



Organ Donation: to Assess Fears and Concerns for Organ Donation Amongst Medical Students in Tertiary Care Hospital in A Metropolitan City

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KEYWORDS

INTRODUCTION:

Organ Donation and transplantation has been one of the greatest advances of modern science that has resulted in many patients getting a renewed lease of life. It was included in the top five miracles of the last century. This miracle of Transplantation would not be possible without Organ Donation. Organs can be donated by even a living person, after natural death & much more organs can be donated after Brain Stem Death.

Since the Transplantation of Human Organs Act (THO Act) also called as Human Organ Transplantation Act (HOTA Act) was passed in India, in 1994(1), it has been possible to undertake multi-organ transplant activity from Brain Stem Dead donors in India. After natural death only few tissues can be donated whereas after Brain Stem Death almost all organs and tissues can be donated including critical organs like kidneys, liver, lungs.

We have 1,40,000 deaths from Road Traffic Accidents(RTA) every year in India(1), 67% of these patients suffer from head injury that leads to BRAIN STEM DEATH in many instances. This means that every year there are almost 93,000 persons who become brain dead, and are therefore potential organ donors. Hence we have potentially a huge pool of Brain Dead Donors available in India, whereas the actual Organ Donation is very less. Organ Donation rate for cadaver in India is currently 0.05 per million population (50 cadaver donors per year)(2). Spain has highest rate of Organ Donation from Brain Stem Dead Deceased Donors about 32 per million population(2). In India, Tamilnadu tops with rate of 1.3 million Organ Donors per million population(3)(4). The gap between Organs available for Transplantation and number of patients waiting for transplant is widening(4). Lack of knowledge and understanding about organ donations, religious attitudes, and superstitious beliefs have generated fear and mistrust in the minds of the common man (5) Similar concerns and fears could there in Medical students. Studies have been done on Medical and Nursing students towards their perceptions and attitudes about organ donation and to enhance their motivation towards the same(6)there is limited research on issues related to organ donation. We aimed to study the attitudes, knowledge, and actions of local medical students regard to organ donation and transplantations of tissues and organs in Greece.

METHODS: This cross-sectional questionnaire based survey was done in Laboratory of Hygiene and Social Medicine, School of Medicine, Aristotle University of Thessaloniki, Greece on medical students in years 1 to 6. In a sample of 600 medical students, a special anonymous questionnaire, which included data as sex, age, and semester of studies, as well as questions regarding certain aspects of transplantation, was distributed. 558 valid questionnaires were completed (men 52.3% and women 47.7%.

This study intends to assess the awareness about Organ Donation among young budding doctors in a tertiary apex institute in a metropolitan area.

Organ Donation: To assess fears and concerns about Organ Donation amongst medical students in tertiary care hospital in a metropolitan city.

AIM :

To assess the Fears & Concerns about Organ Donation in the minds of medical students, giving information with appropriate educational tools to provoke commitment for Organ Donation, so that these care givers also can be motivators for organ donation in case of brain dead cases.

OBJECTIVES:

To assess the knowledge & address the concerns about Organ Donation among medical students, and identifying the de-motivating factors in Organ Donation.

To evolve strategies for promotion of Organ Donation amongst students depending on these factors.

To increase the awareness among students by giving information through appropriate educational tools & help them satisfy all the queries about Organ Donation asked by relatives of the brain dead patients.

MATERIAL & METHODS:-

Study Design:

Cross-sectional study.

Study Area:

Tertiary care hospital in Metropolitan area

Study Participants:

82 Medical students studying in Tertiary care hospital in Metropolitan area were enrolled in this study.

Sampling Method:-

Universal sampling method was used for enrolling the sample size. All undergraduate medical students, those who consented to participate in the study were included.

A pretested, semi-structured questionnaire was used to collect information by interview method for knowledge and concerns about Organ Donation.

Study Period :

Data collection was conducted over 2 months after approval of Institutional

Ethics Committee.

Study Procedure:

Data collection: It was carried out as follows.

Step I: Designing of Questionnaire

A semi-structured questionnaire is prepared in accordance with the study objectives which is pre tested & modified.

Step II: Validation of Questionnaire

This questionnaire is modified and validated by appropriate authorities.

