Organ Donation Registration Knowledge and Association with Blood Donor Status

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Abstract

Background: The rise in demand for donor organs outpaces the availability of donor organs. Increasing the number of organ donor registrations is one strategy to increase the number of organs available for donation and address the demand for organs. While 95% of Americans favor organ donation, only 58% are actually registered to be an organ donor9. Knowledge about organ donation can impact organ donor registration rates. Additionally, blood donors may be more likely to be organ donors. The objectives of our study were to: (a) examine public knowledge of organ donation/transplantation and its association with blood donor status, and (b) to determine the association between blood donation and organ donor registration.

Methods: A survey comprising of (a) an assessment of organ donation knowledge (18 items), (b) a validated assessment of health literacy (4 items), (c) blood and organ donor status history (4 items), and (d) demographic questions (8 items), was designed. This survey was administered to individuals ≥18 years old and able to read English. The survey was administered to attendees at blood drives, interested university organization members, and other community events. he primary outcomes were correlation between blood donor and organ donor status and relative organ donation knowledge scores between organ donors and non-donors. Statistical

analyses included Chi squares and ANOVAs to determine significant differences. Human subjects approval was obtained.

Results: 152 participants completed surveys. Blood donors were significantly more likely to be registered organ donors (64/83, 77.1%) than non-blood donors (46/68, 67.6%), Cramer's V=0.227, $\chi 2$=15.6, df=4, p=0.004). The average knowledge score was 63% correct (standard deviation=18.5%). While organ donors were found to have a higher average organ donation/transplantation knowledge score (64.7% correct) than non-donors (46.6% correct), this difference was not statistically significant. Knowledge of organ donation/transplantation differed by level health literacy (F=13.18, p =<0.001). Respondents with adequate health literacy had significantly higher knowledge percent correct (63.5%), than those with marginal health literacy (62.8% correct), or limited health literacy (51.2% correct).

Conclusion: Our study found that blood donors are significantly more likely to be registered as organ donors than non-blood donors. This supports an organ registration promotion strategy that is targeted at blood drive participants. Further, we found that organ donors may have more knowledge of organ donation and registration than non-donors, but this result is not conclusive. We also found that individuals with greater health literacy were significantly more likely to have greater knowledge about organ donation and registration. This suggests that efforts should be targeted to educate individuals with low health literacy, which may in turn promote organ donor registration among this population. From our findings, organ donors may have more knowledge of organ donation/transplantation than non-donors, but this result is not conclusive. This supports an organ donation registration promotion strategy that is targeted at blood drive participants.