

Interaction between transplant coordinator and non-heart-beating donor family members

Małgorzata Zelman, Grzegorz Michalak

Emergency Department, Bielany Hospital in Warsaw, Poland

Abstract

Thanks to continuous advances in transplantology in Poland, over 1000 patients a year are given a chance for new life or improvement of its quality. The number of identified brain-dead donors increases every year, so is the number of transplanted organs. Unfortunately, despite the substantially improved transplantation system in Poland, the number of patients awaiting organ transplants is markedly higher than the number of donors and still many patients die before the transplantation is possible.

In recent years, the worldwide attempts have been made to increase the number of donors to help the largest possible group of patients with end-stage organ failure. One of the options is to re-start non-heart-beating donation. The contact with the family of a potential non-heart-beating donor is crucial for identification, donation and transplantation of organs. Conversations of transplant coordinators with patients' relatives and their information regarding the patient's opinion about organ donation are extremely important for the entire transplantation process.

Key words: transplant coordinator–donor's family relationship, non-heart-beating donors, transplantation

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Thanks to continuous advances in transplantology in Poland, annually over 1000 patients are given a chance for new life or improvement of its quality. The number of identified brain-dead donors increases every year. In 2009, this number was 11 donors, in 2003 — 13.3 and in 2011 — 14 per 1 million citizens. Thus, the number of transplanted organs is increasingly high [1]. The role of transplantology in the entire healthcare is unquestionable. Unfortunately, despite new strategies to employ transplant coordinators in hospitals and actions increasing the public awareness, demands outstrip actual supply. Many patients still die before transplants are possible. This problem, however, is not only observed in Poland. In the remaining European countries, despite markedly higher numbers of transplanted organs annually (19 donors/ 1 million citizens in the Czech Republic to 34/ 1 million in Spain), better programs for organ procurement and transplantation are being searched for. One of the options considered is to re-start non-heart-beating donation (NHBD).

In 1995, during the conference in Maastricht (Holland), the first European consensus definitions of non-heart-beating donors were established, which were accepted

worldwide. At present, non-heart-beating donors are classified into the following categories [2, 3]:

- I. dead on arrival,
- II. cardiopulmonary resuscitation attempted without success,
- III. with severe irreversible brain damage after controlled cardiac arrest (discontinuation of futile therapy),
- IV. cardiac arrest while brainstem dead,
- V. after irreversible cardiac arrest, dead in the hospital setting (this category was added in 2000).

In Poland, the Organ Transplant Act defines the conditions of donor identification based on neurological criteria (brainstem death), care provided and all the activities associated with procurement and transplantation of cells, tissues and organs. Moreover, the Act accepts the retrieval of organs from donors after cardiac arrest (category I, II, IV and V). According to the Polish law, organs from category III potential donors cannot be retrieved (controlled cardiac arrest) [4, 5].

The introduction of the NHBD program in Poland and worldwide can markedly reduce the shortage of organs and increase the number of procured organs by several or more percent annually [6]. However, the implementation of the

system of NHBD organ procurement is complicated, expensive and requires the involvement of the entire transplant team. The essential elements of this process include efficient coordination of work and cooperation of the medical and technical personnel to provide immediate perfusion of organs in order to prevent them from ischaemic damage. Furthermore, the specificity of NHBD care is different, so are the conversations with their families to determine organ donation opinions of potential donors [7, 8].

Noteworthy, after certification of death, the patient is considered a potential donor and from this moment on, the entire team starts intense activities connected with donor identification and preparation for organ retrieval. In such situations, the return to ventilation and chest compressions is allowed until *"in situ"* perfusion is initiated. The time of warm ischaemia, including resuscitation activities, should not exceed two hours until the initiation of perfusion. During this time, the activities undertaken involve the administration of heparin and vasodilators, which will facilitate the blood flow and body cooling, blood sampling for viral tests and provision of vascular access for organ perfusion and extracorporeal oxygenation. This evidently shows that the medical care required in such cases differs from that of a potential donor with preserved heart activity, whose main goal is to provide cardiovascular stability of the deceased [7, 8].

Moreover, time pressure associated with preparations of a potential NHBD for organ procurement significantly affects the work of the transplant coordinator, who is to verify the donor's personal data, check the Central Organ Donation Registry, obtain the prosecutor's opinion (in some cases), coordinate the work of individual team members, monitor time, and meet the potential donor family.

The conversation with the NHBD family is one of the most difficult stages in the entire transplantation process. Finding the next of kin or closest relatives and meeting them in the hospital setting in a very short time is an additional, extremely relevant factor, which is stressful for both the family and the coordinator [8].

The contact with the NHBD family is stressful from the very beginning due to huge time pressure and usually extremely dramatic circumstances of death of a close person. The patient's family can easier understand the mechanism of death caused by sudden cardiac arrest than the concept of brainstem death based on neurological criteria at preserved cardiac activity. In the majority of cases, the situation and circumstances leading to the relative's death are more unexpected and dramatic for the family, which often induces the physical shock and hinders good contact and relations with them [8]. The characteristic psychological mechanisms and emotional reactions in such situations include denial, anger and protest against the loss, haggling and negotiations to reverse the dramatic condition, despair, grief and finally

acceptance and reconciliation [9]. The behaviour patterns are individual and extremely varied. In most cases, however, the family expresses denial, anger, despair and grief. The coordinator is not usually involved in the final two stages (acceptance and reconciliation) due to shortage of time, which constitutes an additional burden for him and requires extreme empathy, understanding and acceptance [10, 11]. Moreover, unlike in cases of procedures regarding brainstem dead donors, the identification of a potential donor, information about death certification, death circumstances and questions concerning organ donation are separated by only a few minutes [8], which creates another barrier extremely difficult to overcome for the coordinator contacting the potential donor family.

