

A Study to Evaluate the Effectiveness of Planned Educational Programme on Knowledge Regarding Organ Donation among 3rd Year GNM Nursing Students in Selected Schools of Nursing at Vijayapur, Karnataka

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Abstract: *Aim* of the study was to assess the knowledge regarding organ donation among 3rd year GNM nursing students. the research design used for this study is pre experimental (one group pre-test) design. to assess the knowledge and perception of organ donation among GNM students in selected schools of Nursing at Vijayapur. The tool used for the study is self-administered knowledge Questionnaire to assess the knowledge of GNM students regarding organ donation. **Result:** In the pretest, level of knowledge of 3rd year GNM students studying in school of Nursing Vijayapur before using Planned Education Programme. In that 33 (55.0 %) of 3rd year GNM students were having Inadequate knowledge, 24 (40.0%) having Moderate knowledge and 3 (5.0%) of 3rd year GNM students were having Adequate knowledge about Organ Donation. The finding showed that the mean post-test knowledge score of the subjects was 26.5 is higher than the mean pretest score of 16.3. The calculated 't' value obtained from paired 't' test was -31.6 (p-value < 0.0001) the chi-square test was applied to check the association of socio-demographic variables with knowledge scores showed that Age (in years), Religion, Type of family, Place of residence were no significant. **Interpretation and conclusion:** The result of the study showed that, there was a significant improvement obtained following PEP on Organ Donation. This study enlightens that there is an immense need for educational programme in school of nursing to improve the knowledge of 3rd year GNM students regarding Organ Donation.

Keywords: Evaluate, Effectiveness, Planned Educational Programme, Knowledge, Organ donation, GNM students

1. Introduction

Health is defined by the World Health Organization (WHO), as "A state of complete physical, mental and social well-being and not merely an absence of disease or infirmity." Health may be defined as the ability to adapt and manage physical, mental and social challenges thought life. In keeping with the biomedical perspective, early definitions of health focused on the theme of the body's ability to function; health was seen as a state of normal function that could be disrupted from time to time by disease. An example of such a definition of health is: "A state characterized by anatomic, physiologic, and psychological integrity; ability to perform personally valued family, work, and community roles; ability to deal with physical, biological, psychological, and social stress."¹

A disease is a particular abnormal condition that negatively affects the structure or function of part or all of organisms, and that is not due to any external injury. Diseases are often constructed as medical conditions that are associated with specific symptoms and signs. A disease may be caused by external factors such as pathogens or by internal dysfunctions. Diseases can affect people not only physically, but also mentally, as contracting and living with a disease can alter the affected person's perspective on life. Death due to disease is called death by natural causes. There are four main types of disease: infectious diseases, deficiency diseases, hereditary diseases (including both genetic diseases and non-genetic hereditary diseases), and

physiological diseases. Diseases can also be classified in other ways, such as communicable versus non-communicable diseases.²

India is ranked second to China in prevalence of Diabetes and Coronary heart disease. Experts say that it is soon going to be the liver disease capital of the world. These diseases have increased so much in their incidence over the last 20 years that there is a huge demand for organs like kidney, liver and heart. The only way to tackle this situation and reduce the rising toll of mortality due to organ failure is organ donation and transplantation. Organ transplantation is defined as the engraftment of human cells, tissues or organs from a donor to recipient with an aim of restoring function (s) in the body.³ Health promotion is "the process of enabling people to increase control over and to improve health." It is not directed against any particular disease, but is intended to strengthen the host through a variety of approaches (interventions). Health education, Environmental modifications, Nutritional interventions, Lifestyle and behavioural changes.⁴ The first living organ donor in a successful transplant was Ronald Lee Herrick (1931–2010), who donated a kidney to his identical twin brother in 1954. The lead surgeon, Joseph Murray, won the Nobel Prize in Physiology or Medicine in 1990 for advances in organ transplantation. The youngest organ donor was a baby with anencephaly, born in 2015, who lived for only 100 minutes and donated his kidneys to an adult with renal failure.⁵

2. Literature Survey

A literature review is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research.

