

Awareness of Health Care Workers about Organ Donation in a Public Sector Hospital in Rajasthan

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Original Research Article

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Article History

Received: 27.09.2017

Accepted: 04.10.2017

Published: 30.10.2017



Abstract: Organ donation not only saves the lives of dying people but also improves the quality of life of many patients. Although, the first organ transplant in India was performed in the 1965 (a kidney transplant) and the country has made a few strides forward since but still there is a huge demand–supply gap exists between patients requiring transplantation and organ donors. This target can be achieved by making the people aware about organ donation and its importance in saving the lives of people who need the organ transplantation. Keeping in view, the present study was conducted at Sawai Man Singh Hospital, Jaipur during the period of January 2017 to July 2017 to assess the awareness level of different respondents about organ donation. It was found that majority (68.50%) of the total respondents had medium level of awareness, followed by low (18.00%) and high (13.50%) awareness about organ donation.

Keywords: Organ Donation, transplantation, awareness, organ donors.

INTRODUCTION

Organ donation is the donation of biological tissue or an organ of the human body from a living or dead person to a living recipient in need of transplantation [1]. It has been documented that the organs from one donor can save as many as 50 patients [2]. Many people suffering from end-stage organ failure eventually will die while waiting for organ donors. Organ donation not only saves the lives of dying people but also improves the quality of life of many patients. Although Donation after Circulatory Death (DCD) is feasible but the majority of organ transplantation done from heart beating Donors after Brain Death (DBD).

Brain Death (BD) as “coma dépassé” was first defined by Mollaret and Goulon in 1959 [3]. *Brain death* is “irreversible unconsciousness with complete loss of brain function” and is a clinical, measurable condition duly accepted by the law as per Transplantation of Human Organ Act, 1994. Recent improvements in life support technology and critical care management make it possible to maintain the patient’s vital functions even after Brain Death. Such patients who will not survive can help to save or sustain several people, desperately requiring organ transplantation such as kidneys, liver, heart, etc [4]. In recent years, there have been steady increase with each passing year in the total number of organ transplantation as the treatment of choice for patients with end-stage organ disease but still a huge demand–supply gap exists between patients requiring transplantation and organ donors [5].

The first ever human organ transplant (kidney) performed in India was done at the King Edward Memorial Hospital at Bombay in May 1965, using a cadaver donor in a non-renal failure patient who had had hypernephroma, whereas the first successful Live Donor renal transplant in India was done at the CMC Hospital, Vellore in January 1971 [6]. Since that India has made a few strides forward but a lot more needs to be done. The number of transplants done annually has been gradually rising with currently around 5,000 kidneys, 1000 livers and around 15 hearts are transplanted annually [7]. India is one of the lowest organ donating countries in the world whereas, 36.6 persons per million of population donated organs in Croatia in 2013, 36 donated in Spain, 26 donated in the United States, and only 0.26 persons donated in India. Even 20 years after the Human Organ Transplantation Act, majority of the people are not aware of organ donation. This results into death of more than three

million people in the country since 2005 because of non-availability of organs [8].

The depressing statistics convey the urgent need for more people to step and donate their organs;

save the lives of people languishing due to organ failure. Demand and availability ratio for different organ donation in India is as follows:

Table-1: Demand and availability (per year) of different organs in India

Name of organ	Demand (in numbers/year)	Availability (in numbers/year)
Liver	1,00,000	1,000
Kidney	2,20,000	15,000
Heart	50,000	1,000
Lung	20,000	1,000

Source: Fortis organ retrieval and transplant

So, we need to promote deceased donation in order to meet the demand of organs, and to beat the organ black market. This target can be achieved by making people aware about organ donation and its importance in saving the lives of people who needed the organ transplantation.

