RESEARCH PAPER

Knowledge and attitude regarding organ donation and transplantation among patient companion attending outpatient department at a teaching hospital in Baghdad city - Iraq

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Abstract

Background: Organ donation and transplantation is a life-saving for many patients and can be affected by cultural beliefs, socio-economic levels of people and legalization in many countries. Exploring these issues play a crucial role in promoting concept of organ donation among nations especially in the era of disparity between organs a viability and number of patients in waiting lists.

Aims: To evaluate knowledge, awareness and attitude of Iraqi people and the associated factors towards organ donation and transplant.

Subjects and Methods:

Study design: We conducted a cross-sectional study using a self-administrative structured questionnaires distributed to companions of patient during outpatient department visit.

This hospital -based study was performed at a teaching hospital from January 1st to June 1st 2022,

The socio-demographic data as well as knowledge and attitudes of participants on the organ donation and transplantation has been collected and analyzed.

Results: A total of 360 subjects participated in the study with overall response rate 95% (n = 341/360). The mean age of respondents (male n. 212, 62.1% and female n. 129, 37.9%) was 37.8 ± 10.7 (range 18-75 years) and 329 (96.5%) of them heard about organ donation. A 271(73.3%) of the studied group supported and encouraged organ donation, however, only 120 (36.5%) of them exhibiting desire for donation. 59.8% (n.204) of the respondents were governmental employees and 311 (91.2%) of them had a university level of education or higher. The male gender had a significantly higher desire (P = 0.043) for donations than females. On other side desire for donation was significantly less (P = 0.001) among governmental employees in comparison with other occupations

Conclusion: The study advocates to focusing on increase awareness of the general public by broad dissemination of clear messages in various mass media and by local religious and community leaders on the benefit of organ donation will be decisive for improving willingness to donations.

Key words: Organ donation, Knowledge, Attitudes, Awareness

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Introduction

Despite the advancements in medical technology and pharmaceutical manufacturing worldwide, organ donation and transplantation has still been the most cost effective and definitive treatment for end-stage organ failure around the world. Iraq has had a

long-standing history of organ transplantation belonging to the seventies of the last decade when the first renal transplantation was performed in 1970s, and in 1985. Brain death was clearly defined and refined in 1989 to include articles explaining live and deceased donation, donor criteria, not paid donation and consent. In 2016, a law that prohibits and penalizes organ trafficking was up issued by Iraqi government.^{1,2} With the ever- increasing number and aging of our population, the incidence of chronic diseases as diabetes mellitus and hypertension is rising. We expect the demand for organ donation and transplantation to also increase in countries the concept of where deceased transplantation has not gained popularity till now and the living donor program is the only source for organ donation with kidney donation rate of 16.6 per million population per year.^{3,4} Organ donation is a noble and human act based on an altruism concept which is well-rooted in the Middle East region especially Arab culture, which can provide a valuable resource for organ donation.⁵ Most Iraqi people are either unsure or do not know about religious allowance and legalization of organ donation in Iraq, which could be due to mixed messages (bad and good) from religious leaders, social media, educational institutions and health care workers. Globally, the gap between organ donation and transplantation is steeply expanding as there are different communities world-wide with different social, cultural and religious beliefs reflecting their own attitudes towards organ donation. Up to our best knowledge there are few published studies investigating the knowledge and attitudes of Iraqi society regarding organ donation and transplantation. We conducted this study using a self- administered questionnaire in Baghdad city -Iraq to highlight beliefs and misconceptions

about organ donation and transplantation in our culture by assessing public knowledge, awareness and their perception, identity sources of information and the contentment of our nation in the role of the health system in the program of organ donation.