- 1) A retrospective study was conducted to determine prevalence and potential correlates of family refusal to organ donation for patients declared brain dead. Of 111 cases declared brain dead by our hospital within a 12-year period between 2008 and 2019, a total of 82 potentially brain-dead organ donors. The rate of family refusal to organ donation was 51.2% and because of religious concerns (64.3%) in most of cases. The likelihood of family consent to organ donation was significantly higher for an adult vs a child (60.0% vs 25.9%, $P = .004$) and for a schooler and adolescent age vs a younger child (55.6 vs 22.5%, $P = .004$). Patients who were declared brain dead after non-traumatic intracranial hemorrhage (60.4%) vs encephalitis (18.2%) had higher rates of family consent to organ donation ($P = .023$). A study finding revealed 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. 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 socio demographic factors, length of intensive care unit stay, awareness of decedent's wishes, or time of family interview.⁶
- 2) The study was conducted to assess care providers' knowledge and attitude toward organ donation, as they will be volunteer advocates for the public to increase organ donation in the country. A cross-sectional survey was conducted at 3 main higher private clinics and at Jimma University Specialized Hospital (JUSH) in Ethiopia from February 25, 2018, to June 21, 2018. Knowledge measuring questions had 2 possible answers (yes or no). The attitudes domain was measured with an "Agree" and "Disagree" categorical response scale. The results have shown that total, 326 care providers were involved in the study. The mean age and service year of the participants were 29.68 (± 4.877) and 4.28 (± 4.561), respectively. The overall weighted knowledge and practices scores were 4.344 (4.214, 4.473) and 5.64 (5.39, 5.89), respectively. The study was recommended that encouragement to health care workers and better counseling to be given to improve organ donation.⁷
- 4) A study was conducted on semi structured interviews with 56 living kidney donors regarding benefits experienced from donation. Using a qualitative descriptive and constant comparative approach, themes were derived inductively from interview transcripts by 2 independent coders; differences in coding were reconciled by consensus. The 56 participants, 30 were in interdependent relationships with their recipients (shared household and/or significant caregiving responsibilities). Tangible benefits identified by participants fell into 3 major categories: health and wellness benefits, time and financial benefits, and interpersonal benefits. Participants described motivations to donate a kidney based on a more nuanced understanding of the benefits of donation

than accounted for by the current "acceptable risk" paradigm. A study was revealed that tangible benefits for interdependent donors may shift the "acceptable risk" paradigm (where no benefit is assumed) of kidney donor evaluation to a risk/benefit paradigm more consistent with other surgical decision-making.⁸

4. The study was conducted to assess gender differences in the perceptions and attitude of general population toward organ donation. A cross-sectional descriptive study was carried out among randomly selected patient relatives ($n = 193$) at the outpatient department of a tertiary care center. Data were collected through face-to-face interview using a structured questionnaire. The results have shown that majority of men than women were aware and in favor of promoting organ donation ($\chi^2 = 10.428$, $P < 0.001$). Best part of men (70.9%) compared to 52.3% of women were willing to donate their organs after death ($\chi^2 = 18.080$, $P < 0.001$). The study was concluded that number of (48.5%) men were willing to sign on the organ donation card. Hence the study was recommended that there is an urgent need to uncover the myths and misconceptions of the general population toward organ donation.⁹
- 6) A study was conducted on illness attribution among Japanese patients with acute myocardial infraction at 5 hospitals in urban areas in Japan using a cross-sectional study design on convenience sample of 155 patients admitted with acute myocardial infraction using semi-structured interview. Known risk factors were assessed by medical record review and patient interview and found that Twenty-two different primary causes for acute myocardial infraction were identified. Patients most commonly cited smoking, stress, and diet as risk factors. Except for smoking, Japanese patients did not identify their cardiac risk factors as cause of their acute myocardial infraction. Controlling for socio-demographic characteristics, patients with a recorded history of coronary heart disease were significantly less likely to attribute their cardiac risk factors to their acute myocardial infraction ($P < 0.05$) and concluded that, effective education and counselling of patients after an acute myocardial infraction must be coupled with their view of what factors put them at risk for future acute myocardial infractions.¹⁰

3. Problem Definition

"A Study to Evaluate the Effectiveness of Planned Educational Programme on Knowledge Regarding Organ Donation among 3rd Year GNM Nursing Students in Selected Schools of Nursing at Vijayapur, Karnataka."

