KNOWLEDGE AND ATTITUDES ON ORGAN DONATION AMONG FINAL YEAR UNDERGRADUATE MEDICAL STUDENTS IN UNIVERSITI MALAYA

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KNOWLEDGE AND ATTITUDES ON ORGAN DONATION AMONG FINAL YEAR UNDERGRADUATE MEDICAL STUDENTS IN UNIVERSITI MALAYA ABSTRACT

Organ donation is a noble act, and the demand for it is not met enough globally. Malaysia alarmingly has one of the lowest organ donation rates, and this might be due to a lack of awareness and knowledge among Malaysians, including health care providers and medical students.

Objective: This study was conducted to ascertain the rate of organ donor pledgers, to assess the knowledge and attitudes, and to investigate the relationship between various socio-demographic factors with the knowledge and attitudes of organ donation among final year undergraduate medical students in Universiti Malaya.

Methods: This observational analytical cross-sectional study was carried out by using the questionnaire method. The questionnaire included three sections (Socio-demographic data, Knowledge and Attitude). SPSS was utilized to analyze the collected data. Chi-square and independent t-test were used for inferential statistics. The socio-demographic data was then compared with the knowledge, willingness and attitude in which ANOVA (analysis of variance) was performed.

Results: 116 medical students participated in this study. 61.2% of them had good organ donation knowledge while 63.8% of students were willing to register for organ donation. However, only 13.8% were organ donation pledgers. There was a significant association found between the knowledge score and the willingness to become an organ pledger (p=0.009). Students with good knowledge (67.6%) were more willing to become an organ pledger. In terms of religion, Buddhists were more likely to have positive attitude on organ donation when compared to Muslims.

Conclusion: The percentage of organ donation pledgers among medical students is higher when compared to the general population in Malaysia. Generally, medical students

possess good knowledge on organ donation, but aggressive awareness programs with a more structured curriculum can improve this further, as better knowledge leads to more positive attitude towards organ donation, and ultimately, the willingness to pledge. **Keywords** : Organ Donation, awareness, attitude, knowledge

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CHAPTER 1: INTRODUCTION

Organ transplantation is one of the greatest noble acts, and the ever-advancing medical technologies and knowledge have further broadened this challenging field of modern medicine into a new horizon. The World Health Organization (WHO) defines organ donation as "the gift of an individual's body parts after their demise for transplantation." National Transplant Resource Centre, Ministry of Health Malaysia states that "Transplantation is a surgical procedure involving the replacement of a recipient's diseased and defective organs or tissues with healthy ones from a donor". The commonly transplanted organs are kidneys, liver, heart, lungs and pancreas while the transplantable tissues are eyes, bones, heart valves and skin.

Yet, the supply has failed to meet the demand of life-saving transplants. Makmor et al (2014) alarmingly reported that "Malaysia has one of the lowest deceased organ donation rates in the world at 1.3 organ donor per million population." This is alarming considering the number of donors in other countries is much higher with Australia, United States of America and Spain at 11, 26 and 35.1 people per million populations respectively (Global Observatory on Donation and Transplantation, 2014).

A lack of awareness and knowledge among the public and health care providers, especially the medical students, are believed to be contributing to the shortage in organ supply. Health professionals are the most critical link in the organ donation process as they are the first individuals to establish rapport with the potential donor's family. There is also an influence of the individual's perception on organ donation. General public opinion surveys have found that most Malaysians have a negative attitude towards organ donation. This attitude can be due to many reasons namely "the lack of accessibility to information, the lack of trust on the beneficial utilisation of their organ upon donation and religious issues" (Makmor et al, 2014). It is important to address these barriers in order

to promote organ donation, as strategies can be employed to boost knowledge, awareness and attitude among Malaysians, most importantly, medical students.

Hence, in this cross-sectional study, we aim to investigate a group of undergraduate medical students (Final Year) in Universiti Malaya. The objectives of this study are to determine the prevalence of organ donation pledgers, to assess the existing knowledge, willingness and attitude on organ donation and to investigate any relationship between the various sociodemographic data on knowledge, attitudes and awareness of organ donation among the final year undergraduate medical students in Universiti Malaya.

CHAPTER 2: LITERATURE REVIEW

Adithyan, et al (2018) showed that a majority of the medical students in Kerala had adequate knowledge regarding organ donation, but it is not translated into their willingness for donation. The study reiterates the need for educational interventions for medical students which cut across various disciplines to make them understand the nuances of the issue in a holistic way.