Materials and Methods

After obtaining ethical approval from the Research and Ethical committee in our teaching hospital, a hospital-based cross -sectional study was conducted from January 1, to June 30,2022, at Al Karama teaching hospital, Baghdad, Iraq. The hospital provides outpatient services in various specialty fields, including a kidney transplantation and nephrology service which was started in the eighties of the last decade. The participants were selected using a randomized convenience sampling method and participants need to meet the following inclusion criteria to be recruited for study: (1) verbal consent for participation, (2) age equal or more than 18 years old, (3) read and write was the minimum acceptable level of education. The semi-open -ended questionnaire used for this study was adopted and modified from its original form.⁶ The three hundred and sixty questionnaire forms were distributed to companions of patients attending various outpatient departments of the hospital who reflect the diversity of Iraqi society. The questionnaire was presented in Arabic language to be appropriate for the public with an introductory paragraph about the aim of study and composed of three sections.

Section 1: questionnaire about the sociodemographic status of participants.

Section 2: knowledge questionnaire focused on organ donation, source of information, the presence of an organ registry in Iraq, possibility of donating the whole or part of an organ, their

risk and benefit of donating an organ, Iraqi organ donation law, religious views and access to transplant services.

Section 3: The attitude questionnaire focused on the participants' attitude towards willingness to donate, the value of organ donation in saving lives, timing of donation, promoting organ donation, role of the health system in promoting organ donation and financial support for donors. After answering the questionnaire, participants put it in a specific box placed in outpatient departments. At the end of the study period, processing of responses was starting neutrally by trained general practitioners. Any form with the name or signature of the respondent was excluded. The answers were then translated into English.

Statistical analysis:

The analysis of collected data was carried out using the available statistical package of SPSS-28 (Statistical Packages for Social Sciencesversion 28). Data were presented in simple measures of frequency, percentage, mean, standard deviation, and range (minimum-maximum values). The significance difference of different percentages (qualitative data) was tested using Pearson Chi-square test (χ^2 -test) with application of Yate's correction or Fisher Exact test whenever applicable. Statistical significance was considered whenever the P value was equal or less than 0.05.

Results

Socio-demographic characteristics: Among 360 patient companions, 341 responded to the entire questionnaire providing a response rate of 95%. As outlined in (Figure-1), 329(96.5%) were

heard about organ donation and 12(3.5%) participants had not heard about it.

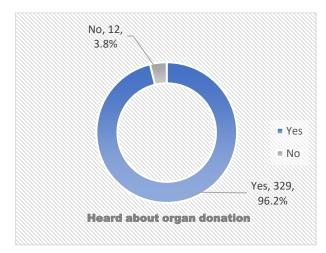


Fig 1. Heard about organ donation

(Table-1), shows that the mean age of participants was 37.8 ± 10.7 (range 18-75 years), and 115 (33.7%) were in range of 30-39 years. More than half of the study participants were males (62.2%, n = 204). The majority of the study participants were married (75.4%, n = 257). Regarding occupation, 59.8% (n = 204) of respondents were governmental employees. As for education level, 91.2% (n = 311) had a university education.

Table 1. Sociodemographic data of the study population.

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Characteristic	classification	Freq.(n = 3 41)	Perc.(n = 341)
	<30years	90	26.4
	3039	115	33.7
	4049	85	24.9
Age (years)	5059	40	11.7
	≥60years	11	3.2
	Mean ± SD	37.8 ± 10.7	
	(Range)	(18-75)	
Gender	Male	212	62.2
Gender	Female	129	37.8
	Governmental employee	204	59.8
	Self-employee	49	14.4
Occupation	Worker	46	13.5
Occupation	Unemployed	22	6.5
	Retired	7	2.1
	Housewife	13	3.8
	Read & write	14	4.1
Level of education	Primary	1	.3
Level of education	Secondary	15	4.4
	College	311	91.2
	Single	70	20.5
Socioeconomic	Married	257	75.4
status	Divorced	8	2.3
	Widowed	6	1.8

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Knowledge about organ donation: The largest sources of information about organ donation among the respondents were the internet (75.4%) and television programs (59.6%) and the least sources were hospital display screens (5.8%) and newspapers and magazines (7%) (Figure-2).