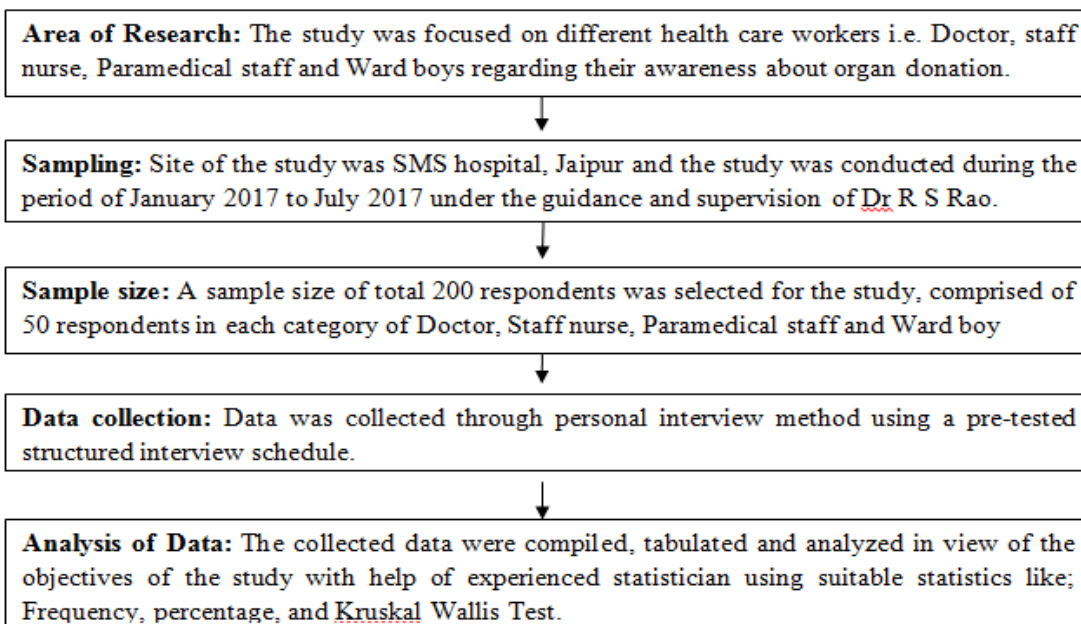
Awareness programmes, personal beliefs and experiences of prior contact with health care services influence individual and societal attitudes and awareness regarding organ donation. In India, consent of the next of kin is mandatory before organs can be recovered from a deceased donor. Thus, attitudes and awareness of health-care workers who are in close interaction with the family of the deceased can influence their decision [9].

MATERIAL AND METHODS

Keeping in mind the major objective of the study, Swai Man Singh Hospital, Jaipur was

purposively selected for the present study. A total sample size of 200 respondents was taken which comprises of 50 staff nurses, 50 doctors, 50 paramedical staffs and 50 ward boys. A structured interview schedule was prepared after conducting a pilot study and this schedule was used as tool for data collection from the different respondents. Personal interview method used for data collection. For socio-personal variables like age, education, family size and family education status, respondents were divided into three categories based of equal class interval method. Awareness score of each respondent was calculated based on their responses against 22 dichotomous type questions (yes/no type) given in the schedule. Based on the total obtained scores, respondents were divided into three categories of low (up to 10.33), medium (10.33 to 15.67) and high (15.67 to 21) level of awareness about organ donation, following equal class interval method.

Steps followed during the Study



RESULT AND DISCUSSIONS**Socio-personal variables**

The table 2 describes the distribution of respondents as per their socio-personal characteristics among all the four category of doctors, staff nurses, paramedical staffs and ward boys. It is evident from the table that among all the categories, majority of the respondents were of young age followed by middle and

old age. Regarding gender, majority (62.00%) of the doctor was female while in case of staff nurses (60.00%) paramedical staff (74.00%) and ward boy (74.00%) categories majority were male. Overwhelming majority of the respondents among all the categories were belonged to Hindu religion and were married.

Table-2: Distribution of the different respondents according to their socio-personal status

