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The Knowledges and Opinions of ICU Professionals about Brain Death and Organ Donation

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This descriptive type of study involves 290 voluntary ICU professionals of 7 transplant hospitals in İstanbul. Data are collected via questionnaire. Data are analysed by SPSS. Frequency range, X-square test are used as statistical method. Aim of study is to assess the knowledge and opinions of ICU professionals of transplant hospitals. %24.1 never followed up a transplant patient, %15.5 never followed up a brain death, %22.1 have a relative donated his organs, %13.1 have organ donation card. For %48.6 their knowledge about donation and transplantation is enough, %59.3 thinks to donate, %11.4 don't think to donate their organs. For %75.5 check-up is necessary before donation, %65.5 don't know where to donate, %98.6 declare that they are aware of brain death, %95.9 believes in brain death. For the statement "Cadaveric organ transplantation can only be done from patients who die in ICU after donation" %55.2 answered yes, %27.6 answered no, %49 think that it should not be available to retrieve organs from brain death patients who donated his organs during his life time without looking for acceptance of their relatives, %79.7 believe organ donation and transplantation is carried out according to law in Turkey, %5.9 don't believe, %14.8 think there is discrimination while choosing the organ recipients, %57.9 declare they can donate their mothers organs, %92.8 declare they can donate their own kidneys to their mother if she needs, %38.6 declare they can donate their kidneys to friends, %52.8 wish for their mother to donate her kidney to them if they suffer from kidney insufficiency. There is statistically significant relation between attendees who allowed up a brain death or organ transplantation case before and thought for donation ($p = 0.031$, $\chi^2 = 6.96$) ($p = 0.00$, $\chi^2 = 17.4$). The increase of professional duration and working period at the hospital increases the believe about having enough knowledge about donation and transplantation ($p = 0.00$, $\chi^2 = 33.15$) ($p = 0.00$, $\chi^2 = 14.77$) ($p = 0.01$, $\chi^2 = 13.36$). This increase also increases the percentage of declaration "My organs can be taken without permission of my relatives" ($p = 0.00$, $\chi^2 = 17.9$) ($p = 0.00$, $\chi^2 = 16.03$). The percentage of declaration for "My organs can be taken without permission of my relatives" is higher throughout doctors according to nurses. Nurses kidney donation to their mothers is higher if needed ($p = 0.00$, $\chi^2 = 18.79$) ($p = 0.00$, $\chi^2 = 15.42$). Study showed the knowledge about donation and transplantation throughout participant ICU professionals is not enough. There should be training programs at these special transplant hospitals.

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Regional Variability in and Factors Related to Offer Rejections of Adult Donor Hearts

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Introduction: Heart failure is a growing health problem affecting nearly 6 million in the United States [1]. Heart transplantation is the definitive therapy for the end-stage heart failure patients with the post-transplant survival rate of over 70% [2]. However, the therapy is not available to many due to the severe shortage of donor hearts. The high rejection rate of donor heart offers is a factor that further aggravates the shortage [3]. The paper investigated the causes of and regional variability in offer rejections of adult donor hearts.

Methods: The UNOS data of the 1,526,306 adult-donor heart offers made between 2003 and 2015 were analyzed. Regional variability in offer rejections was tested using ANOVA. Spatial statistical and mapping analyses were performed to further examine the regional variability and to visualize the spatial pattern of the offer rejections. The likelihood of an offer rejection was estimated using a logistic regression. In the regression, the offer observations were grouped into clusters using donor ID to achieve robust standard errors.

Results: Of all offers made, 809,453 (53.03%) were rejected. The primary reason for declining the offers was the quality of donor hearts, accounting for 631,295 (41.36%) of all offers made, followed by donor size/weight (161,078 or 12.74%). ANOVA revealed significant variations in the rejection rate at the OPO (1.22- 46.95%, $p < 0.001$) and the regional (21.42%-35.11%, $p < 0.001$) levels. Some parts of the Northeastern US exhibited a higher rejection rate compared to other areas. The logistic regression indicated that a rejection is more likely when: 1) the candidate is male (OR = 1.16, $p = 0.003$); 2) the distance between a procuring donor hospital and the receiving transplant center is longer (1.002, $p < 0.001$); and donor is older (OR = 1.004, $p < 0.001$), female (OR = 1.22, $p = 0.001$) and African American (OR = 1.32, $p < 0.001$). The offers made within the same hospital (i.e., donor hospital is also the transplant center receiving the offer) was significantly less likely to be rejected (OR = 0.55, $p < 0.001$).

Conclusion: Regional variability in access to a heart transplant and possible modifications to the current heart allocation system have been discussed. Our findings suggest that regional variability in the rejection rate of donor heart offers as well as donor and patient characteristics associated with such rejections need to be taken into account when modifications in the allocation system is considered.

References:

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