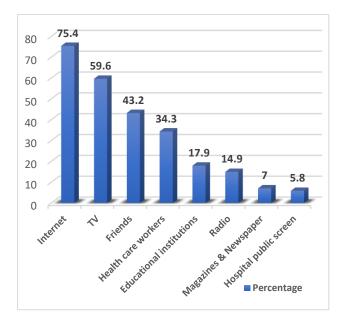


Fig 2. Sources of hearing about OD among study population

Regarding the type of organ that can be donated, the majority of the participants mentioned kidney (72%) followed by the heart (50.5%). On the other hand, 2.4% and 10.9% of study participants reported that the skin and eye can be donated respectively and 23.4% of respondents claimed that, person can donate more than two organs (Figure-3).

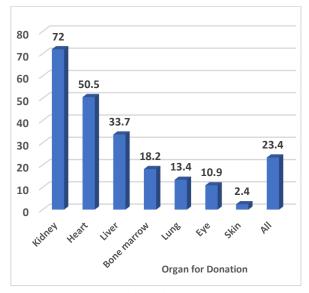


Fig 3. Organs can be donated

(Table-2), shows around fifty percent of respondents (48. 3%, n = 159) believed that both living and dead individuals are eligible to donate organs. In response to the question "Does law in Iraq and religion allow organ donation", 179(54.4%) and 236(71.7%) answered do not know, respectively. More than half (54.1%, n = 178) of participants do not know the place where to register or donate organs.

Table 2. knowledge about organ donation

Knowledge assessment Response		Freq (n = 329)	Perce (n = 329)	
respon	Live	105	31.9	
Person suitable	Dead	36	10.9	
for organ	Both	159	48.3	
donation	No one	5	1.5	
	DNK	24	7.3	
The law in Iraq	Yes	136	41.3	
allows organ	No	14	4.3	
donation	DNK	179	54.4	
Daligian allawa	Yes	84	25.5	
Religion allows organ donation	No	9	2.7	
organ donadon	DNK	236	71.7	
Know the place for organ	Yes; Hospital	70	21.3	
donation or	No	81	24.6	
register for organ donation	DNK	178	54.1	

Attitude towards organ donation:

(Figure-4), shows that 120 (36.5%) of participants had a desire for donation, 110 (33.4%) had no desire and 99 (30.1) were unsure about their desire.

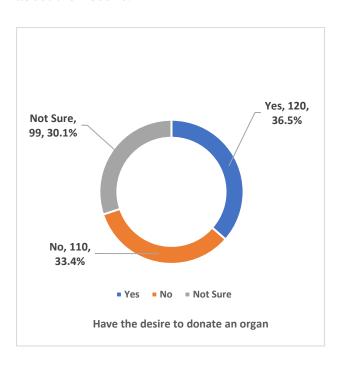


Fig 4. Desire for organ donation

Among those who were willing to donate (n=120, 36.5%), when they asked why they have a desire to donate, 110 (91.7%) reported saving the lives of others and 10 (8.3%) reported donation is part of human responsibility (Table-3). The reasons for opposing organ donations among unwillingness group of donations (n=110, 33.4%) included fear of health complications (46.4%), phobia of body disfiguration (22.7%),

religious beliefs (19.1%) and lack of information (11.8%). As for those who desire organ donation, when they were asked about when they would donate their organs, 52.5% (n = 63) reported that they can donate after their death, while 47.5% (n = 57) reported that they can during their lifetime. Among the participants, 51.8% (n =170) reported they can donate to anyone in need while 45.1% (n = 148) reported they can donate to family members and only 3% (n = 10) reported to both relatives and friends. When they were asked about things to be considered in organ donation, around half of the participants reported providing good health care during the donation process in relation to recipient, the most important things to take into consideration in donation processes (n = 166, 50.5%, n = 143, 43.5%), respectively. The religion of recipient, financial benefit from donation and personality of recipient were least important things to take into consideration in donation processes (n = 1,0.3%, n = 7, 1%, n =12, 3%), respectively. Among the participants, 190(57.8%) expressed their agreement to support and encourage organ donation and 123(37.4%) responded to agreements towards financially supporting organ donation while 270 (82.1%) of participants did not believe that the Iraqi health system had a considerable role in encouraging organ donation (Table-3).

Table 3. Attitude for organ donation.

