuals who have suffered brain death or circulatory death, often after treatment withdrawal (**HRSA, 2023**).

Several challenges further widen this gap: some organs are not recovered, some recovered organs are not transplanted, and some transplanted organs fail to function adequately. Due to this imbalance, 17 people die every day waiting for an organ transplant. Each donor has the potential to save 8 lives, and every 8 seconds, a new person is added to the waiting list (**UNOS, 2024**).

Individuals with congenital or genetic conditions, sudden illness, or organ failure often require transplants to survive. Despite these misconceptions, 48,000 organ donations were recorded in India in 2024 (**NOTTO, 2024**).

The concept of organ donation encompasses altruism, societal values, medical necessity, and ethical complexity. It also raises philosophical questions about bodily autonomy, the definition of death, and societal responsibility. Understanding this multifaceted issue is essential for creating effective public health policies and improving donor registration rates. (**Beauchamp & Childress, 2022**).

Practices vary worldwide—countries such as Spain, Austria, and Belgium follow an “opt-out” system, assuming all citizens are donors unless they object, which leads to higher donation rates. Spain is often recognized as a global leader in organ donation due to its efficient procurement systems and strong public education (**GODT, 2023**).

While the United States follows an “opt-in” model, progress has been made through innovations in donor registries and collaborations with organizations like the United Network for Organ Sharing (**UNOS, 2024**).

Organ donation is important across all age, racial, and cultural groups. Nevertheless, there is a global shortage of donors, primarily due to limited awareness about the donation process. Organ donation has become the optimal treatment for many end-stage organ-specific diseases. However, donated organs are often

insufficient to meet the growing demand. In contrast, many developing countries face significant challenges in organ donation due to poor infrastructure, limited awareness, cultural and religious barriers, and weak legal frameworks. These issues are often compounded by illegal organ trade and transplant tourism, which raise serious ethical and human rights concerns (WHO, 2023).

NEED FOR THE STUDY:

Saving life is an aim of organ donation. The knowledge about the process is essential to improve the rate of donation. The attitude is also directly related to knowledge.

Smith and colleagues(2022) stated that in Canada, 34% had formally registered as organ donors. Despite this low registration rate, 68% expressed support for organ donation in principle. The barrier was misunderstanding about brain death—many believed donation could occur while the donor was still alive. Older adults were more likely to be registered, while younger demographics expressed willingness but lacked clarity on how to register.

Johnson et al (2023) stated that in Australia, 36% registration rate for organ donation and 85% supported organ donation in principle. Knowledge levels were moderate; only 60% could correctly answer questions about donation criteria. People who had discussed donation with family members were significantly more likely to register. The study recommended embedding organ donation information in routine health checkups and enhancing visibility through public campaigns, particularly among younger populations.

According to **Nasir Alwahaibi (2023)** only 34.1 % of the students studying in the universities at Oman had good knowledge about organ donation, 70.2% had a low attitude, and 7.53% had adequate information about brain death. 25.66% of the participants had a high attitude toward people with poor knowledge about organ donation.

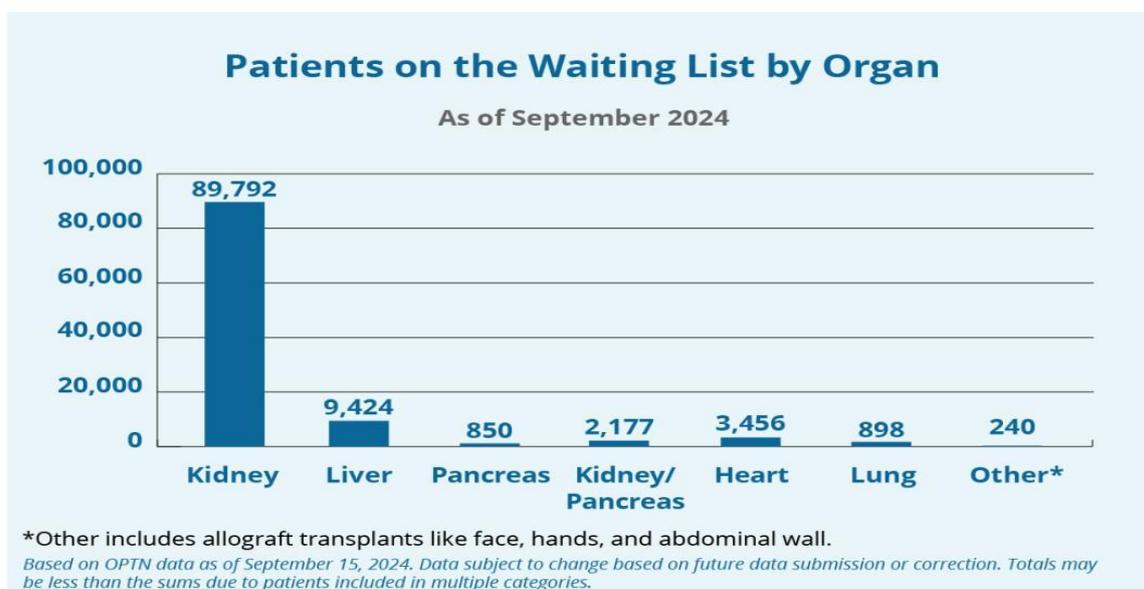
In Saudi Arabia, **Mohamed Somali(2022)** reported that approximately 48.4% of the students had moderate knowledge and a low positive attitude found among 58.1% about organ donation.

Mwangi and Otieno(2022) stated that 18% knew how to become an organ donor in urban and semi-urban areas of Kenya. Of 1,000 respondents, only. Although 40% supported the idea in theory, fears of body desecration, religious ambiguity, and mistrust in the medical system were prevalent. Rural areas exhibited especially low awareness. Advocated for government-led outreach programs and emphasized the need for trust-building within healthcare. They also called for clarity on legal frameworks and involvement of faith leaders to address religious concerns.

In India, according to **Adhan AL Salhi (2024)** reported that 93.9% of the public are aware about organ donation but unaware about the brain death and have low attitude towards organ donation.

Vaibhaskumar Srivastav(2024) stated that in India 90% of the medical students had good knowledge and positive attitude about organ donation. But only 11% of them registered for organ donation and 10% of students discussed it with their family members.

According to **HRSA (Human Resource and Source Administration)** source in India(2024), the rate of waiting list for organ transplant of various organ are mentioned as follows



Babu (2024) assessed the knowledge, attitudes, and awareness regarding organ donation of urban slum dwellers in Chennai, Tamil Nadu and revealed that around 60% of the population in Tamilnadu had good knowledge and 64% were willing to contribute for organ donation. Nearly 65% of the participants are male, 35%

are female, and 45% are between the ages of 18 and 30 years. There was a significant statistical correlation ($P \leq 0.05$) found between the willingness to donate organs and gender. Roughly, 56% of the participants said they had learned about organ donation mainly through radio or television.

Venkatesan K(2022) stated that Teachers have an essential role in giving knowledge to children and teenagers, and they can influence their views. Organ transplantation offers re-life to many patients, yet organ shortages are a global issue. Teachers who influence students' future attitudes regarding organ donation must have a favorable attitude and genuine knowledge.

Kumar and Desai(2021) assessed awareness and attitudes toward organ donation among 1,200 medical students across five Indian medical colleges. The research showed that only 22% had officially pledged to become donors. However, a promising 75% had positive attitudes and said they would consider donation in the future. The main barriers were inadequate knowledge of legal procedures, religious concerns, and fear of body mutilation. The study called for curriculum integration of organ donation topics in medical training and suggested leveraging student advocacy to influence public awareness campaigns.

With these extensive reviews and with the personal experience of the researcher, it was found that there is a need to create awareness about organ donation processes among the people. Creating awareness about organ donation may enhance knowledge and change the attitude regarding organ donation. Teachers are pillars for future society, Hence the researcher is interested to conduct this research among the teacher training students about the knowledge and attitude regarding organ donation.

STATEMENT OF THE PROBLEM:

A study to evaluate the effectiveness of structured teaching program on knowledge and attitude regarding organ donation among students of selected teacher training colleges at Puducherry.

OBJECTIVES OF THE STUDY:

- To assess the level of knowledge regarding organ donation among students at selected teacher training colleges in study and the control group.
- To assess the level of attitude regarding organ donation among students at selected teacher training colleges in study and the control group.
- To evaluate the effectiveness of structured teaching programs on knowledge and attitude regarding organ donation among students at selected teacher training colleges in the experimental group.
- To find out the correlation between the knowledge and attitude regarding organ donation among students at selected teacher training colleges in the experimental group and the control group.
- To find out the association between the level of knowledge regarding organ donation with the selected demographic variables among the experimental group and control group.
- To find out the association between the level of knowledge regarding organ donation with the selected demographic variables among the experimental group and control group.

OPERATIONAL DEFINITIONS:

EVALUATE:

It refers to measurement of the effect of structured teaching programmes on level of knowledge and attitude regarding organ donation among the teacher training students.

EFFECTIVENESS:

It refers to the expected positive change in the level of knowledge and desirable attitude regarding organ donation among the teacher training students with the implementation of a structured teaching program.

STRUCTURED TEACHING PROGRAMME:

In this study structured teaching program refers to a method of teaching about organ donation with the use of powerpoint presentation. It includes the topics such as definition, types, methods, indications and contraindications, eligibility criteria for blood donation.

KNOWLEDGE:

It refers to the level of awareness regarding organ donation. The knowledge level is measured using structured knowledge questionnaires. Based on the score, it is categorized as inadequate knowledge, moderately adequate knowledge and adequate knowledge.

ATTITUDE:

It indicates ideas , beliefs, perception and behaviour towards organ donation. It is measured using structured attitude 5 point likert scale and based on the score it is categorized as favorable attitude , moderately favorable attitude and unfavorable attitude.

ORGAN DONATION:

In this study organ donation refers to the process of donating body parts to an acceptable recipients during alive or after the death..

STUDENTS:

It refers to the B.Ed/D Ted Teacher Training Students of KM College of Education, Shri Bharathi College of Education, Krishnagiri.

ASSUMPTIONS:

- Teacher training students may unaware about the organ donation
- The structured teaching program may enhance the knowledge and positive attitude regarding organ donation.
- The knowledge regarding organ donation can create a positive attitude towards organ donation.

HYPOTHESES:

H1: There is a significant difference between the pre-test and post-test level of knowledge regarding organ donation among teacher training students with the structured teaching program.

H2: There is a significant difference between the pre-test and post-test level of attitude regarding organ donation among teacher training students with the structured teaching program

H3: There is a significant correlation between the level of knowledge and attitude regarding organ donation among teacher training students

H4: There is a significant association between the level of knowledge regarding organ donation among teacher training students with the selected demographic variables.

H5: There is a significant association between the level of attitude regarding organ donation among teacher training students with the selected demographic variables.

DELIMITATIONS:

- The study is delimited to teacher training students.
- The study is delimited to 80 samples.
- The study is delimited to 4 weeks period of data collection
- The study is delimited to selected College of Education, Krishnagiri

PROJECTED OUTCOME:

- The study would measure the existing level of knowledge and attitude regarding organ donation among the teacher training students
- The study would motivate the teacher training students to enhance the knowledge and attitude regarding organ donation
- The study would evaluate the effectiveness of structured teaching program on knowledge and attitude regarding organ donation among students at selected teacher training colleges

CONCEPTUAL FRAMEWORK

A **conceptual framework** is a system of ideas and objectives that guides research, a project, or a process. The conceptual framework adopted for the study was the Modified General systems theory approach, developed by **Ludwig Von Bertalanfly (1968)** (As cited by Christen, 1995). A system is a device for bringing together parts into a meaningful whole so that the way the parts function together is clear. System theory is concerned with changes due to interaction between the various factors in a situation. Thus the situation is complex and constantly changing systems theory provides a way to understand the many influences on the whole person, and the possible impact of change on any part or the whole.

COMPONENTS:

□ INPUT

- THROUGHPUT
- OUTPUT

GENERAL SYSTEM THEORY MODEL-LUDWIG VON BERTANLANFLY (1968): INPUT:

In systems theory, input refers to the process of any information, which enters into the system through its boundary.