Socio-personal variables	Categories	Doctors (n =50)	Staff nurses (n =50)	Paramedical Staff(n =50)	Ward boy (n =50)	Pooled (n =200)
		Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Age (in years)	Young (21-33)	36 (72.00)	35 (70.00)	35 (70.00)	29 (58.00)	135 (67.50)
	Middle age (34-46)	9 (18.00)	11 (11.00)	10 (20.00)	15 (30.00)	45 (22.50)
	Old (47-59 yrs)	5 (10.00)	4 (8.00)	5 (10.00)	6 (12.00)	20 (10.00)
Gender	Male	19 (38.00)	30 (60.00)	37 (74.00)	37 (74.00)	123 (61.50)
	Female	31 (62.00)	20 (40.00)	13 (10.00)	13 (26.00)	77 (38.50)
Religion	Hindu	49 (98.00)	44 (88.00)	44 (88.00)	47 (84.00)	184 (92.00)
	Muslim	1 (2.00)	1 (2.00)	5 (10.00)	3 (6.00)	10 (5.00)
	Sikh	0 (0.00)	2 (4.00)	1 (2.00)	0 (0.00)	3 (1.50)
	Christian	0 (0.00)	3 (6.00)	0 (0.00)	0 (0.00)	3 (1.50)
Marital status	Married	37 (74.00)	40 (80.00)	36 (72.00)	41 (82.00)	154 (77.00)
	Unmarried	13 (26.00)	10 (20.00)	14 (28.00)	9 (18.00)	46 (23.00)
Education	Can read only	0 (0.00)	0 (0.00)	0 (0.00)	3 (6.00)	3 (1.50)
	Can read and write	0 (0.00)	0 (0.00)	0 (0.00)	3 (6.00)	3 (1.50)
	Primary school	0 (0.00)	0 (0.00)	0 (0.00)	3 (6.00)	3 (1.50)
	Middle school	0 (0.00)	0 (0.00)	0 (0.00)	16 (32.00)	16 (8.00)
	Secondary school	0 (0.00)	0 (0.00)	0 (0.00)	10 (20.00)	10 (5.00)
	Higher secondary	0 (0.00)	17 (34.00)	18 (36.00)	12 (24.00)	47 (23.50)
Family type	Nuclear	25 (50.00)	23 (46.00)	20 (40.00)	22 (44.00)	90 (45.00)
	Joint	25 (50.00)	27 (54.00)	30 (60.00)	28 (56.00)	110 (55.00)
Family size	Small (up to 10)	44 (88.00)	44 (88.00)	42 (84.00)	40 (80.00)	170 (85.00)
	Medium (11 to 17)	4 (8.00)	6 (12.00)	8 (16.00)	10 (20.00)	28 (14.00)
	Large (18 to 24)	2 (4.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (1.00)
Family education status	Low (up to 3.76)	0 (0.00)	5 (10.00)	3 (6.00)	21 (42.00)	29 (14.50)
	Medium (3.76 to 5.38)	25 (50.00)	29 (58.00)	27 (54.00)	23 (46.00)	104 (52.00)
	High (5.38 to 7.0)	25 (50.00)	16 (32.00)	20 (40.00)	6 (12.00)	67 (33.50)

Regarding education, except the ward boys all the respondents were educated up to higher secondary and graduate or above. In case of ward boys, 32.00 per cent were educated up to middle class, followed by higher secondary (24.00%), secondary (20.00%) and primary (6.00 %), respectively with 6 per cent under

'can read or write' category. Majority (55.00%) of the total respondents were from joint family pattern of living with 45.00 per cent having nuclear family.

Overwhelming majority of the respondents under all the classes was having small family size with medium family education status.

Awareness about Organ Donation

As evident from the table 3, although majority of respondents in all the four categories were having medium level of awareness about organ donation, but on comparison among categories except the ward boy, remaining three categories of doctors, staff nurses and paramedical staff all were at same level. Only 12.00 per cent of the staff nurses and 18.00 per cent of both doctors and paramedical staff were found to have high

awareness about organ donation. On statistical analysis a significant difference was found among the four categories of respondents i.e. Doctors, Staff nurses, Paramedical staff and Ward boys regarding their level of awareness about organ donation. This difference was probably due to their different level of exposure with concept of organ donation and their different job experience.

Table-3: Distribution of the different respondents according to their awareness about organ donation

Level of awareness	Doctors (n =50)	Staff nurses (n =50)	Paramedical Staff (n =50)	Ward boy (n =50)	Total (n =200)
Low (up to 10.33)	10 (20.00)	10 (20.00)	9 (18.00)	17 (34.00)	36 (18.00)
Medium (10.33 to 15.67)	31 (62.00)	34 (68.00)	32 (64.00)	30 (60.00)	137 (68.50)
High (15.67 to 21.00)	9 (18.00)	6 (12.00)	9 (18.00)	3 (6.00)	27 (13.50)
Test of significance	Kruskal Wallis Test χ^2 value = 8.002*				

CONCLUSION

The study concluded that although majority of all the four type of respondents had medium level awareness about organ donation. The response of ward boys was also surprisingly high because they were not supposed to have any kind of professional exposure and teaching regarding organ donation, other than this, their average education was also on lower side as compare to other three categories of respondents (doctors, staff nurses and paramedical staff). This might be due to continuous exposure in hospital area and regular dealing with medical or paramedical professionals.

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