Attitude Assessment	Response	No.	%	
Why have the desire	Save other person's life	110	91.7	
to donate	Responsibility to humanity	10	8.3	
	No enough information on OD	13	11.8	
Why do not have the desire to donate	Afraid from bad health consequences later	51	46.4	
the desire to donate	Do not want to give part of body or disfigure it	25	22.7	
	Religious reasons	21	19.1	
At which stage want	Donate while alive	57	47.5	
to donate an organ	Donate after death	63	52.5	
	Family	149	45.2	
To whom have	Relatives	4	1.2	
desire to donate	Friends	6	1.8	
	Anybody	170	51.8	
	Provide good health care during OD	166	50.5	
The important thing	Personality of person to donate to		3.6	
to be considered in organ donation	Religion of person to donate to		0.3	
	Relation of person to donate to	143	43.5	
	Financial benefit from OD	7	2.1	
0	Strongly agree	51	15.5	
Opinion in general	Agree	190	57.8	
for encouraging	Not sure	73	22.2	
organ donation	Disagree	8	2.4	
	Strongly disagree	7	2.1	
0.1.1.4	Strongly agree	40	12.2	
Opinion to provide	Agree	123	37.4	
financial support	Not sure	93	28.3	
for encouraging organ donation	Disagree	61	18.5	
organ donadon	Strongly disagree	12	3.6	
Opinion is health	Yes	2	0.6	
sector provide	No	270	82.1	
considerable role in health education about organ	DNK	57	17.3	
donation for publics				

Relation between socio-demographic data and willingness for donation

(Table-4), demonstrates the association between socio-demographic data and willingness to donation. Male gender was significantly associated with more willingness for donation than the female (p = 0.043) while the desire for donation was significantly less among governmental employees in comparison with

other occupations (p = of 0.010). Age, level of education and marital status were all not significantly associated with the desire for donation.

Table 4. Sociodemographic data relation to desire of donation

		Have the desire to donate an organ Yes No/ Not sure		P value		
		No.	%	No.	%	
	< 30years	32	26.7	53	25.4	0.626
	30-39	35	29.2	75	35.9	
Age (years)	40-49	35	29.2	49	23.4	
	50-59	13	10.8	26	12.4	
	= > 60years	5	4.2	6	2.9	
Gender	Male	83	69.2	121	57.9	0.043*
Gender	Female	37	30.8	88	42.1	
	Govern. employee	70	58.3	128	61.2	0.010*
	Self-employee	12	10.0	37	17.7	
0	Worker	25	20.8	20	9.6	
Occupation	Unemployed	5	4.2	14	6.7	
	Retired	5	4.2	2	1.0	
	Housewife	3	2.5	8	3.8	
	Read & write	6	5.0	5	2.4	0.372
Level of	Primary	-	-	1	.5	
education	Secondary	3	2.5	10	4.8	
-	College	111	92.5	193	92.3	
	Single	21	17.5	44	21.1	0.259
Marital status	Married	91	75.8	160	76.6	
	Divorced	5	4.2	3	1.4	
	Widowed	3	2.5	2	1.0	
*Significant difference between percentages using Pearson Chi-square test ($\chi 2$ -test) at 0.05 level.						

Discussions

The rate of organ donation and transplantation is largely dependent on public awareness, knowledge and attitude. Moreover, the sources of information, legislation, education and health systems, cultural and religious thoughts fundamentally affect organ transplantation programs. Globally, the prevalence of knowledge of organ donation ranges from 60 to