4. Objectives of the study

- 1) To assess the knowledge regarding organ donation among 3rd year GNM nursing students.
- 2) To evaluate the effectiveness of planned educational programme on knowledge regarding organ donation among 3rd year GNM nursing students.
- 3) To find the association between the level of knowledge with selected socio-demographic variables.

5. Methods/Approach

The research approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis, and interpretation. It is, therefore, based on the nature of the research problem being addressed. The research design used in the study was one group pretest post-test research design. The present study was conducted at selected school of nursing at Vijayapur. The population for this study was 3rd Year GNM Nursing students. The sample size consists of 60, 3rd Year GNM Nursing students. Purposive sampling technique is used for the present study.

6. Results

This chapter deals with the analysis and interpretation of data collected from 3rd Year GNM Nursing students. The data collected was coded and analyzed as per objectives and hypothesis of the study.

Table 1: To assess demographic variables of 3rd Year GNM students, n=60

S. No	Socio-demographic Variables	No	%
1	Age (in years):		
	a) 20-25	33	55
	b) 26-30	21	35
	c) 31-35	6	10
2	Gender		
	a) Male	25	41.7
	b) Female	35	58.3
3	Religion:		
	a) Hindu	48	80
	b) Muslim	12	20
	c) Christian	0	0
4	Type of family:		
	a) Nuclear family	39	65
	b) Joint family	14	23.3
	c) Extended family	7	11.7
5	Family income (In Rupees / month):		
	a) Less than 4000/-	6	10
	b) 4001/-5000/-	16	26.7
	c) 5001/-10, 000/-	26	43.3
6	Place of residence:		
	a) Rural	29	48.3
	b) Semi urban	18	30
7	Source of information:		
	a) Family and friends	8	13.3
	b) Books and magazines	31	51.7
	c) Internet	6	10
	d) Health care providers	15	25

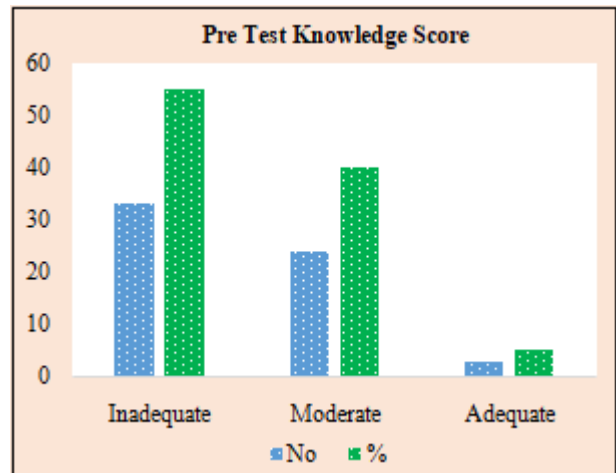


Figure 1: Pretest knowledge regarding Organ Donation among 3rd Year GNM students

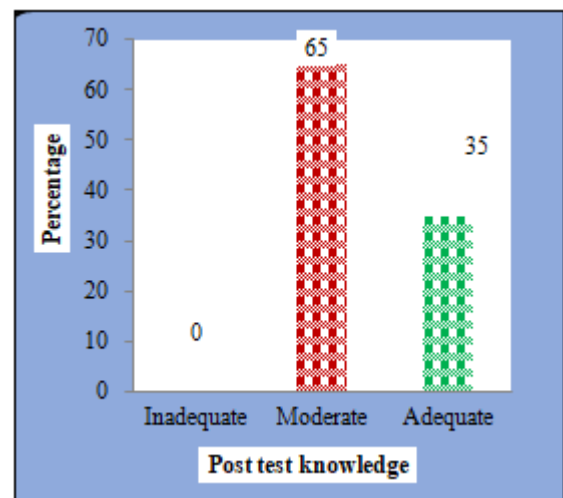


Figure 2: Post test knowledge regarding Organ Donation among 3rd Year GNM students

Table 2: Comparison of pre and post knowledge regarding Organ Donation among 3rd Year GNM students, n=60

Level of knowledge	Score	Pre test		Post test	
		No	%	No	%
Inadequate	<50%	33	55	0	0
Moderate	50-75%	24	40	39	65
Adequate	>75%	3	5	21	35
Total		60	100	60	100

Table 3: Evaluate the Effectiveness of Planned Educational Programme on Knowledge Regarding Organ Donation among 3rd Year GNM Students

Knowledge	Mean	SD	Mean %	t-value
Pre test	16.3	3.5	54.3	31.6**
Post test	26.5	2.7	88.3	
Enhancement	10.2	2.5	34	

** Significant at P<0.01, (df 59, t value 2)

Table No: 03 states that the effectiveness of Planned Educational Programme in terms of gaining knowledge score in post test.