In this study, input refers to the Demographic variables such as Age, Gender, Religion, Residence, Marital status, Education, Type of family , sources of information and willingness to donate organs.. The existing knowledge and attitude regarding organ donation. The level of knowledge about organ donation is measured with the structured knowledge questionnaire and the attitude is measured with a structured attitude 5 point Likert scale

THROUGHPUT:

Throughput refers to the process whereby the system transforms, creates, organizes input. The process used by the system to convert raw materials or from the environment into products that are usable by either the system itself or the environment. Thinking, planning decision making, constructing, sorting, sharing information, meeting in groups. Discussion, melting, shaping, stammering, etc

In this study it refers to the structured teaching program on organ donation implemented to teacher training students through powerpoint presentation. It includes the topics such as definition, types, methods, indications and contraindications, eligibility criteria for blood donation.

OUTPUT:

The product or service which results from the system’s throughput or processing of technical, social, financial and human input documents, decisions, laws, rules, etc. output is the outcome of the system: when the system is a person, output refers to person behavior; these responses or output provide feedback to the system.

In this study output referred to the effectiveness of structured teaching programs on level of knowledge and attitude regarding organ donation among the experimental group and control group. Positive change in knowledge and attitude proves the effectiveness of structured teaching program.

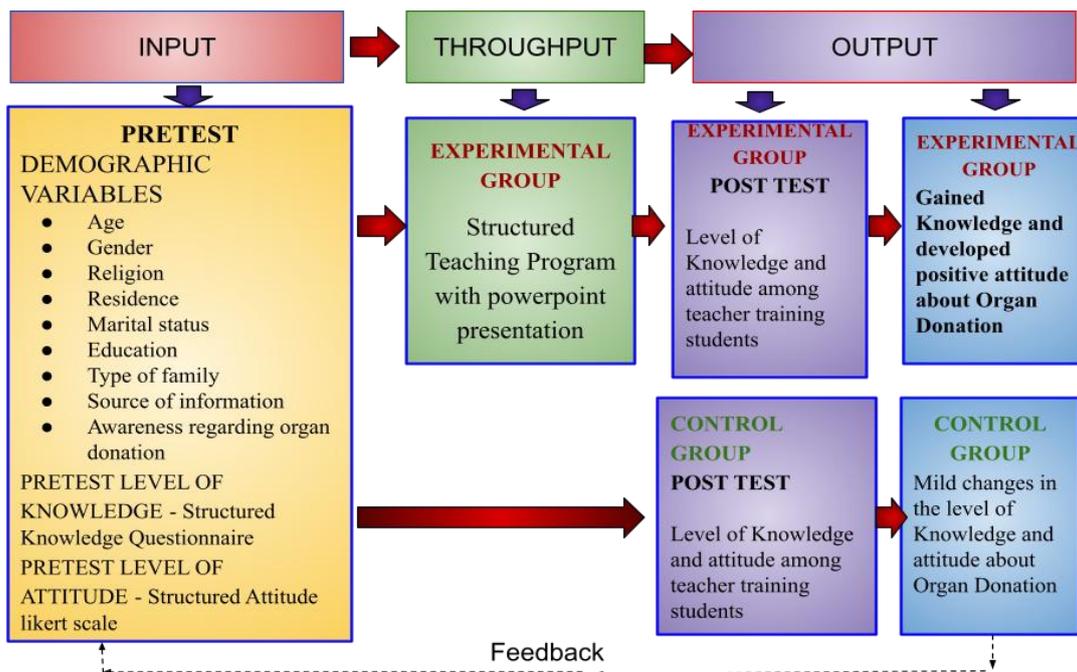


Fig.No:1.1 Conceptual Framework based on Modified Ludwig Von Bertalanffy System Theory (1968)

II. REVIEW OF LITERATURE

"Literature is the reflective reservoir of human inquiry, capturing the continuum of thought, discovery, and dialogue across disciplines."

Review of literature is the selection of available documents on the topic which contain information, ideas, data and evidence. It is an examination of the research that has been conducted in a particular field of study.

--- Dr. Robert Larabee

This chapter consists of three sections

- **Section I:** Reviews related to the prevalence of organ donation
- **Section II:** Reviews related to knowledge and attitude regarding organ donation
- **Section III:** Reviews related to educational intervention on knowledge and attitude regarding organ donation.

SECTION I

REVIEW RELATED TO PREVALENCE OF ORGAN DONATION

Feng et al.(2024) stated that research efforts in liver preservation will undoubtedly blossom with the aim of optimizing both the timing and conditions of transplantation. Coupled with advances in genetic engineering, regenerative biology, and cellular therapies, the portfolio of innovation, offers the promise that, in the future, liver transplantation will not only be broadly available to those in need but also represent a highly durable life-saving therapy.

Yumoto T et al.(2024) did nationwide retrospective cohort study on organ donation after extracorporeal cardiopulmonary resuscitation (ECPR) and non-ECPR groups. The result proved that the number of organs donated was similar between the ECPR and non-ECPR groups, regardless of brain or circulatory death.

Alolod GP et al.(2023) revealed that Over half (58.1%) of Asian American respondents were willing to be organ donors. A majority (81.8%) expressed a willingness to donate a family member's organs, but enthusiasm depended on the family member's donor wishes. Only 9.5% of respondents indicated that the decision to donate their organs was theirs alone to make; the remainder would involve at least one other family member.

Bluhme E et al.(2023) stated that organ transplantation is limited by access to suitable organs. Infant recipient waitlist mortality is increased due to the scarcity of size-matched organs. There is a large pool of potential neonatal organ donors. Good posttransplant organ function was achieved, the use of neonatal organs is associated with increased risk of thrombosis in both kidney and liver transplantation. Neonatal organ donation is a promising alternative for expanding the current donor pool.

Bohler K et al.(2023) reported that Infections were the most frequently reported patient to patient disease transmission occurrences. In case of disease transmission, the mortality of the recipients was high especially when a malignant disease was transmitted. Donor-Derived disease transmission is a rare event, but when it occurs can lead to significant morbidity and mortality.

Israni AK et al.(2023) stated that in 2021, there were 13,862 deceased donors, a 10.1% increase from 12,588 in 2020, and an increase from 11,870 in 2019; this number has been increasing since 2010. The number of deceased donor transplants increased to 41,346 transplants in 2021, a 5.9% increase from 39,028 in 2020; this number has been increasing since 2012. The increase may be due in part to the rising number of deaths of young people amid the ongoing opioid epidemic. The number of organs transplanted included 9,702 left kidneys, 9,509 right kidneys, 551 en bloc kidneys, 964 pancreata, 8,595 livers, 96 intestines, 3,861 hearts, and 2,443 lungs. Compared with 2019, transplants of all organs except lungs increased in 2021, which is remarkable as this occurred despite the COVID-19 pandemic. In 2021, 2,951 left kidneys, 3,149 right kidneys, 184 en bloc kidneys, 343 pancreatas, 945 liver, 1 intestine, 39 hearts, and 188 lungs were not used.

Shadnouse et al.(2023) reported based on the research findings that the process of organ donation involves medical, legal, ethical, organizational, and social aspects. The trend in increasing donation rates over the past years can be attributed to multiple influences, which include rigorous team efforts in the organ donation and transplantation systems, in addition to creating a donation culture and promoting donation through media platforms.

Vail EA et al.(2023) stated that among 5010 cohort donors, 2590 (51.7%) underwent recovery procedures in an OPO-based facility. Donors in facilities differed from those in hospitals, including recovery year, mechanisms of death, and some comorbid diseases. Donors in OPO-based facilities had higher total numbers of organs transplanted per donor. Increasing access to OPO-based organ recovery facilities may improve rates of organ transplantation from deceased organ donors.

Czerwiński J et al.(2022) reported that donation and transplantation activity from deceased donors in Poland decreased about 20% in 2020 compared with 2019, which is comparable with worldwide rates. As the unprecedented pandemic situation affected donation and transplantation procedures, there are measures that must be taken to return to pre-pandemic donation and transplantation rates in both deceased and living transplant

programs and then continue to improve in the years to come.

García & Lopes et al.(2022) surveyed 1,200 individuals across Rio de Janeiro and São Paulo at Brazilian among youth aged 18–30,. While 70% showed a willingness to donate organs, only 28% had an accurate understanding of the legal process. Knowledge gaps included uncertainty about how to register, what organs can be donated, and whether donation affects funeral rites. The study noted a mismatch between positive attitude and practical action. Recommendations included gamified educational apps, integration into secondary school curricula, and partnerships with influencers to increase youth engagement.

Curtis RMK et al.(2021) stated that there was an increase in the consent rate for organ donation in the UK from 61% to 67%. Consent for donation after brain death was significantly higher than for donation after circulatory death, 70% vs. 60%.Patient ethnicity, religious beliefs, sex and socio-economic status, and knowledge of a patient's donation decision were strongly associated with consent ($p < 0.001$).The most readily modifiable factor was the involvement of an organ donation specialist nurse at all stages leading up to the approach and the approach itself. If no organ donation specialist nurse was present, the consent rates were significantly lower for donation after brain death and donation after cardiac death

Leblebici et al.(2021) reported that family refusal to organ donation in at least half of cases and higher likelihood of family consent to organ donation depending on age of patient (adult vs children) and cause of death (brain injury vs encephalitis). The religious concerns and distrust in the health care system were the 2 major causes of family refusal, whereas no significant difference was noted across different family refusal reasons in terms of sociodemographic factors, length of intensive care unit stay, awareness of decedent's wishes, or time of family interview.

Arslantas R et al.(2021) reported that causes of non-organ retrieval among potential donors included refusal of consent by relatives (89.5%), indecision of the family regarding donation or no relatives present (7%), and medical unsuitability for donation (3.5%).Refusal by the family was the most common reason for failure of deceased organ donations. To maximize the number of procured organs, transplant communities need to focus on increasing awareness regarding brain death and organ donation and establish strategies to increase consent obtained from the families.

Pan XT et al.(2021) researched about Investigation and Strategic Analysis of Family Barriers to Organ Donation in China. 69.9% considered family consent necessary and 77.1% thought that the view of their family had a great, even decisive, influence on them to decide to become donors. If the deceased family member had registered as an organ donor, 65.2% of families decided that they would respect the wishes of the deceased person. 58.6% of Adults were more likely to donate than parents. Those born after 2000 and after 1990 (62.5% and 52.8%, respectively) were much more likely to donate than those born after 1960 (18.1%; $\chi^2 = 191.485$, $P < .001$). The interviews indicated that there were high rates of donation refusals within potential donation families. Most donor families chose to make hidden donations, and the majority of donor families had a simple family structure.

SECTION II: REVIEW RELATED TO KNOWLEDGE REGARDING ORGAN DONATION

Neha Joe et al.(2025) conducted a cross sectional research to determine the level of awareness and perceptions about organ donation. in South India with 110 samples at Tertiary care centres.. The result analysis showed that the majority of the participants were Hindus (62%), married (68%), living in urban areas (62%) and gainfully employed (60%). The mean awareness score was 7.86 ± 2.64 (out of 13). About 70% of the participants had adequate knowledge. The mean perception score was 67 ± 9.41 (out of 86). A total of 95 per cent of the participants supported organ donation, however only 51 per cent were willing to donate. Males, participants with higher education and income and those residing in urban areas had significantly higher awareness scores ($P < 0.05$). Multiple linear regression analysis showed that higher education levels was a predictor of increased awareness ($P = 0.036$).

Bernat JL et al. (2024) has conducted a research on knowledge gaps in heart and lung donation after the circulatory determination of death.Experts identified current knowledge gaps and research opportunities in the scientific, conceptual, and ethical understanding of organ donation after the circulatory determination of death and its technologies. To minimize organ injury from warm ischemia and produce better recipient outcomes, innovative techniques to perfuse and oxygenate organs postmortem in situ, such as thoracoabdominal normothermic regional perfusion, are being implemented in several medical centers in the US and elsewhere. These technologies have improved organ outcomes

Chumkasian W et al.(2023) conducted systematic review to investigate knowledge and attitudes toward eye donation and sources of eye donation information among the general population. Result proved that 30.8% of

participants had some knowledge of eye donation. 40.6% were willing to donate their eyes, and 7.3% had already pledged their eyes. 50.9% of participants (95% CI = 49.8-52.1) received information from mass media.