According to Seo et al 2016 (Article no.BJMMR.26208), "The knowledge of organ donations among medical students can be improved through better awareness programs and more structured lectures. High knowledge level on organ donations lead to higher willingness and more positive attitude towards organ donations."

Makmor et al (2016) stated that "medical and nursing students' attitude and commitment toward organ donation should be improved to increase organ donation among future healthcare professionals which would, in turn, indirectly improve deceased donations among the public."

Hamed et al (2016) showed that there is "lack of sufficient knowledge about the legal aspect criteria and details of organ donation process which directly contribute to reducing the positive attitude among Egyptian medical students. In a religiously and culturally accepted background, educational curriculum must focus on the importance of organ donation in modern surgical practice."

Radunz et all (2015) from Germany showed that by exposing medical and nursing students to educational programs on organ donation, their attitude could be significantly improved.

Marqués et al (2013) determined that "medical students have a positive attitude towards organ donation. However, a substantial lack of knowledge of organ donation is a barrier to their taking the necessary measures to become active donors. This highlighted the need to incorporate educational programs to increase knowledge and awareness regarding organ donation and the transplantation process."

Dardavessis T et al (2011) has found that the "undergraduate medical curriculum should include courses on organ transplantation to better equip future doctors with knowledge on organ donation issues."

CHAPTER 3: METHODOLOGY

This will be an observational analytical cross-sectional study. The study population consists of Final Year undergraduate medical students from Universiti Malaya. The total population of final year students is 120 people. However, we only managed to obtain a sample size of 116 as 4 students submitted questionnaires which were less than 80% completed. The inclusion criterion is all medical students in Universiti Malaya who are currently in final year. Students who are absent on the day of survey and submitted a less than 80% completed questionnaire will be excluded from the study. A self-administered questionnaire in English language with three sections (Demographic data, Knowledge and Attitude components) will be used. This questionnaire is formulated and modified from the various established studies.

The first section consists of basic demographic data of the students which comprise of name, age, gender, ethnicity and religion. Then, they will be asked whether they are an organ pledger or not. The next section is based on knowledge on organ donation. It consists of 10 questions (yes or no/don't know) whereby 1 mark will be awarded for the correct answer and 0 for the wrong. The next component is on attitude towards organ donation among medical students. This section consists of 10 questions which use the Likert scale. This scale consists of one to five points in which their level of agreement or disagreement on each statement is identified. The scale is 1: strongly agree 2: agree 3: neutral 4: disagree 5: strongly disagree.

Data processing was performed using Microsoft Excel 2010. The data was analysed by using the Statistical Package for the Social Sciences database (SPSS). For descriptive statistics, we used frequency distribution table and percentage, means and standard deviation as well as median and interquartile range. For inferential statistics, we used chisquare for nominal data and independent t-test for quantitative continuous data to test the hypothesis. We also used ANOVA (analysis of variance) for sections with more than 2 categorical comparison groups. We used odds ratio and 95% confidence interval as the measure of association. Significance level was set at 0.05. P value less than 0.05 was considered as significant.

Our study was approved by the Ethics Committee of Universiti Malaya. All the respondents were voluntary participants. A pilot questionnaire was administered to 10 medical students to assess the comprehensibility of the questions and the feasibility of answering them. Minor changes consisting of grammatical corrections were made to improve the quality and accuracy of the data collected. Before the students completed the questionnaire, they were briefed about the objective of the study and the content of the questionnaire. We assured the respondents that all the information gathered will be kept confidential and they will only be used for the purpose of this study and not in any other personally identifiable manner or made available to anyone who was not involved in this study.

4.1 Demographics

A total of 116 respondents were recruited in this study. As shown in Table 4.1, the gender of the respondents was comparable with the percentage of female respondents (50.9%) being slightly higher than male respondents (49.1%). The percentage of Malay respondents was the highest (50%), followed by the Chinese (33.6%) and the Indian (12.1%). Our respondents consisted of 50% Islam, 29.3% Buddhist, 10.3% Indian and 10.3% Christian.