According to this 3rd year GNM students pre test knowledge regarding Organ Donation was 16.3 and post test knowledge regarding Organ Donation was 26.5, which is significant, so there is enough evidence that Planned Educational

programme is effective in enhancing the knowledge of the 3rd year GNM students regarding Organ Donation.

To determine the association between demographic variables and level of knowledge of 3rd Year GNM students

Association between level of knowledge of 3rd year GNM students and selected demographic data. In that there were significant association between knowledge scores and demographic variables such as Gender, Family income and source of information. But there were not significant between knowledge scores and demographic variables such as Age, religion, type of family and place of residency.

7. Discussion

This chapter presents the major findings of the study. The aim of the study was to evaluate the effectiveness of Planned Educational Programme in improving the knowledge of 3rd year GNM nursing students regarding Organ Donation.

The major findings of the study

Majority 33 (55%) of the 3rd Year GNM students were between the age group 20 to 25 years, 21 (35%) of them were between the age group 26 to 30 years and 6 (10%) were between age group of 31 to 35 years.

Majority of the 35 (58.3%) were Female 25 (41.7%) were Male and respondents.

Majority of the 3rd Year GNM students 48 (80%) were Hindu, 12 (20%) were Muslim respondents.

Majority 39 (65%) of the respondents were belongs to Nuclear family, 14 (23.3%) of the respondents were belong joint family and 7 (11.7%) were belongs to extended family.

Majority 26 (43.3%) of respondents were between 5001-10000 16 (26.7%) of them were belongs to family income of 4001-5000, 12 (20%) of them were belong to more than 10000 income of family. And 6 (10%) of respondents were belong to family income of less than 4000,

Majority 29 (48.3%) of respondents were belong to Rural, 18 (30%) of them were belongs to Semi urban, and 13 (21.7%) of them were belong to Urban areas.

Majority 31 (51.7%) of them were getting information from books and magazines, 15 (25%) of them were getting information from Health care providers. 8 (13.3%) of respondents were getting information from family and friends, 6 (10%) of respondents were getting information from internet.

Objectives

To Assess the Knowledge Regarding Organ Donation among 3rd Year GNM Nursing Students

It was Clear That pretest knowledge of 3rd Year GNM students regarding Organ Donation the level of knowledge of 3rd Year GNM students before using Planned Educational programme. In that 33 (55%) of respondents were have

inadequate knowledge, 24 (40%) of them have moderate knowledge and 3 (5%) of respondents have adequate knowledge.

To Determine the Effectiveness of Planned Educational Programme on Knowledge Regarding Organ Donation

It was clear that 3rd year GNM students pre test knowledge regarding Organ Donation was 16.3 and post test knowledge regarding Organ Donation was 26.5, which is significant, so there is enough evidence that Planned Educational programme is effective in enhancing the knowledge of the 3rd year GNM students regarding Organ Donation.

To Find the Association between Knowledge Scores with Selected Socio-demographic Variables

It was clear association between level of knowledge of 3rd year GNM students and selected demographic data. In that there were significant association between knowledge scores and demographic variables such as Gender, Family income and source of information. But there were not significant between knowledge scores and demographic variables such as Age, religion, type of family and place of residency.