Srivastav V et al.(2024) conducted a mixed methodological study to determine the Knowledge, Attitudes, and Practices Regarding Organ Donation Among Medical Students in India. Data were collected among the 400 randomly selected medical students at a medical college in India using a pretested questionnaire. Additionally, 20 in-depth interviews were conducted to gain qualitative insights. The study result proved that the Knowledge was high regarding organ donation (90%) but lower for brain death (27.5%). Most had positive attitudes, but only 11% were registered donors, and 10% had discussed organ donation with family. Multivariate regression revealed that having third- and fourth-year-old students, urban upbringing, good knowledge, and positive attitudes were associated with increased willingness to donate. Qualitative findings revealed gaps in brain death understanding, religious myths, lack of conviction, and family disapproval as barriers.

Nasar Alhaibi et al.(2023) did a cross sectional study to assess university students' knowledge and attitude about organ donation and transplantation among different colleges at the university. The data were collected among 2125 samples aged between 17-25 years old with the questionnaire consisting of five sections. The first section was about the research information. The second section was informed consent. The third section was about socio demographic information. The fourth section was about the knowledge of organ donation. The last section was about the attitude toward organ donation. The data were analyzed by descriptive statistics and chi-square tests. The result findings proved that 34.1% had good knowledge about organ donation, 70.2% had a low attitude, and 7.53% had adequate information about brain death. The most common reason for supporting donating organs among university students was to save a life (76.8%) and the most common reason for refusing organs, was I am still unaware. In addition, only 25.66% of the participants had a high attitude toward people with poor knowledge about organ donation. The majority of the students (84.13%) used online sources and social networks as the primary sources of information about organ donation.

Urquhart R et al.(2023) conducted a survey among One-hundred and ninety-four nurses (98%) to find out Nurse knowledge and attitudes towards organ donation and deemed consent: the Human Organ and Tissue Donation Act in Nova Scotia. 86% having signed an organ donor card to donate organs and/or tissues after death. A considerable majority (89%) also supported the new legislation. Nevertheless, a minority of respondents (13%) believed that deemed consent legislation would be considered a violation of the general principles of freedom and autonomy.

Hickey M et al.(2022) conducted research about the attitude and acceptance of tissue and organ donation at the emergency department and concluded that 98.5% of emergency physicians support the concept of deceased organ donation. 85.1% felt that the emergency department is an appropriate setting to disseminate information regarding organ donation and 77.6% felt that it is an appropriate location to offer an immediate opportunity to register as an organ donor. 74.1% of physicians who responded report to be personally registered as an organ donor.

Szydło M et al.(2022) stated that 97% of respondents expressed a positive attitude toward transplant and are willing to donate their organs after death (92.19%). Meanwhile, more than 50% of them admit their lack of sufficient knowledge when it comes to declaring brain death. More than 53% of surveyed physicians have never had the opportunity to participate in training in methodology in performing brain death provided by their hospital or know about such training taking place. A vast majority of respondents (94.76%) see the need for workshops in potential organ donor care and brain death determination and would like to attend them.

Farah Khalid et al.(2020) conducted a community based study to assess the level of knowledge and attitude regarding organ donation in Pakistan. 420 people were approached; amongst them 25 refused to participate, so a total number of 395 respondents consented in the research. The result revealed inadequate knowledge among the general population (25.8%). There was a positive attitude regarding organ donation (75.2%). Television was a popular source of information (27%). 29.90% of respondents knew that “Kidney” can be donated. 43.80% of the respondents were oblivious to the allowance of organ donation in their religion. **Rios A et al.(2020)** conducted research and revealed that the favorable attitude among inhabitants in Cienfuegos was 71.2% (n=453), 68.3% (n=628) among those in Havana, and 69.5% (n=316) among those in Santiago de Cuba (P < .05).

Vlaisavljevic Z et al.(2020) researched to analyze the factors influencing the attitudes of nurses toward bequeathing and organ and tissue donation. The average knowledge score concerning organ donation was 29.03. There was a statistically significant difference in the scores according to the length of service (P < .001) and the level of education (P = .019), which showed the strongest influence on nurses' attitudes toward donation.

SECTION III: REVIEW RELATED TO EDUCATIONAL INTERVENTION ON ORGAN DONATION

Atay Doyğacı AG et al., (2024) investigated the level of organ donation awareness among students at vocational schools of different sectors in order to measure awareness of organ donation among the young population of our society. Among participants, 2.2% stated that they had donated their organs, 27.7% had considered organ donation, 30.2% were unwilling to donate, and 41.8% were indecisive. Among participants, 53.5% stated their desire to have detailed information. Rate of students who already had information on how to donate organs was 35.1%.

Ragupathy S et al.,(2024) did cross-sectional research at SRM Medical College and Hospital and Research

Centre in Chennai, Tamil Nadu, involving 207 undergraduate medical students. Data were collected through a structured questionnaire, evaluating knowledge and attitudes toward organ donation. The Knowledge Subscale contained 13 questions, while the Attitude Subscale had 13 items rated on a five-point Likert scale. Result proved that 97.58% are aware of organ donation and the "Transplantation of Human Organs Act." However, only 7.73% knew where to obtain donation cards. Attitudes toward organ donation were mixed, with discomfort and religious beliefs being significant barriers. Concerns about body disfigurement and premature medical treatment persisted. **Araujo CAS et al., (2023)** had an integrated literature review about the effect of educational initiatives on the Attitude and Knowledge of Health Care Professionals regarding Organ Donation and Transplantation. Results suggest that different types of EIs may positively affect the attitude and knowledge of health care professionals regarding the Organ Donation and Transplant.

Bas Sermiento et al.,(2023) conducted a randomised controlled trial with an experimental group (EG) -theory class and round table- and a control group (CG) -theory class- that transitions to a delayed experimental group. A sample of 73 students was distributed in parallel randomised groups. Result proved that the education programme has proven effective, promoting knowledge, change and entrenchment of attitudes, facilitating conversations with families, enabling willingness to donate and increasing potential donors. These changes in the experimental groups were more significant than in CG in perceived quality of information.

Elazazy et al.(2023) conducted a Quasi Experimental study to assess Effect of Educational Intervention on Knowledge and Attitude Regarding Liver Transplantation among Nursing Students at College of Nursing Al-Ahsaa with 98 level four nursing students. Data collected using the Student Self-assessment questionnaire was used pre and post the Educational Intervention for the purpose to assess knowledge and attitudes of nursing students related to liver transplantation. The results proved that the student' knowledge has been enhanced and their attitude has been improved after application of the educational intervention, in addition to highly significant correlation between knowledge score of the studied students and their attitude post the intervention, moreover; there was a significant correlation between total knowledge level score with student' previous Information about liver transplantation pre the intervention. Conclusion and recommendation: implementation of the educational program positively affected the nursing students' knowledge and their attitude toward liver transplantation.

Nayak VC et al.,(2023) conducted an empirical investigation on the impact of attitudes towards organ donation in India. Awareness of organ donation law in India is low on specific issues and respondents from the health science & medicine discipline scored better on knowledge about organ donation. The findings showed that most participants had heard about organ donation and had a favourable attitude toward it. The primary sources of information on organ donation were television and newspapers, and healthcare service providers. A complementary partial median is established ($\beta = .217$, $t = 5.889$, $p < .001$) which implies that willingness to discuss with family significantly mediates the association between attitude towards organ & tissue donation and willingness to sign the donor card.

Sarmiento et al.(2023) conducted a randomized control trial to develop and evaluate an educational programme aimed at undergraduate training to increase and improve knowledge, attitudes and behaviour towards organ and tissue donation and transplants (OTDT). A total of 73 students were selected through parallel randomized groups. The groups increased their knowledge and improved their attitude, significantly changing their behaviour in the follow-up. These changes in the experimental groups were more significant than in CG in perceived quality of information ($z = -4.948$; $p = <0.001$), level of knowledge (EG1 and CG $z = -2.245$; $p = 0.025$) (EG2 and CG $z = -2.215$; $p = 0.027$), attitude (EG1 and CG $z = -2.687$; $p = 0.007$) (EG2 and CG $z = -2.198$; $p = 0.028$) and behaviour (EG1 and CG $t = 2.054$; $p = 0.044$) (EG2 and CG $z = -2.797$; $p = 0.005$).

Zavala-Rodríguez MG et al., (2023) result proved that educational intervention contributed to an increase in the level of knowledge ($p = 0.0001$). The level of knowledge after the intervention was higher in the younger participants ($p = 0.013$) and in those with a university studies ($p = 0.0001$). The relation between age and the level of subsequent knowledge showed favorable significance in the intention to donate in younger participants with high subsequent knowledge ($p = 0.046$).

Nieto-Galván R et al., (2022) had experimental research on Nurse Intervention: Attitudes and Knowledge About Organ Donation and Transplantation in Adolescents. Pretest and Post test knowledge was assessed with the implementation of educational intervention. Results proved that the composition of the groups did not differ significantly in sex ($P = .653$), age ($P = .266$), or in the desire to be a donor ($P = .099$). There was a significant postworkshop improvements in knowledge about brain death ($P < .001$) and which organs can be donated ($P < .001$).

Shukeri et al.(2022) conducted a questionnaire based interventional study to assess the effects of an educational intervention on attitudes toward organ donation among HCWs. A 26-item self-administered questionnaire was distributed online as a preintervention test. A total of 345 (75.3%) respondents completed the tests. Their attitude toward organ donation was positive preintervention. After the intervention, respondents expressed an increase willingness to donate their own organs ($P = .008$) and their relatives' organs ($P < .001$) after death; were more willing to adopt organ donation as part of end-of-life care ($P =.002$); were more comfortable talking to relatives about organ donation ($P =.001$); and expressed an increase consideration to execute the action at any time ($P =.001$). There was increased willingness to admit to the intensive care unit for facilitating organ donation ($P =.007$); to employ the same resources to maintain a potential brain-dead donor ($P < .001$); and to support organ donation in case they or their relatives were diagnosed with end-stage organ failure ($P =.008$). However, there was an increase in negative attitudes regarding the association between organ donation with health care failure ($P =.004$) and with pain ($P =.003$). Positive attitude scores were higher after the intervention ($P < .001$).

Wan Muhd Shukeri WF et al., (2022) conducted a research to assess the effects of an educational intervention on attitudes toward organ donation among HCWs. A total of 345 (75.3%) respondents completed the tests. Their attitude toward organ donation was positive pre intervention. After the intervention, respondents expressed an increase willingness to donate their own organs ($P = .008$) and their relatives' organs ($P < .001$) after death; were more willing to adopt organ donation as part of end-of-life care ($P=.002$); were more comfortable talking to relatives about organ donation ($P =.001$); and expressed an increase consideration to execute the action at any time ($P =.001$). There was increased willingness to admit to the intensive care unit for facilitating organ donation ($P =.007$); to employ the same resources to maintain a potential brain-dead donor ($P < .001$); and to support organ donation in case they or their relatives were diagnosed with end-stage organ failure ($P =.008$). However, there was an increase in negative attitudes regarding the association between organ donation with health care failure ($P =.004$) and with pain ($P =.003$). Positive attitude scores were higher after the intervention ($P < .001$).

Riley K et al.(2021) researched about the impact of an Educational Intervention on Organ Donation Attitudes in College-Aged Students. As the national demand for donated organs continues to rise, the rate of registered donors within the United States has remained stagnant, creating a shortage of viable, transferrable organs. Lack of registered donors can be partially attributed to misconceptions about organ donation, which has led to a population less willing to register as organ donors. Results suggest that educational interventions are effective in creating positive attitudes about organ donation in college-aged students.

III. RESEARCH METHODOLOGY

"Methodology is the architectural framework of research, where systematic design gives form to intellectual exploration."

Research methodology is a way to solve problems systematically. It indicates the general pattern of organizing the procedures for gathering valid and reliable data for the investigator.

Polit and Beck, 2021

RESEARCH APPROACH:

The **research approach** refers to the overall strategy or plan for conducting research. A quantitative research approach was adopted for this study.

RESEARCH DESIGN:

Nursing research design is the **systematic framework** that guides the planning, implementation, and analysis of research in nursing. It determines **how data is collected, analyzed, and interpreted**, and ensures the study is **scientific, valid, and replicable**.

True-experimental pretest post test design was adopted for this study.

| GROUPS | Pre-test | intervention | Post- test |
|------------------|----------|--------------|------------|
| Experimental Gro | O1 | X | O2 |
| Control group | O1 | - | O2 |

O1-Pre test X-Intervention

O2- Post test

POPULATION:

In research, "**population**" refers to the **entire group of individuals or elements** that the researcher is interested in studying or drawing conclusions about. The study population comprises teacher training students .