Step III: The semi-structured questionnaire was administered to medical students after getting necessary permissions from Ethical committee,

STEP IV- Explaining the importance of Organ Donation to the medical students using informative slide show presentation and addressed their concerns regarding Organ Donation.

At the end of the talk, Donor Cards prepared were provided to determine extent of Organ Donation commitment with reference to filling the Donor Cards.

Data analysis included following steps.

Step I:

All responses were tabulated by the investigator using Micro-soft-Excel 2007 Software. Graphical representation was made wherever necessary.

Step II:

Data was analyzed by using appropriate Statistical methods.

Results

Demography:

Table 1: Age wise distribution of the students

Age Group	Number of Students	Percentage
19-20	33	40.24
21-22	25	30.48
23-25	24	29.26

Above table shows that participants were among the age groups of 19 to 25 years.

Table 2: Religion wise distribution of the students

Religion	Number of Students	Percentage
Hindu	61	74.4
Muslim	5	6.09
Buddhist	16	19.5

Above table shows religion wise distribution of participants.

Table 3: Academic year wise distribution of the students

Year	Number of Students	Percentage
First	33	40.24
Second	25	30.48
Third	24	29.26

Knowledge about Organ Donation:

Table 4: Whether students heard about Organ donation

Heard about Organ Donation	Number of Students	Percentage
YES	79	96.3
NO	3	3.7

According to above table it is clear that about 96% students have heard about organ donation.

Table 5: Whether organs can be donated by LIVING donor

Organs can be donated by LIVING Donor	Number of Students	Percentage
YES	52	63.4
NO	30	36.6

Only 63% students were able to enumerate organs that can be donated by living donor.

Table 6: Whether organs can be donated after Brain stem death

Organs donated after BSD	Number of Students	Percentage
YES	50	60.9
NO	32	39.1

Above table shows that only 61% participants were aware ABOUT Organ donation after Brain stem death

Table 7: Conditions in which eyes can be donated

Eyes can be donated if DONOR is-	Number of Students	Percentage
ALIVE	2	2.4
DEATH	63	76.8
BOTH	11	13.4
Cant say	6	7.3

77% Students were aware about the fact that eyes can be donated only after death.

Table 8: Whether EYES can be donated after age of 75 years

>75 age organs can be donated	Number of Students	Percentage
YES	34	41.46
NO	23	28.04
Don't know	25	30.48

More than 58% students did not know that eyes can be donated at any age

Table 9: Whether Cancer patients can donate Organs

Cancer patient OD status	Number of Students	Percentage
YES	9	10.9
NO	57	69.5
Don't know	16	19.5

Only 57% students knew that cancer patients can't donate organs

Table 10: Whether Tuberculosis patients can donate Organs

TB patient OD status	Number of Students	Percentage
YES	48	58.5
NO	14	17.07
Don't know	20	24.39

Except septicaemia no other disease is contra indication for Organ Donation

Table 11: Difference between Brain stem death and Coma

Is there any difference between BSD & COMA	Number of Students	Percentage
YES	50	60.9
NO	4	4.8
Don't know	28	34.14

Only 61% students knew the difference between Coma and Brain stem death, it is important for every medical person to know this difference as organs can be taken only from brain dead not from Coma patients.

Table 12: Respiration may be continued after BSD

Respiration may be continued after BSD	Number of Students	Percentage
YES	8	9.7
NO	52	63.4
Don't know	22	26.82

80 % students were unaware that the respiration does not continue in brain stem death it is only heart continues to beat, it is important for all medical students to know this.

Table 13: Limbs movement may be present in BSD

Limbs may move after BSD	Number of Students	Percentage
YES	56	68.29
NO	7	8.5

Don't know	19	23.17
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68% of students wrongly believed that movement of limbs continues in BSD, there are no movements, no pain and no respiration in BSD.

Table 14: Hypertensive & Diabetics can donate organs

Hypertensive & Diabetics can donate organs	Number of Students	Percentage
YES	5	6.09
NO	33	40.24
Don't know	44	53.65

77 % of medical students did not know that Diabetes and Hypertention are are not contraindication for organ donation.

