Demographic and Socioeconomic Factors Influencing Public Attitudes Toward a Presumed Consent System for Organ Donation Without and With a Priority Allocation Scheme

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Abstract: The influence of demographic and socioeconomic factors on the public’s attitude towards a presumed consent system (PCS) of organ donation was estimated in 2 scenarios: without and with a priority allocation scheme (PAS). Self-administered questionnaires were completed by 775 respondents. Using multiple logistic regressions, respondents’ objections to donating organs in both scenarios were estimated. In total, 63.9% of respondents would object to donating under a PAS, whereas 54.6% would object under a PCS with PAS. Respondents with tertiary education were more likely to object than were respondents with secondary education, in both the first (adjusted odds ratio [AOR] = 1.615) and second (AOR = 1.728) scenarios. Young respondents were less likely to object than were middle-aged respondents, in both the first (AOR = 0.648) and second (AOR = 0.572) scenarios. Respondents with mid-ranged personal monthly income were more likely to object than were respondents with low income, in both the first (AOR = 1.994) and second (AOR = 1.519) scenarios. It does not seem that Malaysia is ready to implement a PCS. The educational level, age, and income of the broader public should be considered if a PCS, without or with a PAS, is planned for implementation in Malaysia.

(Medicine 94(42):e1713)

Abbreviations: ICS = informed consent system, PAS = priority allocation scheme, PCS = presumed consent system, PMP = per million population.

INTRODUCTION

Malaysia suffers from a chronic shortfall in organs for transplantation. Its organ-donation rates are low, at 0.5 and 1.87 donations per million people (PMP) in 2013 for deceased and living donations, respectively. As of December 2014, >18,000 patients in Malaysia were awaiting kidney transplants,\(^2\) whereas on average, only 26 transplants (sourced from deceased donors) have been performed yearly over the past decade.\(^3\) As living donation has led to organ trading and tourism around the world, enhancing deceased donation rates seems to be the only efficient remedy to address this shortfall in organs. The Declaration of Istanbul firmly states that the "therapeutic potential of deceased organ donation should be maximized [and] efforts to initiate or enhance deceased donor transplantation are essential to minimize the burden on living donors."\(^4\)

There is evidence that a presumed consent system (PCS), in which everyone is a donor unless he or she objects during his or her lifetime, yields higher rates of organ donation than an informed consent system (ICS), in which only those who registered during their lifetime are considered for organ donation.\(^5-8\) Some policy analysts have argued that the increase in deceased donation rates achieved in some countries after implementing a PCS actually results from the successful organization of the donation process.\(^5,10\) In fact, some countries have not reported any substantial increase in deceased donation rates after shifting from an ICS to a PCS. In Chile, for instance, average deceased donations declined from 8.08 PMP (2004–2008) to 6.78 PMP (2009–2013) after implementing a PCS in 2009.\(^1\) Nevertheless, PCS are increasingly gaining ground. Starting in 2015, a PCS will take force in Wales, with a similar transition expected in Northern Ireland.\(^9\)

Some people might be willing to receive an organ transplant, should they need it, and yet be unwilling to donate their own organs upon their deaths.\(^11\) This behavior biases the equal allocation of organ transplantation among willing and unwilling people, a bias that can be minimized by giving those who want to donate a preferred position on the waiting list for an organ transplant, should they need it, over those who do not want to donate. Recently, Israel—which adopts an ICS—introduced a priority allocation scheme (PAS), granting registered donors and their families preferred positions on the waiting lists for organ transplantation. This strategy has significantly increased the number of registered donors in Israel.\(^12-15\)

Demographic and socioeconomic factors have been associated with attitudes toward organ donation. In Malaysia, a survey showed that about 34% of Malaysians are willing to donate their organs upon death.\(^14\) The same study reported a significant association between ethnicity and willingness to donate.\(^12\) Furthermore, a study in Europe and 2 in Malaysia have found that willingness to donate is positively associated with higher levels of education. Moreover, personal income was found to have an inverse association with willingness to donate organs after death in Malaysia.\(^14\) Nevertheless, previous studies in Malaysia have not taken into account the legislative system—that is, PCS versus ICS—when analyzing people’s willingness to donate organs. Thus, no study has yet estimated the

Editor: Jongwa Chang.
Received: April 10, 2015; revised: September 3, 2015; accepted: September 10, 2015.
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The University of Malaya funded this study under the University of Malaya Research Grant Scheme (Grant Number: RG511–13HTM).
The authors declare no conflicts of interest.
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ISSN: 0265-7974
DOI: 10.1097/MD.0000000000001713

Medicine • Volume 94, Number 42, October 2015