Given all the above-mentioned circumstances, the contact with the NHBD family can be compared to the specific "crisis intervention", whose main goal is to solve the problem inducing great tension and stress of the family. Therefore, it is extremely important for the coordinator to understand and accept the reactions and behaviour of the family as well as mechanisms causing them. This kind of attitude will enable to maintain tranquillity and facilitate to perceive the helplessness of the family associated with the dramatic situation and its consequences as well as the feeling of enormous grief and loss [9, 12]. During contacts with the NHBD family, it should be remembered that proper relations with the coordinator and medical personnel as well as support and understanding alleviate the mental burden, reduce the stress, ease the pain and facilitate the assimilation of information. Thanks to that, the NHBD relatives can make conscious decisions, which is the priority of the conversation with the transplant coordinator [8, 10].

In this special coordinator-potential donor family relationship, the bonds between those involved are essential. They facilitate to obtain the reliable information about the deceased donation-related opinion and help to go through the period of the most severe suffering and mourning. Besides finding out and understanding the psychological mechanisms and the subsequent reactions, in order to build proper relationships, verbal interactions (e.g. paraphrasing sentences, active listening) and non-verbal interactions (e.g. eye contact, nodding assent) are pivotal [8, 9, 10, 11].

Additionally, the place and accompanying circumstances play an important role in building proper relations during conversations with the family [8, 10]. The conditions in which the coordinator-NHBD family dialogue takes place cannot be overrated. The following should be provided [8, 11]:

- the appropriate (peaceful, full of respect and seriousness) atmosphere of the conversation,
- the empathetic attitude of the coordinator,
- the favourable environment (no interrupting or distracting factors),

- the conversation atmosphere based on mutual trust (the coordinator should avoid all behaviour patterns and gestures that could be perceived as manipulation or intimidation!),
- the suitably adjusted and understandable language,
- the warm yet firm tone of the coordinator's voice.

The place of conversation is equally important. Such a place should be separated from the ongoing hospital activities [10]. The room for such conversations should be away from the ICU or Emergency Department to provide the family with optimal comfort and privacy. Moreover, it is recommended to equip the room with necessary devices, such as comfortable chairs, water, telephone, and others [8].

The separation of information concerning the relative's death and questions about his/her attitude towards organ donation and transplantation is of special importance [10]. In cases of organ retrieval from NHBDs, the time for conversation with the family and decision-making is markedly limited; therefore, such a separation is extremely difficult. However, it is emphasised that circumstances of death and the very information about death of the relative should be provided several minutes before obtaining decisions about organ retrieval, optimally in another room (e.g. physician's office, coordinator's office) [8].

Starting the conversation with the NHBD family, the coordinator should get to know the family members, their first names, which will enable the direct contact with them during the dialogue. Assessing their mental state, emotions and reactions, the coordinator should first define what kind of help and support will be most desirable for them. The next step is to establish the psychological contact by offering help, showing understanding and empathy as well as encouraging them to talk. In cases when the family needs or expects additional information about the circumstances of death, the coordinator re-informs them. This facilitates the acceptance of the fact and allows passing to the further issue, i.e. possibility of organ procurement. The task of the coordinator is to determine in a friendly and peaceful manner the opinions of the potential donor about organ donation and transplantation. If the family needs more time to rethink or discuss the problem, the coordinator is obliged to provide them with the sufficient amount of time. If the family has some doubts, the coordinator should support and help them in decision-making, stressing the aspects of donation, the importance of transplantation and increasing their courage to make a decision. Noteworthy, if the initial opinion of the family is negative, the coordinator should declare that he respects their decision and give them additional time to rethink the problem in his absence [8, 11]. Irrespective of the conversation outcomes, the family should be shown care and support throughout

their stay in the hospital setting so as they could leave the place without any doubts [10].

The most relevant personal characteristics of the coordinator during the conversation with the NHBD family are calmness, empathy, consistency and persistence [8, 11].

The contact between the coordinator and the NHBD family is the key element of the entire process of identification, donation and transplantation of organs. The conversation with the potential donor's relatives and obtaining information about the deceased's attitude towards the issues of organ donation is a complex, difficult and unpredictable element of the process in question. However, it is worth emphasizing that the establishment of good contact and proper interpersonal relations with the NHBD family guarantees the success of organ donation and transplantation.

The transplant coordinator is responsible for not only the individual stages of organ procurement but also for the family support provided during this difficult period.

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Corresponding author:

Małgorzata Zelman MD
Emergency Department, Bielany Hospital in Warsaw
ul. Ceglowska 80, 01–809 Warszawa, Poland
tel.: +48 22 569 01 21, fax: +48 22 569 01 20
e-mail: mzelman@o2.pl

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