## Trends in Organ Transplantation. DCD in West Pomeranian in Poland.


### Abstract

**Introduction:** Over the last fifty years, organ transplantation has become a routine medical procedure, bringing immense benefits to hundreds of thousands of patients. In the last 20 years the use of human organs for transplantation constantly increased. It is currently the most cost-effective way of treatment of end-stage renal disease and the only available treatment for end-stage failure of organs such as the liver, lung and heart. The lack of a sufficient number of transplanted organs is a fundamental limitation and problem facing transplantologists worldwide.

**Aim:** The aim of this study was to evaluate the knowledge and training needs of the medical staff of Intensive Care Units and Cardiology Intensive Care Units in terms of harvesting organs from donors after death due to irreversible cardiac arrest (DCD).

**Material and methods:** The study involved 368 people from hospitals in West Pomeranian, Pomeranian and Lubusz voivodeships. The study was conducted from January 2013 to August 2015 among the medical staff in ICU and Cardiology Intensive Care Units. The questionnaire used for the survey consisted of 23 questions: 20 closed and 3 open questions.

**Results:** The study showed that 98.4% of respondents accept the transplant as a way of treatment. In analyzed attitudes, 79% of respondents declared acceptance for neurological criteria as appropriate to diagnose death in case of potential organ donor. Major percentage of respondents claimed lack of agreement on equal treatment of cardiovascular and neurological criteria in diagnosing death of potential donor. Despite the declaration of knowledge of the terms DCD and NHBD, the vast majority of respondents (93%) did not know the Maastricht classification, and 80% did not know the procedures related to the procurement of organs from DCD donors. The main organs that were mentioned by respondents as those that could be eligible for harvesting from the non-heart-beating donors were kidney (32%), liver (19%) and cornea (22%). More than half of the respondents did not know whether the risk of rejection of the kidney taken from a heart-beating donor is bigger than after brain death. The vast majority did not know about organ donors or acknowledged that there was no single potential DCD organ donor in their unit in the last calendar year. 90% of respondents expressed willingness to participate in trainings, and 70% of them was interested in the subject of

training outlined in the questionnaire. From mentioned 70%, 40% preferred training in expanding knowledge about DCD donor; training in clinical management of organ donor and the training in increasing competences concerning conversation with the family of the donor met less enthusiasm (<30%). Research shows that trainings should last 2-3 hours and should be lead in the morning in the workplace. As a solution helpful in increasing organ donation, respondents showed the equal role of education of society and medical staff training.

**Conclusions:** The main factors in the activities related to the collection and donation of organs are good will, knowledge and qualifications of ICU workers. The attitude of the medical personnel to the idea of transplantation is extremely important. There is a psychologically difficult moment, when it comes to realize that the efforts of keeping the patient alive became futile, and his death became a fact. Referring to the results of studies in other countries of the European Union, there is a general inquietude and immense difference in personal attitudes toward organ donation from patients after brain death versus DCD. Emphasis must be placed primarily on the transparency of procedures in order to avoid any possible confusion. It is necessary to conduct regular training to medical staff so it can feel properly qualified. It will substantially increase the comfort and affect the certainty in making decisions.

Keywords: organ transplantation, organ donation, medical staff training, psychological aspects of organ transplantation, ethics.