 Table 4.1 : Frequency distribution table of socio demographic characteristics of medical students (n=116)

Variables		Frequency (%)
Gender	Male	57 (49.1)
	Female	59 (50.9)
Ethnicity	Malay	58 (50.0)
	Chinese	39 (33.6)
	Indian	14 (12.1)
	Others	5 (4.3)
Religion	Islam	58 (50.0)
	Buddhist	34 (29.3)
	Hindu	12 (10.3)
	Christian	12 (10.3)

However, only a minority of the respondents was registered organ pledger (13.8%) and most of them were from the Buddhism religion (37.5%). The prevalence of registered organ pledgers in Universiti Malaya is as shown in the Table 4.2. Out of the 116 participants, only 16 students (13.8%) were registered organ donors while 100 students (86.2%) did not register as organ donors.

 Table 4.2 : Frequency distribution table of the prevalence of registered organ pledgers

Variables	Frequency (%)
Non-organ pledgers	100 (86.2)
Organ pledgers	16 (13.8)

Out of the religion groups in our study, the percentage of registered organ donors among the Buddhist is the highest (37.5%), followed by Islam with 31.3%, Hindu with 25% and Christian with 6.3%. However, the percentage of non-organ donors is highest in the Islam religion group (53%) (Table 4.3).

Variables	Non-organ pledgers	Organ pledgers
Islam	53 (53.0%)	5 (31.3%)
Buddhist	28 (28.0%)	6 (37.5%)
Hindu	8 (8.0%)	4 (25.0%)
Christian	11 (11.0%)	1 (6.2%)

Table 4.3 : Frequency distribution table of the prevalence of registered organpledgers based on religion

4.2 Knowledge

Based on Table 4.4, we found that all of them were aware of organ donation (100.0%). Only two respondents failed to acknowledge that some organs can be donated by living donors (1.7%). Most of them were aware that the demand for transplants was higher than the organ availability (94%). About 75% of the students understood that a single donor can donate to multiple recipients. A minority of them were not aware that brain death is irreversible (6.0%). A majority of the students were well-informed that brain dead patients are potential organ donors (85.3%). Most of them were not conscious of the fact that malignancy is a contraindication to organ donation (63.8%). Almost 40% of the respondents did not know that critical patients on the waiting list have priority over the less critical patients. About 40% of the students were not apprised of the fact that organ donation in a deceased organ pledger cannot proceed if the family does not wish to do so. A good majority of the students were aware that opportunity infection is a common complication in transplantation (84.5%).

Table 4.4 : Frequency distribution table of responses against knowledge
questions

Knowledge about organ donation	True	False/ Don't
		know
Are you aware of organ donation?	116 (100.0)	0
Some organs (eg. Kidney or parts of liver and lung)	114 (98.3)	2 (1.7)
can be donated while you are alive		
The demand for transplants is higher than the	109 (94.0)	7 (6.0)
availability of organs		
A single donor can donate to multiple recipients	87 (75.0)	29 (25.0)
Brain death is reversible	109 (94.0)	7(6.0)
Brain dead patients are potential organ donors	99 (85.3)	17 (14.7)
Malignancy is a contraindication to organ donation	42 (36.2)	74 (63.8)
Patients on the waiting list who are in critical	71 (61.2)	45 (38.8)
condition have priority over the other patients		
It is alright to proceed with organ donation in a	69 (59.5)	47 (40.5)
deceased organ pledger even when the family does		
not wish to donate the organ(s)		
Increased risk of opportunistic infection is a common	98 (84.5)	18 (15.5)
complication to all transplantation		

For the 116 students who answered the survey, the mean score was 7.9 (SD 1.4), with the highest score being 10 points and the lowest score being 4 points. The total knowledge score of 10 has been categorized into levels where a score of 0-4 indicates poor knowledge, 5-7 is average knowledge and 8-10 indicates good knowledge about organ donation. A majority of the students had good knowledge (61%) on organ donation as shown in Table 4.5.

Table 4.5 : Frequency	distribution	table of level	of organ	transplant k	nowledge
	0				

Knowledge level	Frequency (%)
0-4 (poor)	1 (0.9%)
5-7 (average)	44 (37.9%)
8-10 (good)	71 (61.2%)

There was a significant association found between the knowledge level and the willingness to become an organ pledger (p=0.009). Students with good knowledge

(67.6%) were found to be more willing to become an organ pledger. Out of the 74 students who were willing to be an organ donor, it can be seen that majority of them had good knowledge 48 (67.6%) followed by average knowledge with 26 (59.1%). Among the participants who were unwilling to donate, only 4 (5.6%) had good knowledge and 10 (22.7%) had average knowledge (Table 4.6). However, there was no significant association between the knowledge level with gender, ethnicity and religion (p=0.923, p=0.544, p=0.589 respectively) (Table 4.7, 4.8, 4.9).