85%, which varies between countries, and our revealed that 96.2% of participants heard of organ donation, which is encouraging and comparable to published data from Syria, Egypt and Saudi Arabia, which reported that 82%, 89% and 95% of their study participants have heard of organ donation, respectively. 6,9,10 Our data demonstrated that the internet and television were the most effective sources of information about organ donation. These findings were correlated with results of other studies in which the internet and television play a considerable role in raising knowledge and awareness of organ donation. 11,12 This could be explained by low cost and ease of access in comparison with other sources of information. However, the reliability of information provided on these platforms is doubtful and needs further assessment and control. 9,10,13 The health care workers, educational institutes and hospital display screens were the least effective source of information as shown in figure (1), and that was reflected by the fact that 82.1% of participants did not believe that the Iraqi health system had a considerable role in education about organ donation for public in agreement with published data from Syria and Egypt where the role of health care workers as source of information was low 6.3% and 11%, respectively. 9,10 However, these sources can be considered as a trustable source and their interaction can influence the final decision of individuals.¹⁰ These findings elicit the need to bridge the gap between health and education systems and the general population by engaging health care workers in specific workshops on organ donation, setting up websites managed by health care workers, starting an early education program about organ donation at the level of secondary school. The health sector needs to take a step forward by

organized workshop for public, distributed booklet, display screens in hospital and public places encouraged organ donation. The kidney is the most common organ that can be donated, according to many surveys. This is consistent with our study, which showed that 72% of study participants believed that the kidneys are the most common organ that can be donated, followed by the heart and liver. The population's choice of kidneys is somewhat expected as there is an existing practice of kidney transplant in Iraq and dissemination of information in the different media in addition to an expanding number of kidney failure patients. 23.5% of participants claimed that one can donate more than two organs. This observation reflects that Iraqi people are preoccupied with the possibility of multiple organ donation to save lives, in agreement with local published data by Al-Abbasi and Al-Jasim, where their study group claimed that one donates more than two different organs.¹⁴ Legalized regulations and religious faiths have a fundamental role in promoting organ donation. Iraq has been pioneering legislation on organ transplantation and donation in the Middle East when the first renal transplant was performed in June 1973. Revision and updates on legal provisions for organ donation and transplantation have been underway. Religious acceptance of both living and deceased donors was clearly stated in Islam and Christianity for the benefit of people in need.^{1,9} Lack of such knowledge was relevant with our findings that 54.4% and 71.7% of participants did not know that the Iraqi constitution and religion permit them of living and deceased organ donation, respectively. In agreement with published data from Saudi Arabia lack of awareness of presence of regulations and societies which legalized and regulated organ donation and transplantation among adult

population in Riyadh city was noted. 15 Providing the fact that the Iraqi organ donation and transplant program has been successfully handling organ transplantation since inception. The present research revealed that 54.1% and 24.6% of participants either do not know or not know where to register for donation, respectively, and we cannot blame them as 82.1% of participants believed that health sector did not have active role in education and support of organ donation. Efforts need to be augmented to inform the public about the regulations of organ donation in Iraq and religious permission and to establish our register program for organ donation. The daily life of Iraqi people has been affected by many conflicts such as wars, sanctions and economic crises, making the concept of organ donation and transplantation fluctuating between self-faith in helping others and human behavior in fear of sequels, such as 73.2% of participants encouraging organ donation, while one third of participants (36.5%, n.120) had desire for donation. Our result regarding willingness to donations was similar to published data from Iraq. As Al-Abbasi and Al-Jasim found in their observational study among 912 Iraqi young adults, the percentage of participants willing to donate was 38%, which is lower than that Iraq.6,9,10,14,16,17,19 backgrounds with The motivation factors behind willingness for donation were to save the life of others and humanity, which could be explained by sympathy for the support and help of any individual in need.^{8,13} Worldwide, humans share the same obstacles to organ donation, like dissatisfaction with the health care system, incorrect perceptions of organ donation, desire to keep the body intact and religious beliefs. These thoughts stand with our findings, where barriers to organ donation among participants (n =110,33.4%) who do not

