

Consent model, opt-in/opt-out system, and organ donation rates in the European Union countries

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Abstract

Introduction: Disparities in organ donation rates exists through the world countries, even despite sharing a common legislative background. The model of the consent for organ donation after brain death (deceased donor) informed consent (opt-in system) or presumed consent (opt-out system), influences the rates of organ donation. Opt-out legislative systems claim to dramatically increase effective organ donation consent rates. There is no evidence that opt-out system is the sole factor. The aim of the study was to identify if other factors than opt-out system may interact and modify the system's effect on donation rates. *Materials and methods:* Secondary data analysis using the European annual reports from International Registry in Organ Donation and Transplantation (IRODaT) for the years 2013-2017 through univariate descriptive statistics was done. Comparisons were made between all 28 EU countries from the perspective of the consent systems. For this study, we choose to compare the donation rate per million population (pmp) between EU countries with opt-in consent system, 8 countries (28.58%) - Denmark, Netherlands, Germany, Romania, UK, Ireland, Lithuania, Malta - and countries with opt-out consent system, 20 countries (71.42%), namely Sweden, Poland, Austria, France, Spain, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Greece, Hungary, Italy, Latvia, Luxembourg, Portugal, Slovakia, and Slovenia. *Results:* In opt-out system countries resulted a mean value of 20.34 ± 9.79 pmp, and in the opt-in countries resulted a mean value of 15.94 ± 6.30 pmp. For each year we have analyzed, the mean for opt-out countries has recorded a higher value of pmp than opt-in countries: 2013 - 19.77/16.64, 2014 - 19.15/15.10, 2015 - 20.79/14.94, 2016 - 20.45/16.51, 2017 - 21.45/16.50. *Conclusion:* Opt-out consent may lead to an increase in deceased donation but it is also important to assess other factors that influence organ donation system.

Keywords:

Organ Donation Rate; Presumed Consent; Informed Consent