 Table 4.6 : Comparison of knowledge level with willingness to be an organ donor

*7 * 1 1	Willingness to be an orga			gan donor	1
Variables		Yes	No	Neutral	p-value
	Poor	0	1 (100.0%)	0	
	Average	26	10 (22.7%)	8 (18.2%)	
Knowledge		(59.1%)			0.000*
level	Good	48	4 (5.6%)	19 (26.8%)	0.009*
		(67.6%)			

*Fisher's Exact Test

Table 4.7 : Comparison of knowledge level with gender

Variables]	Knowledge leve	1	
		Poor	Average	Good	p-value
Candan	Male	1 (1.8%)	21 (36.8%)	35 (61.4%)	0.022*
Gender	Female	0	23 (39.0%)	36 (61.0%)	0.923*

*Fisher's Exact Test

Variables	Variables Knowledge level				
		Poor	Average	Good	p-value
	Malay	1 (1.7%)	22 (37.9%)	35 (60.3%)	
	Chinese	0	13 (33.3%)	26 (66.7%)	
	Indian	0	8 (57.1%)	6	
Ethnicity				(42.9%)	0.544*
	Others	0	1 (20.0%)	4 (80.0%)	

Table 4.8 : Comparison of knowledge level with ethinicity

*Fisher's Exact Test

Variables		ŀ				
		Poor	Average	Good	p-value	
	Islam	1 (1.7%)	22 (37.9%)	35 (60.3%)		
	Buddha	0	12 (35.3%)	22 (64.7%)		
Religion	Hindu	0	7 (58.3%)	5(41.7%)	0.589*	
	Christian	0	3 (25.0%)	9 (75.0%)		

 Table 4.9 : Comparison of knowledge level with religion

*Fisher's Exact Test

4.3 Attitude

More than half of the respondents were willing to be an organ pledger (63.8%). Based on Table 4.10, there is a significant association between the different religions and the willingness to be an organ pledger (p<0.001). Buddhists were found to be more willing to be an organ pledger when compared against the other religions. However, the unwillingness to pledge as organ donors was highest among the Muslims compared to the other religions. Ethnicity was also found to be a significant association to the willingness to be an organ pledger (p<0.001) (Table 4.11). The Chinese students were more willing to register as organ donors as compared to the other races. No significant association was found between the gender and the willingness to be an organ donor (Table 4.12).

Variables		Willingness to be an organ pledger			1	
		Yes	No	Neutral	p-value	
Religion	Islam	25 (43.1%)	11 (19.0%)	22 (37.9%)		
	Buddhist	31 (91.2%)	2 (5.9%)	1 (2.9%)	-0.001*	
	Hindu	7 (58.3%)	2 (16.7%)	3 (25.0%)	<0.001*	
	Christian	11 (91.7%)	0 (0.0%)	1 (8.3%)		

Table 4.10 : Comparison of the willingness to be an organ pledger with religion

*Fisher's Exact Test

Table 4.11 : Comparison of the willingness to be an organ pledger with ethnicity

Variable		Willingness to be a pledger			1	
		Yes	No	Neutral	p-value	
Ethnicity	Malay	26 (44.8%)	11 (19.0%)	21 (36.2%)		
	Chinese	35 (89.7%)	2 (5.1%)	2 (5.1%)	-0.001*	
	Indian	9 (64.3%)	2 (14.3%)	3 (21.4%)	<0.001*	
	Others	4 (80.0%)	0 (0.0%)	1 (20.0%)		

*Fisher's Exact Test

Table 4.12 : Comparison of the willingness to be an organ pledger with gender

Variable		Willin	1			
		Yes	No	Neutral	p-value	
Gender	Male	36 (63.2%)	7 (12.3%)	14 (24.6%)	0.040*	
	Female	38 (64.4%)	8 (13.6%)	13 (22.0%)	0.940*	