have a desire for donation, as the following: the of complications (46.4%),body disfigurement (22.7%), religious beliefs (19.1%) and lack of information (11.8%). The published data from Iraq, Saudi Arabia, and Kuala Lumpur show that religious beliefs and practices form 7%, 26.2% and 10%, respectively, as a barrier to donating organs. As a result, as individuals gain more education and more access to social media and networks, the religious barrier becomes less and less of an actual barrier.^{5,18,20} Our study also showed that participants who had willingness for donation are aware when someone can donate their organs. The responses were 52.5% (n = 63) and 47.5(n = 57) % that is possible after death and during people's lives, respectively. This finding is consistent with a study conducted among adult population in Jazan, Saudi Arabia where 59% and 46% of study participants knew that organ donations can be done during live and after death.²¹ However, Taimur et al. showed that only a minority of the study participants were aware of the possibility of donation during a person's lifetime. 8 Around half of participants (n = 170, 51.8%) were willing to donate an organ to anyone and not just to friends and relatives, this could reflect the altruistic behavior of the study participants in agreement with Sayedalamin et al where 41.2% of his study group agree to donate to anyone and 45.1% (n = 146) of our participants were willing to donate to their family as this result was in consistent with results of other studies conducted in other countries such as Poland and Turkey where their participants preferred to donate their organs to family members rather than strangers and this could reflect the family role in organ donation decisionmaking.²²⁻²⁴ This variation in the level of awareness of organ donation timing and to who donate organ is varied according to culture,

educational level, the provided health care services, and campaign efforts.^{6,25} There is a general belief among our people that the organs can be sold and bought on black market in Iraq and other developing countries. As thousands of patients from Arab countries have received kidneys sold in Iraq especially in the era of sanction, making the subject of financial incentives a controversial issue in organ donation and transplantation community as the line between paid and incentive donation is often blurred and vulnerable groups are at risk of being victims of organ trafficking. The Iraqi government and Iraqi nephrology society are like many governments and societies all over the world which considered paid donation a condemned behavior. Moreover, the Iraqi constitution clearly illegalized trading organs and declared aggressive punishment for this act which could reach to execution or sentence whole life in prison.²⁶ 37.4% (n = 123) and 12.2% (n = 40) of participants agree and strongly agree, respectively, with the idea of financial incentives to encourage organ donation in agreement with local studies, as Ali et al and Al-Jasim have found that 40.5% and 56.9% of their participants has supported the concept of having donors, respectively.^{5,13} We believe it is time to change our donation programs from donation based on a gift without financial rewards to a gift with financial rewards (paid leave, health insurance, pocket expenses and donor acknowledgment), result in more donations and making the organ transplantation process clearer to the public and avoid organ trade.²⁷ Gender and organ donation is a debatable subject in communities as socioeconomic, educational levels, tributal and cultural beliefs can play a crucial role in sex disparity in the organ donation process. As the published studies from India and Libya

demonstrated that willingness for donations was significantly stronger among men than women. On the contrary, in other studies, it was found that females were more willing to donate organs.²⁷⁻³⁰ However, in the last decades, the published data from Iraq has shown that women represented two -thirds of organ donations, as in developing and developed countries under women are consistently overrepresented among living donors where tribal effect and poor socioeconomic status effect. Indeed the current study show that the desire for donation was significantly more in male than female (P value 0.043) which could be attributed to that the study was conducted in the capital city where women were educated and had more right and independent personality than peripheral areas where women may be under exploitation.^{3,31} The Type of a job is an extrinsic and nonimmunologic factor which could play an important role in the field of organ donation and transplantation, where more than half of our responders were governmental employees with different levels of education, but unfortunately, unwilling, for donation, was significantly more among them (P value 0.010) which could be explained by fear of work interruption with no indemnities or, worst, losing a job as result of post donation health complications. Lack of motivation and educational programs can also contribute to this unwillingness to donate. This analysis highlights the importance of creating motivation among employees, such as having laws that give them the right to medical leave if they choose to be living donors and, even more importantly, in getting insurance cards or financial rewards and engaging them in education campaigns. The development of these policies will undoubtedly help increase donation willingness.³² The correlation between education level and willingness for organ donation was confirmed in different literature. In the present study, around 90% of responders had completed university education and our results indicate there was no statistically significant difference between the level of education and willingness for donation. This finding comes in concordance with studies done among Bosnian immigrants living in Sweden, where there was no difference between education. levels and donation willingness. In contrast, a Korean study conducted by Kim et al., showed a higher level of organ donation willingness is associated with a higher educational level, particularly among health care professionals. 33,34

limitations: Study There were certain limitations in the present study such as selfreporting bias, cross-sectional design of the study and lack of presence of other religions in this study based on which the role of religion on the attitude of the participants could not be evaluated. Moreover, a study group restricted to one teaching hospital that made it difficult to generalize the findings. However, the strength of the present study is that it includes a random sample that comprises participants with various backgrounds and represents the varied Iraqi population.