8. Conclusion

Pretest knowledge of 3rd Year GNM students regarding Organ Donation the level of knowledge of 3rd Year GNM students before using Planned Educational programme. In that 33 (55%) of respondents were have inadequate knowledge, 24 (40%) of them have moderate knowledge and 3 (5%) of respondents have adequate knowledge. Post test knowledge of 3rd Year GNM students regarding Organ Donation after using Planned Educational programme. In that 0 (0%) of respondents were have inadequate knowledge, 39 (65%) of them have moderate knowledge and 21 (35%) of respondents have adequate knowledge. Mean post-test score was higher as compared to mean pre-test score and was highly significant with p-value less than 0.0001. Pre-test knowledge regarding Organ Donation was 16.3 and post test knowledge regarding Organ Donation was 26.5, which is significant, so there is enough evidence that Planned Educational programme is effective in enhancing the knowledge of the 3rd year GNM students regarding Organ Donation. Association between level of knowledge of 3rd year GNM students and selected demographic data. In that there were significant association between knowledge scores and demographic variables such as Gender, Family income and source of information. But there were not significant between knowledge scores and demographic variables such as Age, religion, type of family and place of residency.

9. Future Scope

Education

As a nurse educator, there are abundant opportunities to educate the 3rd Year GNM Nursing Students as well as other Health Team members regarding Organ Donation. Nursing professionals working in the hospitals as well as in the community set ups able to understand the importance of health education regarding Organ Donation. The nurse plays an important role in health care delivery system. The nurses can visit to Community to recognize the problems of the

community. The nurse can insist on all the Health Team members regarding Organ Donation.

Administration

It implies that a nursing administrator should take part in developing protocols, standing orders related to design of the health educational programmes and strategies related to Organ Donation. Nurse administrator should plan and organize continuing nursing educational programmes for 3rd Year GNM Nursing Students and motivate them in conducting awareness programmes on Organ Donation education programmes. Planning and organizing of such programmes requires on efficient teamwork, planning for men, money and material for successful education programmes.

Research

This study helps the nurse researcher to develop an appropriate health education tools for educating health team members regarding Organ Donation according to their Socio – demographic, Socio – economic, cultural and political characteristics. The findings play a strong emphasis on extensive need to evaluate the effectiveness of Planned Education Programme regarding Organ Donation. An experimental study could be conducted to find out the effectiveness of Planned Education Programme. . The findings of this study emphasize the importance of further studies and need of educating the student nurses.

References

- [1] Health-available from Wikipediahttps://en.wikipedia.org/wiki/Health, assessed on 24/01/2020.
- [2] Disease – available from https://en.wikipedia.org/wiki/Diseasesassessed on 24/01/2020.
- [3] Horton RL, Horton PJ. A model of willingness to become a potential organ donor. Soc Sci Med.1991; 33 (9): 1037-51.
- [4] Health Promotion available from–K. Park’s textbook of preventive social medicine 18th edition Jan.2005, M/s BanarsidasBhanot publishers 38p
- [5] Organ donation, https://en.wikipedia.org/wiki/Organ_donation#History. Retrieved on 12/06/2021 at 3: 25 pm.
- [6] MetinLeblebici. Prevalence and Potential Correlates of Family Refusal to Organ Donation for Brain-Dead Declared Patients: A 12-Year Retrospective ScreeningStudy.2021 Mar; 53 (2): 548-554. doi: 10.1016/j.transproceed.2020.08.015. Epub 2020 Sep 14.
- [7] Wolide AD, Goro KK, Dibaba FK, Debalke S, et, al, “CareProvider’s Knowledge and Attitude Toward Organ Donation in Jimma Town, Ethiopia: Cross-Sectional Study. ” Faculty of Health sciences Jimma University, Jimma, Ethiopia, January 2020, 28P.
- [8] Sarah E. Van Pilsum Rasmussen, BA, Miriam Robin, MD, Amrita Saha, MSPH, Anne Eno, MS, Romi Lifshitz, Madeleine M. Waldram, et al. The Tangible Benefits of Living Donation: Results of a Qualitative Study of Living Kidney Donors. Transplant Direct. 2020 Dec; 6 (12): e626. Published online 2020 Nov 10. doi: 10.1097/TXD.0000000000001068
- [9] Poreddi V, Sunitha TS, Thimmaiah R, Math SB, et, al, “Gender differences in perceptions and attitudes of general population towards organ donation: An Indian perspective” College of Nursing, National Institute of Mental Health and Neuro Sciences Bengaluru, Karnataka, India.
- [10] Fukuoka Yoshimi, DracupKatheleen, Hirayama Haruo (2009), conducted study on illness attribution among Japanese patients with acute myocardial infraction at 5 hospitals in urban areas in Japan.

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