Table 15: OD status in case of death due to Drowning

OD status in case of death due to Drowning	Number of Students	Percentage
YES	8	9.7
NO	18	21.9
Don't know	56	68.29

Only 10% of medical students knew that the organs cant be donated in case of death due to drowning.

Table 16: Consent of relatives is important in Organ Donation in case of BSD

Consent of relatives is important	Number of Students	Percentage
YES	41	50
NO	6	7.3
Don't know	35	42.6

50% students did not know the importance of consent of relatives in Organ Donation.

Table 17: OD status in case of conflicts between relatives

OD status in case of conflicts between relatives	Number of Students	Percentage
YES	21	25.6
NO	22	26.8
Don't know	39	47.56

Very close relatives like spouse, daughters/sons, sisters /brothers in that order the importance is given to the consent

Table 18: Possibility of Commercial dealings

Possibility of Commercial dealings	Number of Students	Percentage
YES	27	32.9
NO	29	35.36
Don't know	26	31.7

As per the law there can't be any money exchange in case Organ Donation.

Table 19: Knowledge about LAW on Organ Donation and retrieval

Knowledge about LAW	Number of Students	Percentage
YES	5	6.09
NO	48	58.53
Don't know	29	35.36

Only 5% of medical students had some knowledge of the Law.

Table 20: Disfigurement in body after OD

Disfigurement in body after OD	Number of Students	Percentage
YES	47	57.3
NO	11	13.4
Don't know	24	29.2

Only 11% students knew correctly that there is no disfigurement after OD

Table 21: Knowledge about Appropriate authorization committee

Knowledge about Appropriate authorization committee	Number of Students	Percentage
YES	9	10.9
NO	34	41.4
Don't know	37	47.56

Table 22: OD status in case of MLC

OD status in case of MLC	Number of Students	Percentage
YES	11	13.4
NO	34	41.46
Don't know	37	45.12

Table 23: Donor family needs to pay for OD

Donor family needs to pay for OD	Number of Students	Percentage
YES	4	4.8
NO	44	53.66
Don't know	34	41.46

Table 24: Donor family knows to whom the organs are being donated

Donor family knows to whom the organs are being donated	Number of Students	Percentage
YES	18	21.9
NO	21	25.6
Don't know	43	52.4

More than 74% students did not have knowledge that the relatives do not know to whom is the organ donated.

Table 25: Does Government give money to donor family

Does Government give money to donor family	Number of Students	Percentage
YES	17	20.7
NO	21	25.6
Don't know	44	53.65

Only 21% answered rightly as even the government does not pay the donor family.

Table 26: OD in case of unclaimed body

OD in case of Unclaimed body	Number of Students	Percentage
YES	14	17.07
NO	17	20.7
Don't know	51	62.19

There can't be any OD in case of unclaimed bodies was known to only 17% of the students.

Table 27: Is there any age limit for OD

Is there any age limit for OD	Number of Students	Percentage
YES	37	45.1
NO	8	9.8
Don't know	37	45.1

Table 28: Whom to contact for OD

Whom to contact for OD	Number of Students	Percentage
YES	37	45.12
NO	45	54.87

Table 29: All religions have accepted OD as a good cause

All religions have accepted OD as a good cause	Number of Students	Percentage
YES	35	42.6
NO	13	15.8
Don't know	34	41.46

There is no religion which opposes Organ Donation

Table 30: Are you willing to donate YOUR RELATIVES organs after BSD

Are you willing to donate YOUR RELATIVES organs after BSD	Number of Students	Percentage
YES	27	32.9
NO	14	17.07
Cant say	41	50

Students could not say if they were prepared to donate organs of their relatives after BD

Table 31: Do you PLEDGE your organs here to donate after BSD

Do you PLEDGE your organs here to donate after BSD	Number of Students	Percentage
YES	58	70.7
NO	24	29.26

71% were prepared to pledge for OD after the sensitisation lecture by the researchers which was a positive finding. This meant one awareness lecture can get them up to pledging the organs, amongst this group six students volunteered to be part of awareness creating group on Organ Donation. It is important to talk to medical students, Nursing students and other paramedical staff and sensitise them as they can be potential motivators of organ donation in case BSD.

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