*Pearson Chi Square Test

Attitude questions	Strongly	Disagree	Neutral	Agree	Strongly
1	disagree	n (%)	n (%)	n (%)	agree
	n (%)	× ,			n (%)
Would u be willing to be	1 (0.9)	14 (12.1)	27	43	31 (26.7)
an organ donor?			(23.3)	(37.1)	
Organ donation gives	0	0	3 (2.6)	47	66 (56.9)
someone a new chance of				(40.5)	
life after donor's death					
Do you agree that donating	0	0	8 (6.9)	39	69 (59.5)
organs is a good thing to				(33.6)	
do?					
Do you worry that donated	10 (8.6)	28 (24.1)	23	37	18 (15.5)
organs might be used			(19.8)	(31.9)	
without consent for other					
purposes?					
Do you find organ	33 (28.4)	46 (39.7)	23	10 (8.6)	4 (3.4)
donation unacceptable			(19.8)		
because of religious					
beliefs?					
Do you think that	42 (36.2)	57 (49.1)	5 (4.3)	6 (5.2)	6 (5.2)
registering to be a donor is					
like tempting death?					
An intact body is needed	15 (12.9)	29 (25.0)	51	11 (9.5)	10 (8.6)
after death			(44.0)		
My family would be upset	6 (5.2)	20 (17.2)	46	33	11 (9.5)
if they were required to			(39.7)	(28.4)	
consent to my organ					
donation after my death	*				
It is valuable to discuss	2 (1.7)	3 (2.6)	12	56	43 (37.1)
organ donation with a			(10.3)	(48.3)	
brain dead patient's family					
I would donate the organs	9 (7.8)	9 (7.8)	58	26	14 (12.1)
of my family members if			(50.0)	(22.4)	
they were diagnosed as					
brain dead					

Table 4.13 : The frequency distribution and percentages of the attitudes towards organ donation responses

Table 4.13 showed that a great majority of the respondents agreed that organ donation gives someone a new chance of life after donor's death (97.4%). Most of the students also thought that donating organs is a good thing to do (93.1%). About 47.4% of them were worried that donated organs might be used for other purposes without consent. More than half of the students did not find organ donation unacceptable because of religious beliefs. A very small percentage of students agreed that registering as organ donors is like

tempting death (10%). A significant percentage of students were unsure whether an intact body is needed after death (44%). About 39.7% of them were also unsure whether their family would be upset if they were required to consent to their organ donation after death. A vast majority of the respondents agreed that it is valuable to discuss organ donation with a brain dead patient's family (85.4%). Half of the students were unsure whether they would donate the organs of their family members if they were diagnosed as brain dead.

CHAPTER 5: DISCUSSION

There are numerous advancements in the world of organ donation. However, the dilemma of a persistent shortage of organs for transplantation still remains. In Malaysia, organ donors are scarce and there are insufficient conclusive data about the factors which may affect the knowledge, readiness and attitude for organ donation among undergraduate medical students in Malaysia. A study by Essman et al (2006) states that "health professionals are the most critical link in the organ donation process as they are the first individuals to establish a relationship with the potential donor's family and to initiate discussions regarding organ donation." As future physicians, Malaysian medical students will become part of that critical link in increasing the number of potential organ donors. The aim of this survey therefore was to determine the prevalence of organ donor, to evaluate the existing knowledge, attitude and willingness on organ donation among the final year undergraduate medical students in Universiti Malaya.

The prevalence of registered organ donors among them was only 13.8% (16 students). This is much higher than the prevalence of registered organ donor in the general population in Malaysia which is 4.3% (Makmor et al, 2014). Figueroa et al (2014) found that medical students, when compared with general population, are more willing to register themselves as organ donors. This might be due to the fact that they are more educated and have more exposure toward organ donations.

With regards to knowledge, we found that most of the final year undergraduate medical students have good knowledge (61.2%) while 37.9% have average knowledge on organ donation and the system practiced in Malaysia (Table 4.5). This can be justified by the fact that lectures pertaining to organ donation are usually given from the fourth year of

study. Therefore, many students may still be able to recall some facts from lectures. Bardell et al (2003) conducted a similar study among medical students in a Canadian university and showed that knowledge was higher among the fourth year medical students. However, another study by Essman et al (2006) found that "medical students still have significant gaps in knowledge regarding the organ donation and transplantation." This highlighted the fact that different universities have different curriculum, and the exposure and knowledge that medical students gain depends on the curriculum. Universities should adopt and take those curriculums as reference.

There is also an association between participant's knowledge level being high and a higher willingness towards organ donation where students with good knowledge (67.6%) were readier to become an organ pledger (Table 4.6). Schaeffner et al (2014) stated that by improving knowledge, attitudes and willingness in those within medical profession, this can help to promote organ donation and increase the limited donor pool. Organ donation and transplant as a curriculum topic should be included as a core subject in the medical curriculum and not just being covered in a single lecture. This will help to increase the knowledge level among medical students, and indirectly, will enhance organ donation awareness.