TARGET POPULATION:

The target population refers to the entire group of individuals or entities that a researcher is interested in studying or making generalizations. In this study, it consisted of the teacher training students at Tamilnadu.

ACCESSIBLE POPULATION:

The accessible population refers to the portion of the target population that the researcher can realistically reach and include in the study. In this study it refers to the teacher training students studying at KM College of Education and Shri Bharathi College of Education at Krishnagiri district.

SETTING:

The study was conducted at KM College of Education and Shri Bharathi College of Education in Krishnagiri district. KM College of Education was selected as the experiment setting where the research intervention was provided. It is located in the rural areas of Krishnagiri district. The total student strength is 200 intake per batch for the B. Ed Programme with various departments. It started in the year 2007. It has various departments like Tamil, English, Physical sciences, Biological Sciences , History, Computer Sciences and commerce. Shri Bharathi College of Education was selected as Control setting. It started in 1992. The sanctioned intake per year was 100 in various disciplines of B.Ed and DTED through regular education.

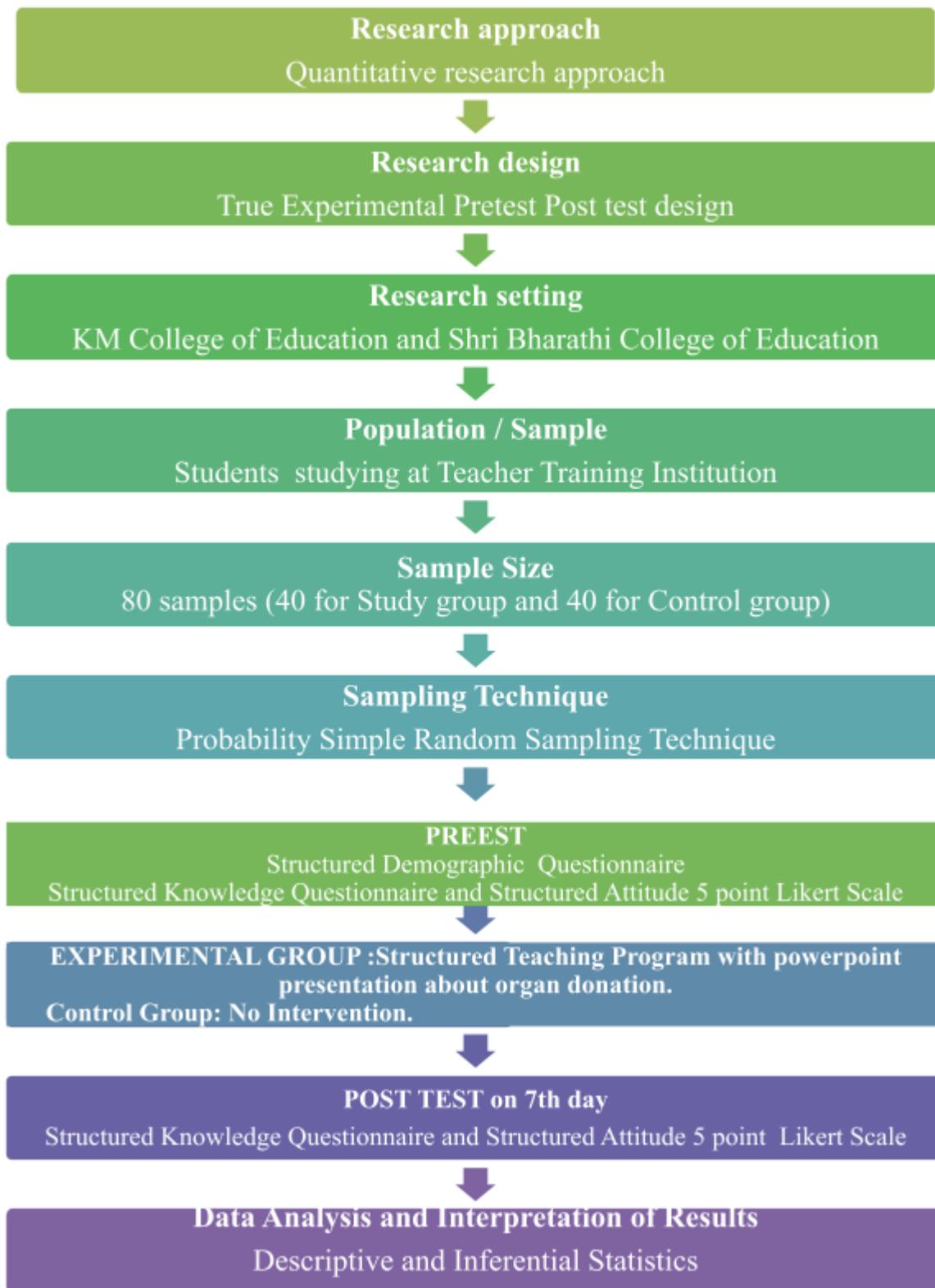


FIG NO: 3.1 SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

SAMPLE:

The **sample** is the actual group of individuals selected for the study from the accessible population. The samples were B.Ed/D.T.Ed teacher training students of KM College of education and Shri Bharathi College of Education who fulfills the inclusion criteria.

SAMPLE SIZE:

The sample size refers to the number of individuals or units selected from the accessible population to participate in a study.

- Sample size analyzed using power analysis with $\alpha = 0.05$ and $\beta = 0.2$.
- The sample size was calculated to be 72, the value was rounded up to 80,
- Expecting the 10% attrition rate.
- The total sample size was 80. In that 40 samples for the Experimental Group and 40 samples for the control group.

SAMPLING TECHNIQUE:

A **sampling technique** is the method used to select individuals from the accessible population to be included in the sample. The choice of technique depends on your research objectives, resources, and the need for generalizability. Simple random sampling technique is adopted. Through lottery method samples were selected.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria for sampling:

- Students studying BEd / DTEd courses.
- Students of both Gender.
- Students who can understand Tamil and English

Exclusion criteria for sampling:

- Students who are sick during data collection
- Students who attended organ donation awareness programs and conferences.

VARIABLES:

INDEPENDENT VARIABLE:

It is the interventions manipulated by the researcher which has a significant effect on outcome. In this study the independent variable was structured teaching program on knowledge and attitude regarding organ donation

DEPENDENT VARIABLES:

The dependent variable is the outcome or result of the independent variable(s). In this it was the knowledge and attitude about organ donation among the teacher training students.

DESCRIPTION OF THE TOOLS:

It consists of three sections.

TOOLS FOR DATA COLLECTION:

Section I: Structured Demographic questionnaire.

Session II: Structured Knowledge questionnaire

Session III : Structured Attitude 5 point scale

DEVELOPMENT AND DESCRIPTION OF THE TOOL:

The research instrument is developed in English after extensive review of literature and expert opinion. The investigator used demographic variables, self-structured knowledge questionnaires and attitude 5 point rating scale to assess the knowledge and attitude of students regarding organ donation.

It consists of the Following 3 Sections:

Session I: Demographic variables. It consists of demographic variables like Age, Gender, Religion, Residence, Marital status, Educational, Types of Family, Sources of information, Awareness, willingness to donate organs.

Session II: This part consists of 20 multiple choice questions, to assess the knowledge regarding organ donation. Each question has 4 points with one right answer. Each correct answer was given a score of one (1) mark and wrong answer or unanswered was given a score of zero(0).

GRADING OF SCORES: The obtained scores were to be computed for 20 structure knowledge questionnaires graded as follows.

| SCORE (%) | LEVEL OF KNOWLEDGE |
|-----------|-------------------------------|
| <50% | Inadequate knowledge |
| 51 – 75% | Moderately adequate knowledge |
| >75% | Adequate knowledge |

Session III: It allows the participants to express their opinion regarding organ donation. The scale consists of 10 statements to assess the tendency of the participants towards organ donation. Each statement has five options like Strongly Agree, Agree, uncertain, Disagree, Strongly disagree, for the positive statement the scores were 5,4,3,2,1. and negative questions the scores were 1,2,3,4,5. The maximum score is 50 and the minimum score is 10.

GRADING OF SCORES:

| SCORE | LEVEL OF ATTITUDE |
|--------|----------------------|
| >75% | Favorable |
| 51-75% | Moderately Favorable |
| <50% | Unfavorable |

VALIDITY: Content validity was obtained from two experts in Medical Surgical Nursing. The tool was found adequate and minor suggestions regarding organization of questions were given by the experts after incorporating the suggestions the tool was finalized and used for the pilot study

RELIABILITY:

- The Reliability of the, research tool was verified by using Rating scale for 8 teacher training students
- Results were obtained by test split off method for knowledge and for inter- rater reliability method was used for the attitude scale.
- The ‘r’ value of the structured knowledge questionnaire was 0.84 and the structured attitude checklist was 0.94.
- Hence the tool was considered highly reliable and the tools can be used for the main study.

PILOT STUDY:

Prior to the data collection the written consent obtained from the authorities of the institution. The study was conducted from 16.12.2024 to 21.12.2024. 8 samples were selected based on inclusion criteria. Each individual subject was informed about the purpose of the pilot study. Informed consent obtained from the sample in written form.

The subject had the freedom to withdraw from the study at any time. No physical or psychological harm was caused. The samples were assured of the confidentiality of the study result. Structured assisted teaching was provided to the samples. The finding revealed the feasibility for the setting and

DATA COLLECTION PROCEDURE:

- The researcher first collected the census of all teacher training colleges in Krishnagiri district. Data were collected from 06.01.2025 to 05.02.2025.
- 80 students were selected by using simple random sampling technique. 40 in each group.
- Each sample was explained about the purpose of the study. Written consent was obtained from each samples.
- Assessed demographic variables using structured questionnaires for the experimental group and the control group.
- Pre – test knowledge regarding organ donation was assessed using a structured knowledge questionnaire and attitude was assessed using 5 point likert scale for both the experimental and control groups.
- Structured teaching programme was provided using a power point presentation regarding organ donation for the experimental group at KM college of Education. It took 20 minutes for the presentation. No intervention for the control group at Shri Bharathi College of Education. After the post test same intervention was given to control group.
- Post-test done on 7th day with the same data collection instruments for the experimental group and the control group.

DATA ANALYSIS PLAN:

Data was categorized and analyzed using Descriptive and Inferential statistics

| DATA ANALYSIS | METHODS | REMARKS |
|-------------------------------|---|---|
| Descriptive Statistics | <ul style="list-style-type: none"> ● Frequency, ● Mean and ● Standard Deviation | <ul style="list-style-type: none"> ● Analyze the distribution of demographic variables |
| Inferential Statistics | <ul style="list-style-type: none"> ● Paired ‘t’ test ● Unpaired ‘t’ test ● Pearson Correlation | <ul style="list-style-type: none"> ● Evaluate the effectiveness of structured Teaching programme on knowledge and attitude ● Determine Correlation between knowledge and attitude |
| | <ul style="list-style-type: none"> ● Chi-square test | <ul style="list-style-type: none"> ● Association between Pretest level of knowledge and attitude with selected demographic variables.. |

SUMMARY:

This chapter dealt with the methodology of the study. It consists of research approach, research design, population, setting, sampling, variables, and description of the tool, validity and reliability, pilot study, method of data collection and plan for data analysis.

IV. DATA ANALYSIS AND INTERPRETATION RESULTS

"Analysis is the art of turning chaos into clarity."

— *David McCandless*

This chapter describes analysis and interpretation of data collected for a study to evaluate the effectiveness of structured teaching programme on knowledge and attitude regarding organ donation among students of selected teacher training colleges in Krishnagiri.

“Data analysis refers to the process of organizing, transforming, and interpreting collected data in order to extract useful information, detect patterns, and support decision-making.” - Best & Kahn (2022)

The collected data were organized, tabulated and analyzed by using descriptive and inferential statistics as follows,
ORGANIZATION OF THE DATA:

Section-A: Distribution of samples according to their demographic variables.

Section-B: Distribution of pretest knowledge score and level of attitude among the experimental group and

control group.

Section C: Comparison of mean scores pretest and post test level of knowledge and attitude among the experimental group and control group

Section-D: Testing Hypotheses

- a. Effectiveness of Structured Teaching programme on level of knowledge and attitude regarding organ donation among the experimental and control group.
- b. Find out the Correlation of between the level of knowledge and attitude score regarding organ donation among the experimental group and control group
- c. Association between the level of knowledge and attitude regarding organ donation with selected demographic variables among the experimental group and control groups.

