

Willingness to Adopt Opt-Out Organ Donation System: Saving Life from Death

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ABSTRACT

Objective: To study the information, supposition and impression of the general population concerning organ donation and transplantation in Pakistan.

Study Design: Cross-sectional analytical survey.

Place and Duration of Study: Study was conducted at Tertiary Care Hospital, from Jan to Aug 2020.

Methodology: We used the web-based questionnaire, devised from relevant studies and National Health Service (NHS) protocols. The questionnaire comprised of 20 multiple-choice questions (MCQs) in addition to demographic profile, distributed among the general population (n=1000) which assessed basic knowledge regarding organ transplantation and willingness for donation.

Results: One thousand participants were enrolled in the study. The age range was 24–61, with a mean age of 36.66±9.00 years. 933(93.3%) participants believed organ donation should be mandatory, and 600(60%) expressed willingness to donate or accept organ donation. In addition, 933(93.3%) participants believed in arranging awareness campaigns, and 1000(100%) had an opinion of establishing a convenient donor registration system.

Conclusion: There are momentous awareness and willingness for organ donation; therefore, befitting tactics can enhance organ donation in Pakistan, and this issue will no longer be considered a haunted one.

Keywords: Cadaver, Opt-out, Organ donation.

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INTRODUCTION

The United States stands fourth among top organ donation-positioned nations with an intricately established organ donation registry system and vault framework.^{1,2} According to insights from July 2010, 90,000 patients were on the waiting list for renal transplants and 116,705 patients for the rest of the organs. In July 2019, 113,432 patients were waiting for an organ transplant.^{3,4} Joined Network Organ Sharing (UNOS) as shared information of yearly deaths of 2017 while sitting tight for organ donation was 6500.⁵

In Pakistan, a definitive framework is absent, and facilities and this thought of organ donation are superimposed by myths, convictions, odd notions, superstitions, financial embezzlements and criminal organ trafficking.⁶ Therefore organ donation terms haunt even those who are willing to donate.⁷

European nations have effectively received this Opt-out organ donation pattern. Spain had the highest contributor rate on the earth at 46.9 per million individuals (2017).⁸ Some nations like the United Kingdom and Canada are moving towards an Opt-out

framework to expand the accessibility of perished organ donation and improve endurance rate because of organ failure.⁹ Opt-out, called "considered" consent, suggests that most individuals support organ donation. However, just a small level of the populace is enrolled because they neglect to experience the simple step of enlistment, regardless of whether they need to give their organs at the hour of death. This could be settled with an Opt-out framework, where more individuals would be enlisted as benefactors when just those who object consent to enroll to be on the non-donation list. For this reason, nations such as Wales have embraced a "delicate Opt-out" consent just in case a resident has not decided to enlist. At that point, they will be treated as an enlisted resident and join in the organ donation process.¹⁰

Our Study was based on evaluating and gauging knowledge, willingness and pattern towards organ donation and transplantation of the general population in Pakistan.

METHODOLOGY

The cross-sectional analytical survey was conducted at Tertiary Care Hospital, from January to August 2020 and approval was taken from the Hospital Ethical Committee (Ltr No. 233). The sample size was

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calculated keeping in view the study conducted by Ashraf *et al.*¹¹

Inclusion Criteria: Patients suffering from chronic ailments, attendants accompanying patients and health care professionals were included in the study.

Exclusion Criteria: Population with poor literacy levels were excluded from the study.

The methodology constituted of a web-based questionnaire devised based on relevant studies and National Health Service (NHS) protocols, comprised of (20) multiple-choice questions (MCQs) in addition to a demographic profile. The questionnaire was validated by a pilot study and experts' opinions on the subject. The experts acknowledged the subject, and 90% of participants, all healthcare workers, and supported organ donation programs. The survey was conducted via an online structured and paper-based questionnaire distributed among the general population, (n=1000), which assessed basic knowledge regarding organ transplantation and willingness for donation. Feedback was received from (100%) participants.

We asked about the comprehension of organ donation and which organs can be given, assessment about organ donation, the expectation of organ donation, eagerness to give your organs after death, ability to acknowledge organ donation, the significance of talking about with your partner about your desires in regards to organ donation, the thought process of organ gift, the explanation behind the reluctance to give, feeling in a situation where expired has not done any will about organ gift, supposition about unclaimed body organ gift. We likewise evaluated the emotional coherence of participants by inquiring whether any of them lost their cherished ones because of the absence of the organ donation registry. We likewise asked about specialized activity campaigns regarding awareness, organ donation vault and moral laws to advance organ donation.

SPSS verses 21.0 was used for the data analysis. Quantitative variables were expressed as Mean±SD and qualitative variables were expressed as frequency and percentages. Chi-square test was applied to find out the association. The *p*-value lower than or up to 0.05 was considered as significant.

RESULTS

One thousand participants were enrolled in the study. The age range was 24–61 years, with a mean age was 36.66±9.00 years. Among them, 395(39.5%) were health experts, while non-clinical experts were

605(60.5%). 933(93.3%) participants had a feeling that organ donation would be mandatory, and 600 (60%) communicated eagerness to give or acknowledge organ donation (Table-I).