With regards to willingness to donate, it is established that more than half (63.8%) of the participants are willing to register as organ donors. However, the fact that only 13.8% (16 students) of total respondents were registered organ donors shows that they have moderate willingness but low commitment towards organ donation. This shows that there is a great need to have intervention strategies to enhance their attitude and motivate them to donate organs. Different strategies like health campaigns and comprehensive lectures on organ donations need to be applied to further raise awareness of organ shortage. Better understanding in the field of organ donation will help them to become pro-organ donation

disseminators in our society. The lectures in our current curriculum may not be effective enough and it may have to be modified as knowledge and understanding of the subject can change significantly after a comprehensive lecture.

No significant association was found between the gender with the willingness to be an organ donor. This is in-line and consistent with a study done by Makmur Tumin et all (2016). However, this is in contrast to a study done by Rasiah et all (2014) where gender is a significant predictor in their willingness to be an organ donor.

Based on Table 4.11, when comparing willingness among different ethnicity to register for organ donation, Chinese is the most willing to register for organ donations with 89.7%, followed by Indians with 64.3% and Malay with 44.8%. Meanwhile, the Malays were the highest in percentage (19%) of unwillingness to register for organ donation. This is in accordance with the national transplant registry (2013) where it noted an increasing trend in the number of organ donors among the Chinese for the past five years while Malays made up only 5% of total donors in the recent years. These findings imply that Malay ethnic group should be targeted more heavily. This finding may prove useful for government and non-government organizations to employ specific strategies to target certain ethnic communities and demographic group.

We found that the sociodemographic data of religion have a significant association with attitude on organ donations. We established that Buddhists are more likely to have positive attitude on organ donations when compared to Muslims. In another similar study done by Wong LP et al (2010), in regards to religion, they found that "almost two-thirds (66%) of the donors were Buddhists, with Hindus at 24%, Islam at 3%, Christians at 3% and others at 5%." This can be explained by the fact that Muslims face the dilemma of being unsure whether their religion allows them to make organ donations, as shown well in a survey done by Sharif on Western Muslims. Sharif et all (2011) showed that while

68.5% of his respondents entertained the idea of organ donation, but only 39.3% of them thought that it is compatible with Islamic teachings. Bhandary et all (2011) discussed that the culture-specific reasons among some Muslims arguing against donation include "a sense of the sacredness of the body, believing that it is important to have an intact body after passing away and fear of illegal trade in organs and the poor would suffer". Meanwhile, BBC resource (2003) stated that "there is no law that prohibits the Hindus to donate their organs, as they believe by donating the organs it would give positive effect for their rebirth process after death". Lastly, the concept of donating organs is generally accepted in Christianity. Pope Benedict XVI himself is an organ donor and his predecessor John Paul II showed his support stating that "Donating organs is an act of Christian's love and duty" (Badrolhisam et all, 2012). This is important as any future healthcare practitioners who perceive that their religions forbid organ donation would most likely not donate any organs after death and would not facilitate others' donations among the undergraduate medical students.

Healthcare professionals' attitude toward organ donation is pivotal in influencing organ donation rates, as they are responsible during their clinical work to identify and facilitate any potential cases of organ donations. Furthermore, they can also become ambassadors in advocating organ donation. Medical students eventually are future health care providers and thus their attitude toward organ donation cannot be taken lightly. Having a positive attitude towards organ donation may support the physician's belief that organ donation is a treatment option that may benefit many patients in need.

A limitation of this study is the lack of data from other medical schools in Malaysia. The results may not be strictly representative of the medical students in Malaysia.

CHAPTER 6: CONCLUSION

The prevalence of registered organ pledgers is higher among medical students compared to the general population in the country. The knowledge of organ donations among medical students is good but can be further improved through better awareness programs and more structured lectures. Better knowledge on organ donations leads to a higher willingness and more positive attitude towards organ donations. The early introduction of the subject in the medical curriculum may tackle some of the misconceptions related to organ donation. Their attitude and commitment toward organ donation should be enhanced to increase organ donation among future healthcare providers which would indirectly improve deceased donations among the public. A study might be needed to determine ways to improve the current medical curriculum and ultimately, positively impact the rate of organ donation in this country. Future research should focus on the possibility of shifting from the informed consent system to the presumed consent system as a way to improve deceased donations in Malaysia.

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