**SECTION- A
Distribution of samples according to their demographic variables**

Table 4.1.1: Frequency and Percentage Distribution according to the demographic variables. (N=80)

| S. No | Demographic Variables | EXPERIMENTAL GROUP (n=40) | | CONTROL GROUP(n=40) | |
|-------|---|---------------------------|-------------------|---------------------|--------------------|
| | | n | % | n | % |
| 1. | Age | | | | |
| | 17-18 Years | 0 | 0 | 0 | 0 |
| | 19-20 Years | 10 | 25 | 8 | 20 |
| | 21-22 Years | 20 | 50 | 18 | 45 |
| | Above 22 years | 10 | 25 | 14 | 35 |
| 2 | Gender | | | | |
| | Male Female | 6 34 | 15 85 | 2 38 | 5 95 |
| 3 | Religion | | | | |
| | Hindu Christian Muslim | 26 12 2 | 65 30 5 | 28 12 0 | 70 30 0 |
| | Residence Urban Rural | 30 10 | 75 25 | 34 6 | 85 15 |
| 5 | Marital Status Married Unmarried Divorced Others | 2 38 0 0 | 5 95 0 0 | 10 30 0 0 | 25 75 0 0 |
| | Education | | | | |
| | B.T. Ed | 40 | 100 | 40 | 100 |
| | Type of Family Joint Family | | | | |

| | | | | | |
|---|---|-----|----|----|----|
| . | Nuclear Family Separate Family Single Parent Family | 8 | 20 | 12 | 30 |
| | | 22 | 55 | 20 | 50 |
| | | 8 | 20 | 4 | 10 |
| | | 2 | 5 | 4 | 10 |
| 8 | Willingness to donate organ | | | | |
| | | Yes | 24 | 60 | 20 |
| . | No | 16 | 40 | 20 | 50 |

The above table showed the frequency and percentage distribution of demographic variables. Regarding age, the majority of participants in both groups fell within the 19–22-year range. In the experimental group, 10 (25%) participants were aged 19–20 years, 20 (50%) were aged 21–22 years, and 10 (25%) were above 22 years, with none in the 17–18-year category. Similarly, the control group had 8 (20%) participants aged 19–20 years, 18 (45%) aged 21–22 years, and 14 (35%) above 22 years.

In terms of gender, the experimental group consisted of 6 males (15%) and 34 females (85%), while the control group had 2 males (5%) and 38 females (95%), indicating a predominantly female population in both groups. Religious affiliation showed that in the experimental group, 26 (65%) participants identified as Hindu, 12 (30%) as Christian, and 2 (5%) as Muslim. In contrast, the control group had 28 (70%) Hindus, 12 (30%) Christians, and no Muslim participants.

With respect to residence, 30 (75%) participants in the experimental group were from urban areas and 10 (25%) from rural areas, while the control group had 34 (85%) urban and 6 (15%) rural participants. Marital status analysis showed that 38 (95%) participants in the experimental group were unmarried and 2 (5%) were married, compared to 30 (75%) unmarried and 10 (25%) married participants in the control group. All participants in both groups (40 each) were pursuing B.T. Ed degrees (100%).

Family structure revealed that in the experimental group, 8 (20%) belonged to joint families, 22 (55%) to nuclear families, 8 (20%) to separate families, and 2 (5%) to single-parent families. In the control group, 12 (30%) participants were from joint families, 20 (50%) from nuclear families, 4 (10%) from separate families, and 4 (10%) from single-parent families. Finally, willingness to donate organs was reported by 24 (60%) participants in the experimental group and 20 (50%) in the control group, while 16 (40%) and 20 (50%) participants, respectively, expressed unwillingness.

Overall, the demographic comparison indicates that the experimental and control groups are broadly comparable across all variables, with only minor differences observed.

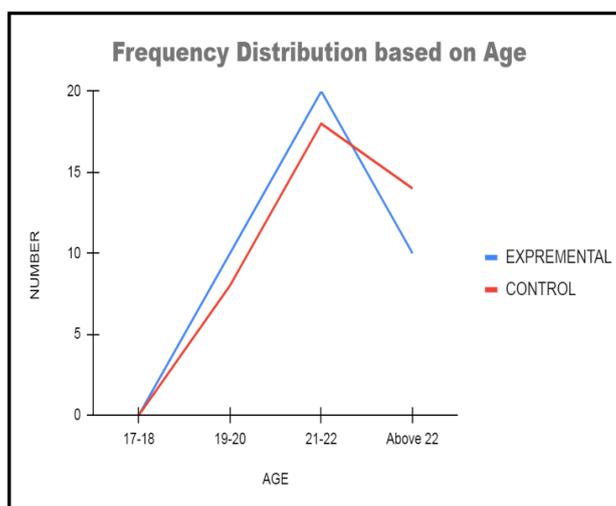


FIG NO: 4.1.1.1. FREQUENCY DISTRIBUTION BASED ON AGE

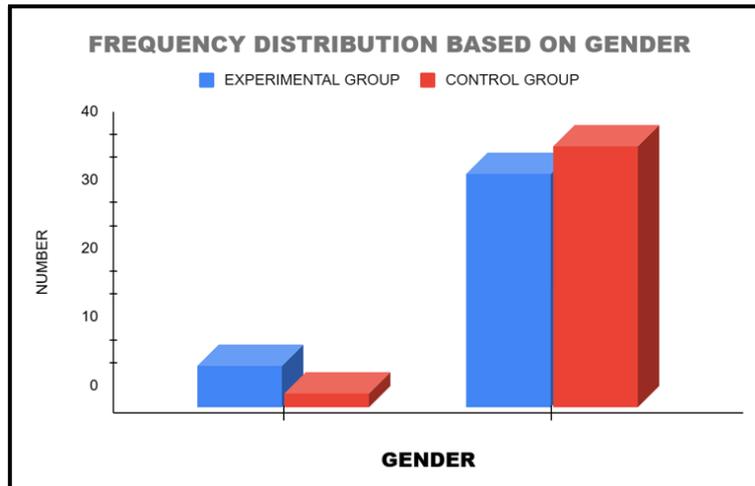


FIG NO: 4.1.1.2. FREQUENCY DISTRIBUTION BASED ON GENDER

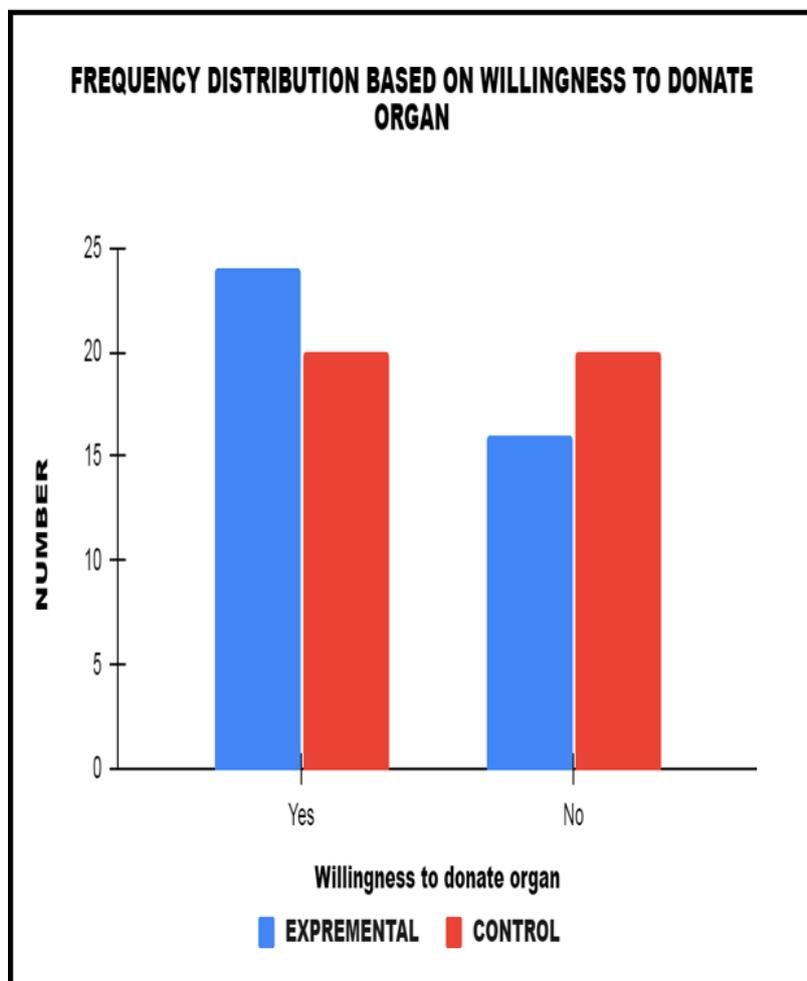


FIG NO: 4.1.1.3. FREQUENCY DISTRIBUTION BASED ON WILLINGNESS TO DONATE ORGANS

SECTION-B

Table 4.2.1: Frequency distribution of pretest and post test level of knowledge regarding organ donation among experimental group and control group

(N=80)

| Groups | PRETEST | | | | | | POSTTEST | | | | | |
|---------------------------|------------|----|-----------------------|----|----------|----|------------|----|-----------------------|----|----------|----|
| | Inadequate | | Moderately inadequate | | Adequate | | Inadequate | | Moderately inadequate | | Adequate | |
| | n | % | n | % | n | % | n | % | n | % | n | % |
| Experimental Group | 12 | 30 | 16 | 40 | 12 | 30 | 0 | 0 | 2 | 5 | 38 | 95 |
| Control Group | 14 | 35 | 16 | 40 | 10 | 25 | 14 | 35 | 16 | 40 | 10 | 25 |

In the pretest, among the experimental group 12(30%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 12(30%) had adequate knowledge. Similarly in the control group 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge.

In the posttest, among the experimental group 2(5%) had moderately adequate knowledge and 38(95%) had adequate knowledge. In the control group, 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge.

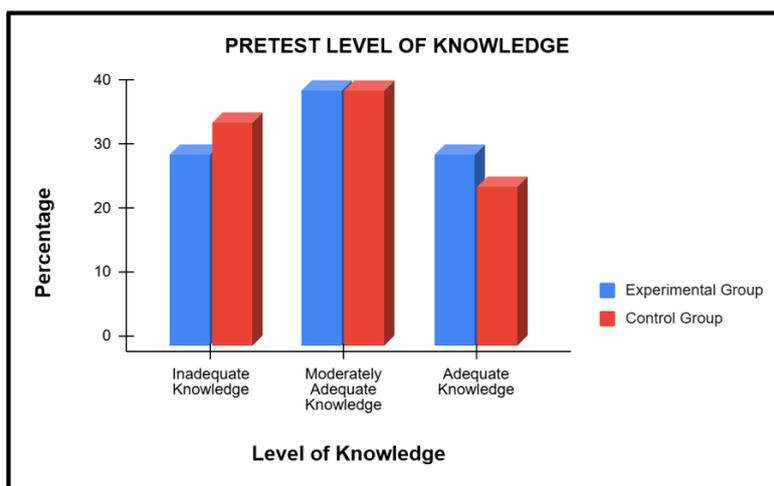


Fig. No :4.2.1.1 Pretest Level of Knowledge among Experimental Group and Control Group

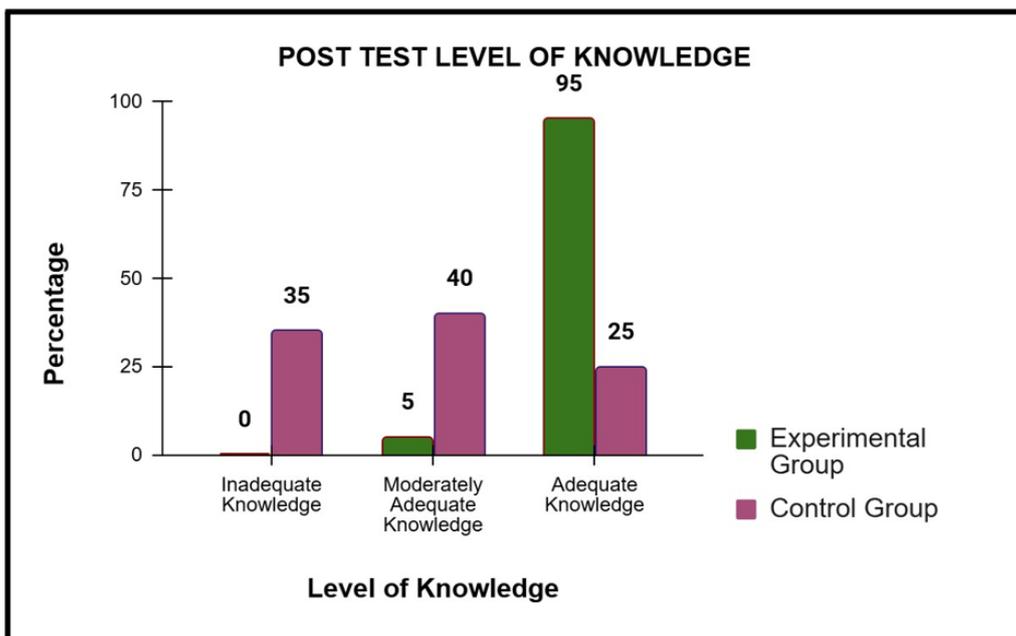


Fig. No :4.2.1.2 Post test Level of Knowledge among the Experimental Group and Control group

Table 4.2.2: Frequency distribution of pretest and post test level of attitude regarding organ donation among the experimental group and control group.