Table-I: Attitude towards Organ Donation (n=1000)

n(%)		
Yes	No	May Be
Organ Donation will be mandatory		
933(93.3%)	67(6.7%)	-
Willingness for Organ Donation		
600(60%)	133(13.3%)	267(26.7%)
Willingness to accept Organ Donation		
600(60%)	67(6.7%)	33(3.3%)
Unclaimed Bodies-Decision to be reserved by Medical Authorities		
467(46.7%)	467(46.7%)	67(6.7%)
Awareness Campaign's		
933(93.3%)	-	67(6.7%)
Organ Donation National Registry Establishment		
1000(100%)	-	-

About 933(93.3%) participants had confidence in awareness campaigns, and 1000(100%) had an opinion of the foundation of convenient benefactor enlistment substructure. Knowledge and disposition are outlined in (Table-II).

Table-II: Organ Donation Willingness (n=1000)

	n (%)
Organ Donation Intent	
To save lives	933(93.3%)
Compassionate and sympathetic Intents	67(6.7%)
Organ Donation Opinion Irrespective of Willingness	
Support Organ Donation	867(86.7%)
Neither Support nor oppose Organ Donation	133(13.3%)
Number of Lives saved from one body Organ Donation	
Four	133(13.3%)
Eight	467(46.7%)
Unsure	400(40.0%)
Organ Donation Attitude	
Donate all of my organs	200(20%)
Donate some of my Organs	600(60%)
Unsure	200(20%)
Motive of Organ Donation	
Improve Health and save lives	267(26.7%)
Want to do something good even after my death	733(73.3%)
Reason for Unwillingness to Donate	
Organ donation contrary to my religion, culture and faith	333(33.3%)
Mutilation of the body before burial	400(40%)
Fear of organs misuse	200(20.0%)
Hurt emotional state of family	67(6.7%)
Organ Donation Consent	
Individual Consent	733(73.3%)
Family Consent	133(13.3%)
Automatically pursue organ donation wherever applicable	133(13.3%)

The overview of donation and acceptance of organ consent is summarized in (Table-III). Comparison of attitude among medical and non-medical professionals is shown in the Table-IV.

Table-III: Association of Attitude with the Willingness to Donate (n=1000)

Willingness to Donate			p-value
Yes	No	Unsure	
Willingness to accept Organ Donation			
395(66.9%)	70(51.9%)	135(49.1%)	0.001
65(11%)	-	-	
130(22.0%)	65(48.1%)	140(50.9%)	
Organ Donation Will			
525(89.0%)	135(14.4%)	275(29.4%)	0.001
65(11.0%)	-	-	

Table-IV: Comparison of Attitude among Medical and Non-Medical Professionals (n=600)

	Profession		p-value
	Healthcare Professionals	Non-Medical Professionals	
Willingness to accept Organ Donation			
Yes	200	400	<0.001
No	65(16.5%)	-	
Unsure	130(32.9%)	205(33.9%)	
Unclaimed Body Organ Donation			
Yes	265(67.1%)	195(32.2%)	<0.001
No	130(32.9%)	345(57.0%)	
Unsure	-	65(10.7%)	
Willingness to Donate			
Yes	265(67.1%)	325(53.7%)	<0.001
No	65(16.5%)	70(11.6%)	
Unsure	65(16.5%)	210(34.7%)	

DISCUSSION

The study results revealed that many individuals would support organ donation in Pakistan if specialists concentrated on this. Patients who had experienced renal, corneal, bone marrow and liver transplantations demonstrated promising outcomes. However, they had to wait long to get their contributor, and this hold-up needed to be more robust.

One study assessed organ donation inclines in Pakistan Information source was through Television (47.9%), press (45.4%) and the health sector (9.5%). Graduates and postgraduates had a higher mindfulness rate (82.7%), contrasted with lower education standards (64.0%) (p=0.000). The connection between financial status and information was critical (p=0.001).¹¹ In 1954 a successful renal transplant was completed by Murray. Since then, organ transplantation rehearses are effectively followed according to World Health Organization information of 104 nations in the year 2008, demonstrated an approximate number of

100,800 organ transplants all around which incorporates 69,400 kidneys, 20,200 livers, 5,400 hearts, 3,400 lungs and 2,400 pancreatic transplants.¹³ Asia positioned least in this space starting in 2014. South East Asia introduced a pace of 3.8 patients per million populace.¹⁴ The Transplant Evaluation Committee gave insights into Pakistan in 2016, with 1092(5.66) transplantations compared globally to 121,129(28.73). 20 public and 23 private establishments perceived by the government for organ transplantation execution.^{15,16}

Umair *et al.* reviewed Pakistani colleges. Many of the students had a positive supposition about organ donation. However, they feared family and social impacts.¹⁷ Ali *et al.* evaluated the awareness and impression of clinical undergraduates in Pakistan. There was a huge degree of information from the press and electronic media. Source of information arranged by priority was media (64.6%), companions/family (50%), press (42.4%), courses 52(32.9%) and medicinal services suppliers (27.8%). 44.9% exhibited an eagerness to give their organs. In a situation where their family members were enduring (56.3%) consented to give.¹⁸

Consequently, study results show the number of people willing to organ donation. Even though the transplantation society of Pakistan gives a chance for organ donation enlistment yet, at the same time, it needs much more awareness campaigns which could be accomplished through internet-based social and electronic media, to make it an acknowledged subject as opposed to a contested one.

CONCLUSION

There is momentous awareness and willingness for organ donation; therefore, befitting tactics can enhance organ donation in Pakistan, and this issue will no longer be considered a haunted one.

Conflict of Interest: None

Author’s Contribution

Following authors have made substantial contributions to the manuscript as under:

SA: Concept, data acquisition, drafting the manuscript, critical review, approval of the final version to be published.

SN: Study design, data analysis, data interpretation, approval of the final version to be published.

AR & SQ: Critical review, drafting the manuscript, interpretation of dataapproval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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