In conclusions, we need to take the findings of this study into consideration while planning public awareness programs about the benefits of organ donation using multiple platforms (social media, TV and hospital display screens) and at varying educational levels. Further, health-care workers, governmental and non-governmental agencies, political and religious leaders should all take active initiation in motivating the public to donate organ by uncovering the misconceptions of general population toward organ donation. In

addition, it is time to change Iraqi donation and transplant program from unrewardable to rewardable programs (health insurance, paid donation leaves, pocket expenses) under governmental control to avoid organ trafficking. Moreover, further studies across Iraq are needed to highlight the reasons for variations in knowledge and attitude among the Iraqi population.

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المعرفة والموقف فيما يتعلق بالتبرع بالأعضاء وزرعها بين مرافقي المريض الذين يحضرون قسم العيادات الخارجية في مستشفى تعليمي في مدينة بغداد - العراق

الخلفية: التبرع بالأعضاء وزرعها هو المنقذ للحياة للعديد من المرضى ويمكن أن يتأثر بالمعتقدات الثقافية والمستويات الاجتماعية والاقتصادية للناس والتقنين في العديد من البلدان. يلعب استكشاف هذه القضايا دورا حاسما في تعزيز مفهوم التبرع بالأعضاء بين الدول خاصة في عصر التفاوت بين الأعضاء وقابلية البقاء وعدد المرضى في قوائم الانتظار.

الأهداف: تقييم معرفة ووعى وموقف الشعب العراقي والعوامل المرتبطة به تجاه التبرع بالأعضاء وزرعها.

الموضوعات والأساليب: تصميم الدراسة: أجرينا دراسة مقطعية باستخدام استبيانات منظمة ذاتية الإدارة وزعت على مرافقي المريض أثناء زيارة قسم العيادات الخارجية. تم إجراء هذه الدراسة القائمة على المستشفى في مستشفى تعليمي في الفترة من ١ يناير إلى ١ يونيو ٢٠٢٢ ، تم جمع وتحليل البيانات الاجتماعية والديموغرافية وكذلك معرفة ومواقف المشاركين بشأن التبرع بالأعضاء وزرعها.

النتائج: شارك ما مجموعه 77 شخصا في الدراسة بمعدل استجابة إجمالي 90% (0 = 77/78). كان متوسط عمر المستجيبين (ذكور 77) 77% وإناث 770 (نطاق 770 (نطاق 700 سنة) وسمع 770 (نطاق 771 (نطاق 771 (نطاق 771 (نطاق 771 فقط 770 منهم عن التبرع بالأعضاء. أيد 771 فقط 770 من المجموعة المدروسة وشجعوا التبرع بالأعضاء ، ومع ذلك ، فإن 771 فقط 770 منهم يظهرون رغبة في التبرع وكان 771 من المستجيبين موظفين حكوميين و 771 (771 منهم حاصلون على مستوى تعليمي جامعي أو أعلى. كان لدى جنس الذكور رغبة أعلى بكثير (700 و) للتبرعات من الإناث. على الجانب الآخر ، كانت الرغبة في التبرع أقل بكثير (700 و) للتبرعات من الإناث. على الجانب الآخر ، كانت الرغبة في التبرع أقل بكثير (700 و) بين موظفي الحكومة مقارنة بالمهن الأخرى.

الاستنتاج: تدعو الدراسة إلى التركيز على زيادة وعي عامة الناس من خلال النشر الواسع لرسائل واضحة في مختلف وسائل الإعلام ومن قبل الزعماء الدينيين والمجتمعيين المحليين حول فائدة التبرع بالأعضاء.

الكلمات المفتاحية: التبرع بالأعضاء، المعرفة، المواقف، الوعي