(N=80)

| Groups | Pre test | | | | | | Post test | | | | | |
|---------------|-------------|----|----------------------|----|-----------|----|-------------|---|----------------------|----|-----------|----|
| | Unfavorable | | Moderately Favorable | | Favorable | | Unfavorable | | Moderately Favorable | | Favorable | |
| | n | % | n | % | n | % | n | % | n | % | n | % |
| Exp. group | 0 | 0 | 20 | 50 | 20 | 50 | 0 | 0 | 16 | 40 | 24 | 60 |
| Control group | 6 | 15 | 18 | 45 | 16 | 40 | 2 | 5 | 22 | 55 | 16 | 40 |

Regarding the attitude about organ donation, among the Experimental Group in pretest 20(50%) of them had moderately favorable attitude and another 50% had favorable attitude. In the post test 16(40%) had a moderately favorable attitude and 60% developed a favorable attitude on organ donation.

Among the control group in the pre test , 6(15%) had an unfavorable attitude, 18(45%) of them had a moderately favorable attitude and another 40% had a favorable attitude. In the post test 2(5%) had an unfavorable attitude 22(55%) had moderately favorable attitude and 40% developed favorable attitude on organ donation.

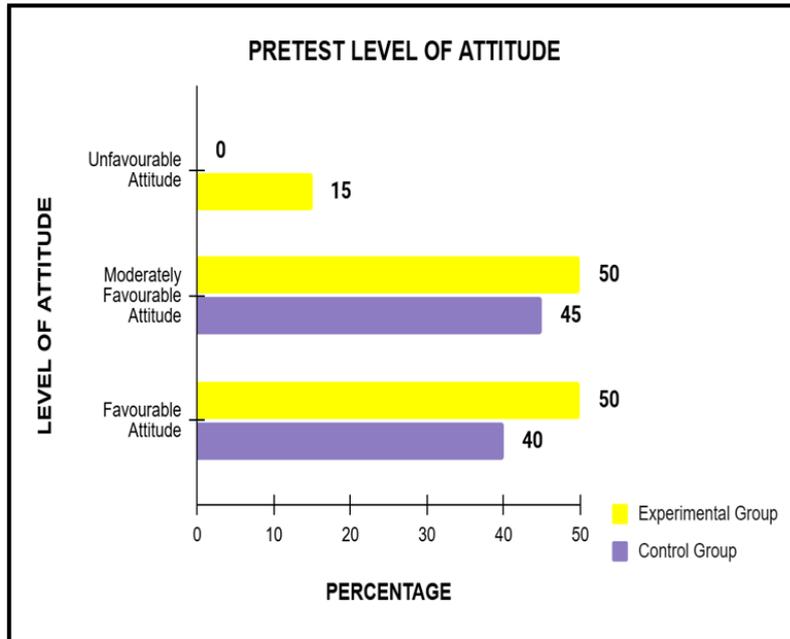


Fig. No :4.2.2.1 Pretest Level of Attitude among Experimental Group and Control Group

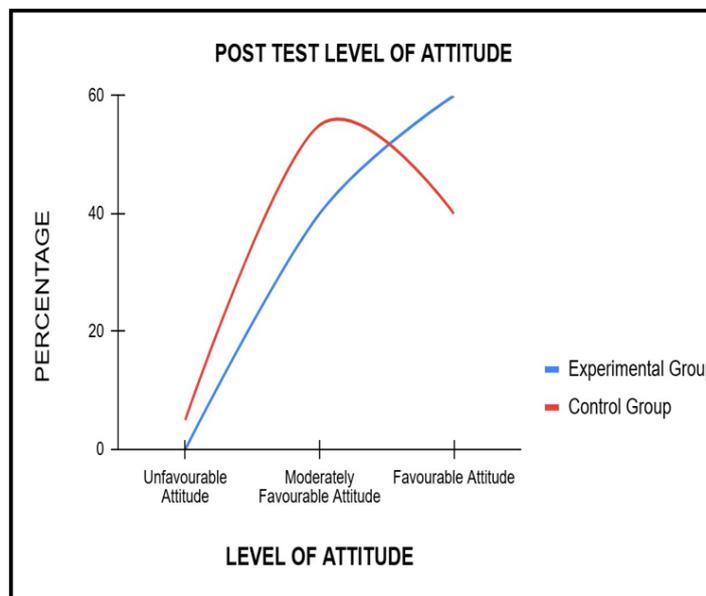


Fig. No :4.2.2.2 Posttest Level of Attitude among the Experimental Group and Control Group

SECTION – C

Comparison of Mean Score of pretest and posttest level of knowledge and attitude regarding organ donation among the experimental group and control group.

Table 4.3.1: Comparison of Mean Score of pretest and posttest level of knowledge regarding organ donation among the experimental group and control group.

| Groups | Pre test | | | Post test | | | |
|--------------------|----------|------|--------|-----------|------|--------|-----------------|
| | M | SD | Mean % | M | SD | Mean % | Mean Difference |
| Experimental Group | 12.43 | 4.59 | 60.15 | 17.65 | 2.07 | 88.25 | 28.1 |
| Control Group | 12.03 | 4.59 | 60.13 | 13.03 | 4.59 | 64.13 | 4.0 |

Among the Experimental Group, the pretest mean score was 12.43 with SD of 4.59. The mean percentage was 60.15. After the intervention, the post-test mean score increased to 17.65 (SD = 2.07), translating to 88.25%. The

mean difference of 28.1 percentage points demonstrates a substantial improvement, supported by a decrease in standard deviation, indicating more consistent performance post-intervention.

Among the Control Group, the pretest mean score was 12.03 with SD of 4.59. The mean percentage was 60.13. The post-test mean score increased to 13.03 (SD = 4.59), The post-test percentage increased marginally to 64.13%, yielding a mean difference of 4.0 percentage points. The unchanged standard deviation suggests no improvement in performance or consistency, highlighting the absence of a treatment effect.

Table 4.3.2: Comparison of Mean Score of pretest and posttest level of attitude regarding organ donation among the experimental group and control groups.

| Groups | Pre test | | | Post test | | | |
|--------------------|----------|------|--------|-----------|------|--------|-----------------|
| | M | SD | Mean % | M | SD | Mean % | Mean Difference |
| Experimental Group | 37.55 | 6.18 | 75.1 | 41.55 | 8.61 | 83.1 | 4.0 |
| Control group | 32.35 | 7.75 | 64.7 | 32.85 | 9.66 | 65.7 | 0.5 |

The **Experimental Group** showed an improvement from a **pre-test mean score of 37.55 (SD = 6.18, 75.1%)** to a **post-test mean of 41.55 (SD = 8.61, 83.1%)**, resulting in a **mean difference of 4.0**. This suggests a positive change in attitude following the intervention. In contrast, the **control group** exhibited minimal change, with a **pre-test mean of 32.35 (SD = 7.75, 64.7%)** and a **post-test mean of 32.85 (SD = 9.66, 65.7%)**, corresponding to a negligible **mean difference of 0.5 percentage points**. These results indicate that the intervention had a measurable effect on the Experimental Group’s performance, while the control group remained largely consistent, supporting the potential efficacy of the applied treatment.

SECTION - D

Effectiveness of Structured teaching programme on level of knowledge regarding organ donation among experimental group and control group

Table 4.4.1: Effectiveness of Structured teaching programme on level of knowledge regarding organ donation within the study and control group (N=80)

| Groups | Experimental Group | | | | Control Group | | | |
|-----------|--------------------|------|------|-------------|---------------|------|-----|----------------|
| | M | SD | MD | t value | M | SD | MD | t value |
| Pre test | 12.43 | 4.59 | 28.1 | 6.56 P=1 | 12.03 | 4.59 | 4.0 | 0.97 P=0.03 |
| Post test | 17.65 | 2.07 | | | 13.03 | 4.59 | | |

S=Significant NS=Not Significant P<0.001 The above table indicates that among the Experimental Group the mean and standard deviation (SD) of the pre-test scores were 12.43 ± 4.59, while the post-test mean and SD scores were 17.65 ± 2.07. The calculated **t-value was 6.56**, which was greater than the tabulated value at $p < .001$, indicating a highly significant improvement from pretest to posttest following the intervention.

In the control group the mean and standard deviation (SD) of the pre-test scores were 12.03 ± 4.59, while the post-test mean and SD scores were 13.03 ± 4.59. The calculated **t-value was 0.97**, which was not greater than the tabulated value. The result was not statistically significant ($P = 0.34$), indicating no significant difference between pre- and post-test scores.

Table 4.4.2: Effectiveness of Structured teaching programme on level of attitude regarding organ donation within the experimental group and control group

(N=80)

| Groups | Experimental Group | | | | Control Group | | | |
|-----------|--------------------|------|-----|-----------------|---------------|------|-----|----------------|
| | M | SD | MD | t value | M | SD | MD | t value |
| Pre test | 37.55 | 6.18 | 4.0 | 2.38 p=0.019 | 32.35 | 7.75 | 0.3 | 0.25 p=0.79 |
| Post test | 41.55 | 8.61 | | | 32.85 | 9.66 | | |

S=Significant NS=Not Significant P<0.001

The above table indicates that among the Experimental Group the mean and standard deviation (SD) of the pre-test scores were 37.55 ± 6.18 , while the post-test mean and SD scores were 41.55 ± 8.61 . The calculated **t-value was 2.38**, which was greater than the tabulated value at $p < .001$, indicating a highly significant improvement from pretest to posttest following the intervention.

In the control group the mean and standard deviation (SD) of the pre-test scores were 32.35 ± 7.75 , while the post-test mean and SD scores were 32.85 ± 9.66 . The calculated **t-value was 0.25**, which was not greater than the tabulated value. The result was not statistically significant ($P = 0.79$), indicating no significant difference between pre- and post-test scores.

Table 4.4.3: Effectiveness of Structured teaching programme on level of knowledge regarding organ donation between experimental group and control group

(N=80)

| Groups | Pre test | | | | Post test | | | |
|--------------------|----------|------|-----|---------------|-----------|-------|------|------------------|
| | M | SD | MD | t value | M | SD | MD | t value |
| Experimental Group | 12.43 | 4.59 | 0.4 | 0.389 0.69 | 17.65 | 2.07 | 4.62 | 5.80 p=0.0001 |
| Control Group | 12.03 | 4.59 | | | NS | 13.03 | 4.59 | |

S=Significant NS=Not Significant P<0.001

The above table indicates that in pre-test the mean and SD score among the Experimental Group were 12.43 ± 4.59 respectively and in the control group the mean and SD score were 12.03 ± 4.59 . The calculated ‘t’ value was 0.389, $p = 0.69$. There was no significant difference found between the groups.

In post- test mean and SD score among the Experimental Group were 17.65 ± 2.07 . and in the control group the mean and SD score were 13.03 ± 4.59 . The calculated ‘t’ value was 5.80, which is statistically significant at $p < 0.001$ level indicating the effectiveness of intervention on knowledge about organ donation. Hence the Hypothesis H1 was accepted.

