



EDITORIAL

Importance of Early Worldwide Organ Donation Education

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Introduction

A global organ shortage exists, and introducing young people to the concept of organ donation early can have a significant influence in promoting awareness among their family and friends. Early awareness and understanding of organ donation and transplantation offer adolescents the opportunity to make their own important life choice, especially when they are confronted with the question of being an organ donor when they apply for their driver's license in most industrialized nations.

Studies from around the world have shown that structured organ donation classes in high school curricula build awareness, dispel myths, shape informed attitudes and knowledge, facilitate family discussions, increase organ donation registration, and foster lifelong advocacy.¹⁻¹¹ Researchers evaluated the feasibility of presentations on organ donation and transplantation addressed to elementary and high school students from Canada and Argentina.¹ Findings from this pilot study showed that young students showed great interest in the topic and observed that children as young as 10 years old understood the basic concepts about organ donation and transplantation. In several studies, researchers found that participants with a higher degree of accurate knowledge showed greater willingness to donate their organs.¹²⁻¹⁵

The importance of targeting early organ donation classes to adolescents lies in the fact that it is easier to form or change young people's attitudes toward donation than it is for adults, by influencing them during their formative years before strong biases against donation form. Teenagers represent the future of the community and are often regarded as change-makers within families, with their opinions having a direct impact on their family and friends.^{5,15} It is essential to adapt future organ educational programs to the age and cultural characteristics of different societies that emphasize family discussion.^{1,8}

Educational programs play a significant role in deceased organ donation.² Early education can help young people realize and understand what it means to become an organ donor and its impact on society, which may reduce fears and misconceptions about organ donation and transplantation. It promotes empathy and one's social responsibility, helping adolescents recognize the effect of giving "the gift of life" and the great value of helping others in need. High schools may provide a safe area to explore cultural, religious, and ethical perspectives on organ donation. Early education also ensures that when faced with the question of organ donation, the adolescent is confident and well-equipped to make a thoughtful and informed choice.

In Canada, researchers conducted a systematic review examining the impact of adolescent classroom education on knowledge and attitudes regarding deceased organ donation.² In this systematic review (1902 articles screened, 25 articles assessed for eligibility), fifteen studies from nine countries were summarized. Findings showed that adolescent classroom education increased knowledge (in 10 of 10 studies) and attitudes (in 5 of 5 studies), with six studies reporting success in promoting family discussions. However, students commonly had misconceptions regarding brain death^{17,18} and the composition of the waitlist and the organ allocation system;^{19,20} therefore, it is essential for organ donation curricula to include these topics. Overall findings showed that adolescent classroom education is a promising strategy for improving knowledge about deceased organ donation and appears to increase public support for donation.

In the Netherlands, a high school education program was developed to prepare adolescents to make informed decisions, which proved effective in increasing organ donation registration.⁴ To prepare Dutch adolescents to make a well-considered organ donation decision and to increase registration rates, a school-based intervention was developed and tested. The education program was evaluated in a post-test-only design with randomization, involving a total of 2,868 students aged 15-18 years from 39 high schools in the Netherlands. Students within schools and classes were randomly assigned to the experimental group ($n=1287$) or to a control group ($n=1581$). The intervention group included two lessons: (1) students watched a video consisting of four 5-minute episodes introducing various possible outcome expectations and misconceptions regarding organ donation and registration preferences with family members; and (2) students worked with an interactive computer program that provided individually tailored information about organ donation and registration. Results showed that the intention to register an organ donation preference had increased significantly after exposure to the program, and students exposed to the program were more inclined to register as a posthumous organ and tissue donor, had greater knowledge about and more positive social

outcome expectations, and experienced significantly less negative outcome expectations related to organ donation registration.⁴ A large-scale implementation in the Dutch high school curriculum was planned.

In the United States, a student collaborative model was implemented in organ donation and transplantation-related education.⁵ A high school student created a collaborative project with the local Organ Procurement Organization (OPO) that was presented in students' health, biology, and international current events classes. The program consisted of a video presentation entitled "Share Your Life, Share Your Decision," and lectures by invited speakers (OPO education coordinator, transplant recipients, donor family members). Pre- and post-assessment surveys were administered, showing that the program was statistically significant in improving knowledge of organ and tissue donation. This initial pilot program demonstrated the feasibility and effectiveness of involving students in organ donation and transplant-related educational programs aimed at their peers. The authors noted, "the short exposure to the subject matter can open minds and alter opinions..."

Conclusion

Early organ donation education promotes positive attitudes, increases knowledge, and improves willingness to donate; therefore, helping to create a generation more willing to register as donors. Early education empowers adolescents to use their influence to educate their families and peers, thereby expanding awareness and helping address the organ donor shortage.

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None.

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