Table 4.4.4: Effectiveness of Structured teaching programme on level of attitude regarding organ donation between the experimental group and control group

(N=80)

| Groups | Pre test | | | | Post test | | | |
|--------------------|----------|------|-----|-------------------|-----------|------|-----|-------------------------|
| | M | SD | MD | t value | M | SD | MD | t value |
| Experimental Group | 33.55 | 6.18 | 1.2 | 0.76 p=0.44 NS | 41.55 | 8.61 | 8.7 | 4.25 p<0.001 S*** |
| Control group | 32.35 | 7.75 | | | 32.85 | 9.66 | | |

S=Significant NS=Not Significant P<0.001

The above table indicates that in pre-test the mean and SD score among the Experimental Group were 33.55 ± 6.18 respectively and in the control group the mean and SD score were 32.35 ± 7.75 . The calculated ‘t’ value was 0.76, $p = 0.44$. There was no significant difference found between the groups.

In post- test mean and SD score among the Experimental Group were 41.55 ± 8.61 . and in the control group the mean and SD score were 32.85 ± 9.66 . The calculated ‘t’ value was 4.25, which is statistically significant at $p < 0.001$ level indicating the effectiveness of intervention on attitude about organ donation. Hence the Hypothesis H2 was accepted.

SECTION-D

Correlation of knowledge and attitude regarding organ donation among experimental and control group

Table 4.5.1: Correlation of knowledge and attitude regarding organ donation among experimental group and control group

(N=80)

| Groups | Pretest | | Post test | |
|--------------------------------|---------|------|-----------|------|
| | Mean | SD | Mean | SD |
| Knowledge about organ donation | 12.43 | 4.59 | 17.65 | 2.07 |
| Attitude about organ donation | 37.55 | 6.18 | 41.55 | 8.61 |
| Pearson Correlation ‘r’ value | 0.335 | | 0.76 | |
| | p=0.033 | | p=0.55 | |

Significant at $p < 0.05$

In pretest the mean knowledge score was 12.43 ± 4.59 and mean attitude score was

37.55 ± 6.18 , the ‘r’ value obtained was 0.335 which showed a moderate positive correlation between the level of knowledge and attitude regarding organ donation. In Post test the mean knowledge score was 17.65 ± 2.07 and mean attitude score was 41.55 ± 8.61 , the ‘r’ value obtained was 0.76 which showed a high positive correlation between the level of knowledge and attitude regarding organ donation. Hence the hypothesis H3 was accepted.

SECTION-E

Association between level of knowledge and attitude on organ donation with the selected demographic variables among the experimental group and control group

Table 4.6.1: Association between level of knowledge level on organ donation with the selected variables among the experimental group and control group.

(N=80)

| S. NO | Demographic variables | Experimental group | | | Control group | | |
|-------|-----------------------|--------------------|----------------|-------------|---------------|----------------|-------------|
| | | Pre test | | | Pre test | | |
| | | Df | X ² | Table value | Df | X ² | Table value |
| 1. | Age | 2 | 4.704 | 0.031 | 2 | 3.891 | 0.030 |
| 2. | Gender | 1 | 1.358 | 0.243 | 1 | 0.982 | 0.231 |
| 3. | Religion | 2 | 3.404 | 0.065 | 2 | 2.944 | 0.056 |
| 4. | Residence | 1 | 3.055 | 0.080 | 1 | 2.891 | 0.034 |
| 5. | Marital status | 3 | 0.958 | 0.327 | 3 | 0.456 | 0.124 |
| 6. | Type of family | 3 | 0.965 | 0.325 | 3 | 0.564 | 0.175 |

Not Significant at $p < 0.05$

The above table revealed that there was no significant association found between the level of knowledge on organ donation with the selected demographic variables. Hence the hypothesis H4 was not accepted.

Table 4.6.2: Association between level of attitude on organ donation with the selected demographic variables among the Experimental Group and control group.

(N=80)

| S.NO | Demographic Variables | Experimental group | | | Control group | | |
|------|-----------------------|--------------------|---------|-------------|---------------|--------|-------------|
| | | Pre test | | | Pre test | | |
| | | Df | X2 | Table value | Df | X2 | Table value |
| 1. | Age | 2 | 6.264 | 0.012 | 2 | 3.211 | 0.254 |
| 2. | Gender | 1 | 18.492* | 0.000 | 1 | 9.431* | 0.981 |
| 3. | Religion | 2 | 23.08* | 0.000 | 2 | 9.984* | 0.976 |
| 4. | Residence | 1 | 4.207 | 0.043 | 1 | 2.041 | 0.981 |
| 5. | Marital status | 3 | 5.428 | 0.019 | 3 | 2.564 | 0.067 |
| 6. | Type of family | 3 | 4.053 | 0.044 | 3 | 2.361 | 0.091 |

Not Significant at $p < 0.05$

The above table reveals that there was a significant association found between the pretest level of attitude with the selected demographic variables such as Gender and Religion. Hence the hypothesis H5 was accepted.

V. DISCUSSION

A study to evaluate the effectiveness of structured teaching programs on knowledge and attitude regarding organ donation among students of selected teacher training colleges at Krishnagiri.

DEMOGRAPHIC CHARACTERISTICS:

The frequency and percentage distribution of demographic variables among the experimental group regarding age, the majority of participants in both groups fell within the 19–22-year range. In the experimental group, 10 (25%) participants were aged 19–20 years, 20 (50%) were aged 21–22 years, and 10 (25%) were above 22 years, with none in the 17–18-year category. Similarly, the control group had 8 (20%) participants aged 19–20 years, 18 (45%) aged 21–22 years, and 14 (35%) above 22 years, with no participants aged below 19.

In terms of gender, the experimental group consisted of 6 males (15%) and 34 females (85%), while the control group had 2 males (5%) and 38 females (95%), indicating a predominantly female population in both groups. Religious affiliation showed that in the experimental group, 26 (65%) participants identified as Hindu, 12 (30%) as Christian, and 2 (5%) as Muslim. In contrast, the control group had 28 (70%) Hindus, 12 (30%) Christians, and no Muslim participants.

With respect to residence, 30 (75%) participants in the experimental group were from urban areas and 10 (25%) from rural areas, while the control group had 34 (85%) urban and 6 (15%) rural participants. Marital status analysis showed that 38 (95%) participants in the experimental group were unmarried and 2 (5%) were married, compared to 30 (75%) unmarried and 10 (25%) married participants in the control group. All participants in both groups (40 each) were pursuing B.T. Ed degrees (100%).

Family structure revealed that in the experimental group, 8 (20%) belonged to joint families, 22 (55%) to nuclear families, 8 (20%) to separate families, and 2 (5%) to single-parent families. In the control group, 12 (30%) participants were from joint families, 20 (50%) from nuclear families, 4 (10%) from separate families, and 4 (10%) from single-parent families. Finally, willingness to donate organs was reported by 24 (60%) participants in the experimental group and 20 (50%) in the control group, while 16 (40%) and 20 (50%) participants, respectively, expressed unwillingness.

The first objective was to assess the level of knowledge regarding organ donation among students at selected teacher training colleges

In the pretest, among the experimental group 12(30%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 12(30%) had adequate knowledge. Similarly in the control group 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge. In the posttest, among the experimental group 2(5%) had moderately adequate knowledge and 38(95%) had adequate knowledge. In the control group, 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge.

The result is consistent with a similar study conducted by **Nasar Alwahaibi et al., (2023)** to determine the knowledge of medical students regarding organ donation at Oman University, stated that the among 2,125 students, 68.1% were females, and 93.1% were in the age group 17-24 years old. Only 34.1% had good knowledge about organ donation, 70.2% had a low attitude, and 7.53% had adequate information about brain death. The most common reason for supporting donating organs among university students was to save a life (76.8%) and the most common reason for refusing organs, was I am still unaware. In addition, only 25.66% of the participants had a high attitude toward people with poor knowledge about organ donation. The majority of the students (84.13%) used online sources and social networks as the primary sources of information about organ donation.

Second objective to assess the level of attitude regarding organ donation among students at selected teacher training colleges

Regarding the attitude about organ donation, among the Experimental Group in pretest 20(50%) of them had moderately favorable attitude and another 50% had favorable attitude. In the post test 16(40%) had a moderately favorable attitude and 60% developed a favorable attitude on organ donation.

Among the control group in the pretest, 6(15%) had an unfavorable attitude, 18(45%) of them had a moderately favorable attitude and another 40% had a favorable attitude. In the post test 2(5%) had an unfavorable attitude 22(55%) had moderately favorable attitude and 40% developed favorable attitude on organ donation.

The result is supported by a similar study conducted by **Prasanna Mithra et al.,(2023)** on perception and attitude towards organ donation revealed that Overall, 59.6% participants showed the willingness to donate organs. Females (64.1%) and participants from upper socio economic status (62.7%) had higher willingness rates for organ donations. Hindus (63.6%) and Christians (63.3%) had higher willingness rates for organ donations than Muslims (38.2%). Also, 23.7% participants showed willingness to donate eyes and 33.6% wished to donate any organ after death. Most of the participants (67%) were aware that money should not be accepted for donating organs, and 58.1% were aware that it is an offence to accept any benefit for organ donations. Forty percent participants had perceived risks associated with organ donation. Regarding donor cards, 42.3% of the participants knew about it and 3.7% already possessed it

Third objective to evaluate the effectiveness of structured teaching program on knowledge and attitude regarding organ donation among students at selected teacher training colleges

Regarding the knowledge, In the pre-test the mean and SD score among the experimental group were 12.43 ± 4.59 respectively and in the control group the mean and SD score were 12.03 ± 4.59 . The calculated ‘t’ value was 0.389, $p = 0.69$. There was no significant difference found between the groups. In post- test mean and SD score among the Experimental Group were 17.65 ± 2.07 . and in the control group the mean and SD score were 13.03 ± 4.59 . The calculated ‘t’ value was **5.80**, which is statistically **significant** at $p < 0.001$ level indicating the effectiveness of intervention on knowledge about organ donation.

Pertaining to attitude, In the pre-test the mean and SD score among the Experimental Group were 33.55 ± 6.18 respectively and in the control group the mean and SD score were 32.35 ± 7.75 . The calculated ‘t’ value was 0.76, $p = 0.44$. There was no significant difference found between the groups. In post- test mean and SD score among the Experimental Group were 41.55 ± 8.61 . and in the control group the mean and SD score were 32.85 ± 9.66 . The calculated ‘t’ value was **4.25**, which is statistically **significant** at $p < 0.001$ level indicating the effectiveness of intervention on attitude about organ donation. Hence the Hypothesis **H1 was accepted**.

The result is similar to the research conducted by **Sri Harichandana et al.,(2024)** about effectiveness of educational intervention on Knowledge & attitude about organ donation. Result stated that out of the 226 study participants, 220 (97.30%) belong to the 18-40 age group, and 154 (68.1%) were female participants. Before the educational intervention,

132 (58.40%) participants were aware of organ donation. After the educational intervention, knowledge about the organ donation card increased from 101 (44.69%) participants to 152 (67.25%), and the inclination to donate organs rose from 128 (56.63%) to 151 (66.81%). Overall, awareness about organ donation improved from 132 (58.40%) to 175 (77.43%).

Another support with the result Investing in comprehensive education programs is crucial for enhancing organ and tissue donation coordinators' work-related wellbeing, Improving organ donation and transplantation outcomes, and promoting continued research and development tailored to their unique needs (**Sylvia 2025**).

Fourth objective correlate the knowledge and attitude regarding organ donation among students at selected teacher training colleges

In pretest the mean knowledge score was 12.43 ± 4.59 and mean attitude score was 37.55 ± 6.18 , the ‘r’ value obtained was 0.335 which showed a moderate positive correlation between the level of knowledge and attitude regarding organ donation. In Post test the mean knowledge score was 17.65 ± 2.07 and mean attitude score was 41.55 ± 8.61 , the ‘r’ value obtained was 0.76 which showed a high positive correlation between the level of knowledge and attitude regarding organ donation. Hence the hypothesis H3 was accepted.

A study conducted by **Prajapati et al.(2024)** stated that the association of participant’s knowledge and their

attitude toward organ donation was significant *(28.1, 4, 0.00). Similarly, the association of participant's knowledge and their practice toward organ donation were also significant *(10.5, 4, 0.02). The association of participant's attitude and their practice toward organ donation was also tested using Fisher's exact test and results were significant *(14.2, 4, 0.01).

Fifth objective was to associate the level of knowledge regarding organ donation among students at selected teacher training colleges with the selected demographic variables.

In this study the result indicates that there is no significant association found between the pre test level of knowledge with the selected demographic variables. Hence the hypothesis H4 was rejected. A study was conducted by **Vaibhvkumar shrivastav (2024)** et.al.indicated that the prevalence of knowledge was greater among those aged ≥ 24 years (40, 71%), those aged 18-20 years (124, 55%, $p > 0.05$), and urban residents (150, 62%) than among rural residents (74, 47%, $p < 0.01$). Females (134, 64%) had better knowledge than males (90, 47%, $p < 0.01$). A study by **Wisneiwka** stated that more than half of the respondents (57%) would agree to donate organ after the death of a loved one. Age was found to be statistically significant ($P = .001$). Older people showed more doubts about transplantation than people under 30. Over 80% of respondents agreed that initiatives to educate the public about transplantation are needed.

Sixth objective was to associate the level of attitude regarding organ donation among students at selected teacher training colleges with the selected demographic variables.

In this study the result indicates that there is a significant association found between the pretest level of attitude with the selected demographic variables such as Gender and Religion. Hence the hypothesis **H5 was accepted**. The result is consistent with the findings of research reviewed by **Ferid Krupic et al.(2024)** indicating that religious aspects significantly influenced the decision to donate organs. These aspects were shaped by the informants' self-assessed level of religiosity, their religious knowledge, their religion's stance on organ donation, beliefs about ownership of one's body, and concerns related to fear and prejudice.

VI. SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter consists of four sections. The first two sections consist of summary, and conclusion and the last two sections consist of the implications for nursing practice and recommendations.

SUMMARY OF THE STUDY

The purpose of the study was to evaluate the effectiveness of structured teaching programs on knowledge and attitude regarding organ donation. True –experimental pretest post test design was used to conduct this study at Krishnagiri. The samples are students from KM College of Education and Shri Bharathi College of Education. The samples were selected through simple random sampling technique. A structured questionnaire was used to collect the data. Structured knowledge questionnaire was used to assess the knowledge regarding organ donation and attitude was measured with the structured 5 point likert scale. Structured teaching programme was implemented to Experimental Groups after the pretest. The post test was done on the 7th day with the same tools. The data obtained was analyzed using both descriptive and inferential statistics based on the objectives and hypotheses of the study .Demographic variables were analyzed using frequency and percentage distribution. Effectiveness of structured teaching programs among teacher training students was assessed by using paired ‘t’ tests. Correlation of knowledge and attitude done with pearson correlation. Association between pre test knowledge level and selected demographic variables was analyzed using chi square test.

MAJOR FINDINGS OF THE STUDY:

- Regarding age, the majority of participants in both groups fell within the 19–22-year range. In the experimental group, 10 (25%) participants were aged 19–20 years, 20 (50%) were aged 21–22 years, and 10 (25%) were above 22 years, with none in the 17–18-year category. Similarly, the control group had 8 (20%) participants aged 19–20 years, 18 (45%) aged 21–22 years, and 14 (35%) above 22 years, with no participants aged below 19.
- In terms of gender, the experimental group consisted of 6 males (15%) and 34 females (85%), while the control group had 2 males (5%) and 38 females (95%), indicating a predominantly female population in both groups. Religious affiliation showed that in the experimental group, 26 (65%) participants identified as Hindu, 12 (30%) as Christian, and 2 (5%) as Muslim. In contrast, the control group had 28 (70%) Hindus, 12 (30%) Christians, and no Muslim participants.
- With respect to residence, 30 (75%) participants in the experimental group were from urban areas and

10 (25%) from rural areas, while the control group had 34 (85%) urban and 6 (15%) rural participants. Marital status analysis showed that 38 (95%) participants in the experimental group were unmarried and 2 (5%) were married, compared to 30 (75%) unmarried and 10 (25%) married participants in the control group. All participants in both groups (40 each) were pursuing B.T. Ed degrees (100%).

- Family structure revealed that in the experimental group, 8 (20%) belonged to joint families, 22 (55%) to nuclear families, 8 (20%) to separate families, and 2 (5%) to single-parent families. In the control group, 12 (30%) participants were from joint families, 20 (50%) from nuclear families, 4 (10%) from separate families, and 4 (10%) from single-parent families. Finally, willingness to donate organs was reported by 24 (60%) participants in the experimental group and 20 (50%) in the control group, while 16 (40%) and 20 (50%) participants, respectively, expressed unwillingness.

- In the pretest, among the Experimental Group 12(30%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 12(30%) had adequate knowledge. Similarly in the control group 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge.

- In the posttest, among the Experimental Group 2(5%) had moderately adequate knowledge and 38(95%) had adequate knowledge. In the control group, 14(35%) had inadequate knowledge and 16(40%) had moderately adequate knowledge and 10(25%) had adequate knowledge.

- Regarding the attitude about organ donation, among the Experimental Group in pretest 20(50%) of them had moderately favorable attitude and another 50% had favorable attitude. In the post test 16(40%) had a moderately favorable attitude and 60% developed a favorable attitude on organ donation.

- Among the control group in the pre test , 6(15%) had an unfavorable attitude, 18(45%) of them had a moderately favorable attitude and another 40% had a favorable attitude. In the post test 2(5%) had an unfavorable attitude 22(55%) had moderately favorable attitude and 40% developed favorable attitude on organ donation.

- Among the Experimental Group, the pretest mean score was 12.43 with SD of 4.59. The mean percentage was 60.15. After the intervention, the post-test mean score increased to 17.65 (SD = 2.07), translating to 88.25%. The mean difference of 28.1 percentage points demonstrates a substantial improvement, supported by a decrease in standard deviation, indicating more consistent performance post-intervention.

- Among the Control Group, the pretest mean score was 12.03 with SD of 4.59. The mean percentage was 60.13. The post-test mean score increased to 13.03 (SD = 4.59), The post-test percentage increased marginally to 64.13%, yielding a mean difference of 4.0 .

- The **Experimental Group** showed an improvement from a **pre-test mean score of 37.55 (SD = 6.18, 75.1%)** to a **post-test mean of 41.55 (SD = 86.1, 83.1%)**, resulting in a **mean difference of 4.0**. This suggests a positive change in attitude. following the intervention. In contrast, the **control group** exhibited minimal change, with a **pre-test mean of 7.53 (SD = 1.83, 75.3%)** and a **post-test mean of 7.56 (SD = 2.13, 75.6%)**, corresponding to a negligible **mean difference of 0.3**.

- Among the Experimental Group the calculated **t-value was 6.56**, which was greater than the tabulated value at $p < .001$, indicating a highly significant improvement in the level of knowledge from pretest to posttest following the intervention. In the control group the calculated **t-value was 0.97**, which was not greater than the tabulated value. The result was not statistically significant ($P = 0.34$).

- Regarding the attitude, the Experimental Group the mean and standard deviation (SD) of the pre-test scores were 37.55 ± 6.18 , while the post-test mean and SD scores were 41.55 ± 8.61 . The calculated **t-value was 2.38**, which was greater than the tabulated value at p

$< .001$, indicating a highly significant improvement from pretest to posttest following the intervention. In the control group the mean and standard deviation (SD) of the pre-test scores were 32.35 ± 7.75 , while the post-test mean and SD scores were 32.85 ± 9.66 . The calculated **t-value was 0.25**, which was not greater than the tabulated value. The result was not statistically significant ($P = 0.79$).

- Comparison of post- test mean and SD score of knowledge level among the Experimental Group and control groups were 17.65 ± 2.07 and 13.03 ± 4.59 respectively. The calculated ‘t’ value was 5.80, which is statistically significant at $p < 0.001$ level indicating the effectiveness of intervention on knowledge about organ donation. Hence the Hypothesis H1 was accepted.

- Comparison of the post- test mean and SD score of attitude among the Experimental Group and control group were 41.55 ± 8.61 . and 32.85 ± 9.66 respectively. The calculated ‘t’ value was 4.25, which is statistically significant at $p < 0.001$ level indicating the effectiveness of intervention on attitude about organ donation. Hence the Hypothesis H2 was accepted.

- On Correlation of pretest mean and SD of knowledge and attitude, the ‘r’value obtained was 0.335 which showed a moderate positive correlation. In Post test the ‘r’value obtained was 0.76 which showed a high

positive correlation between the level of knowledge and attitude regarding organ donation. Hence the hypothesis H3 was accepted.

- There was no significant association found between the level of knowledge on organ donation with the selected demographic variables. Hence the hypothesis H4 was not accepted.
- There was a significant association found between the pre test level of attitude with the selected demographic variables such as Gender and Religion. Hence the hypothesis H5 was accepted.

VII. CONCLUSION:

The study evaluated the effectiveness of structured teaching programs on knowledge and attitude regarding organ donation among students of selected teacher training colleges at Krishnagiri. The comparison of post test mean and standard deviation between the Experimental Group and control group proved that the ‘t’ value was 5.80 which is statistically significant at $P < 0.001$ level. Regarding the attitude, between the groups comparison of mean and standard deviation, the t value was 8.07 which is statistically significant at $p < 0.001$ level. It concludes that the structured teaching programme was very effective in enhancing the knowledge and bringing a positive attitude among the teachers training students at selected settings.

IMPLICATIONS:

The findings of the study have practical application in the field of nursing. The implication of the study could be discussed in four areas namely Nursing practice, Nursing administration, Nursing education and Nursing research.

IMPLICATIONS FOR NURSING PRACTICE:

The findings of the study will help the nurse in following ways:

- Nurses can adopt the structured teaching programme model used in this study to develop similar educational modules targeting various community groups. These interventions can be applied in outpatient departments, health education units, and community outreach programs to raise awareness and foster favorable attitudes towards health issues such as organ donation, disease prevention, and lifestyle modifications.
- Nurses can utilize these findings to disseminate the knowledge about organ donation among health care workers at different health care settings.
- Community health nurses can incorporate structured teaching strategies as a routine part of home visits, community health camps, and group education sessions. This research provides evidence-based guidance on how structured, goal-oriented education can influence health perceptions and behaviors in non-clinical populations.

IMPLICATIONS FOR NURSING ADMINISTRATION:

- Nurse managers and administrators can use the findings to advocate for the inclusion of structured teaching modules in institutional health promotion policies. These programmes can be institutionalized in nursing homes, primary health centers, and wellness clinics as part of preventive and promotive health services.
- The structured teaching programme can be incorporated into in-service education and staff development programs to improve the teaching competencies of nurses.

IMPLICATIONS FOR NURSING EDUCATION:

- Nurse educators can utilize these research findings to teach the student nurses about the rate of organ donation and ways to improve the organ donation awareness among the students and public.
- Nursing students are future frontline educators and advocates, training them with effective teaching models as evidenced in this study can prepare them to deliver impactful health education in clinical and community settings, particularly on sensitive topics like organ donation.
- Nurse educators can arrange continuing education programs, workshops, seminars for nurses regarding organ donation.

IMPLICATIONS FOR NURSING RESEARCH:

- Nurse researchers can build upon this study to explore the impact of structured teaching programmes in other demographic groups, such as nursing students, high school students, or community health volunteers. This provides a foundation for replicative or comparative studies across diverse settings
- The researcher should conduct periodic review of research findings and disseminate the findings through conference, seminar, publications in journals and in the world wide web.
- The positive outcomes of the intervention provide a strong evidence base for nurse

researchers to develop grant proposals aimed at scaling up structured educational interventions. Such research can also inform policy recommendations related to health education in academic and community settings.

RECOMMENDATIONS FOR FUTURE STUDY:

- A similar study can be conducted on a larger scale to generalize the study findings.
- Future studies are recommended to evaluate the long-term retention of knowledge and attitude changes. Replicating the study across diverse geographical and demographic populations would help generalize the findings.
- A similar study can be conducted to find out the knowledge and attitude among students of engineering colleges.
- A qualitative study can be conducted about the perception about organ donation among the family members.
- Incorporating visual aids, videos, and digital platforms can further enhance engagement and understanding, especially for tech-savvy youth.

LIMITATION:

Getting co-operation for intervention was difficult for few samples. The researcher made a convenient time and place for data collection.

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