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Israel's experience in the organization of the program of organ donation. Interview with Transplant Coordinator Kirill Grozovskiy, Hadassah University Hospital (Jerusalem, Israel)

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Kirill Grozovskiy

- **Kirill, tell us briefly about yourself.**

- I was born in Moscow where I graduated from a Medical School. I worked as a nurse. In 1991, I moved to Israel. There I worked as a nurse, passed a number of advanced training courses, graduated from the University of South Africa UNISA (Pretoria) course in *Psychology and Communication Science.* Since 2002, I have been working as a Transplant Coordinator (TC) at Hadassah University Hospital, Jerusalem.

- **How is the transplantation system arranged in Israel?**

- Organ transplantation procedures in Israel started from the mid 80s. In 1994, the Ministry of Health established the National Transplant Center (NTC) that is the sole official and independent national authority to manage and coordinate all issues of the organ donation and transplant system in Israel. The center has special committees (professional committees) whose members are experts in the field of transplantation. They give advice as to organ allocation, regulations, transplant promotion programs and quality control (QC).

There are 6 transplant centers in Israel. The leading ones are the Hadassah Medical Center (Jerusalem), and Beilinson Hospital (Petah Tikva) that perform all types of transplant surgery. Liver and kidney transplants are performed in Ichilov Hospital (Tel Aviv); Tel-Hashomer Hospital (Ramat Gan) has specialized in heart transplants, and Rambam Hospital (Haifa) and Magpie Hospital in Beersheba has active programs in kidney transplants. On average, about 250-280 transplants are performed in Israel annually.

Until 1994, each transplant center had its own waiting list which appeared inefficient. After the NTC was established, a Unified Waiting List has been managed for the whole country. Each patient who needs a transplant is free to choose the hospital where he will have the transplant surgery to be made, regardless of the place of residence. After a series of necessary tests and examinations performed in this hospital, the patient is referred to the NTC where, after appropriate checks and consultations, a special computer-assisted program is used to assess medical records of a patient and allocate a so-called score. Thus, each patient waiting for an organ transplant has a certain score reflecting his/her health status, blood type, duration of the disease, age, number of previous transplants, ADI donor card signing, the medical urgency of the transplant, etc. The patient position on the waiting list is determined according to these scores. This list is all-Israeli, anonymous, and therefore, it does not matter which hospital has sent the request, and the sequence number does not depend on personal relationships of the doctor.

- **Thus, is it the NTC that coordinates all issues related to the transplantation?**

- Yes, this is stipulated by the Law on Organ Transplantation enacted in 2008, and the Center is headed by one of the leading experts in Medicine, appointed by the Health Minister.

- **Will you tell me in-detail about the organization of donor services, the so-called transplant coordinators? Who takes these positions? What are their responsibilities?**

- The Transplant Coordinator Service has been established since 1997 based on a Spanish model of transplant coordination as an example. Each of the 20 multidisciplinary hospitals has its own TC who is appointed to the position from a nursing staff and has a specialized training in transplantation, intensive care, and who has passed an advanced training in psychology, communication, group dynamics, cultural and religious aspects. Unfortunately, in contrast to Spain having several TCs in every hospital, an Israeli hospital is staffed with only one TC, sometimes working part-time only. TC duties, if I may say so, at 24-hour readiness are as follows:

- identify and select a potential donor;
- make an evaluation;
- coordinate the donor management;
- arrange the procedure of ascertaining brain death;
- talk to (interview) the donor relatives;
- transmit the information on potential donors to the NTC in case the donor family has granted consent to organ donation;
- coordinate organ procurement;

- instruct medical teams;
- educational work.

- Please, describe, TC work, as say step-by-step, its interaction with transplant specialists.

- On a regular basis, TC keeps in touch with hospital units where the patients with irreversible brain damage may stay. At Hadassah Hospital, I see patients in Intensive Care Units (ICUs) on a daily round basis. They are casualties who have sustained a head injury, patients who have had a stroke, and those after cardiopulmonary resuscitation, or with various intoxications. There are about 45 beds in ICUs. If there is any patient whose condition is consistent with the concept of a potential donor, the general plan of this patient's further management shall be discussed. With the progression of negative neurological symptoms, i.e., a high probability of brain death occurrence, we make a more detailed study of the case history, the patient's previous medical history, and lifestyle. All hospitals and hospital payment offices have a common, computer database with restricted access where authorized persons may obtain medical data on every patient's diseases, previous hospitalizations, medications taken, etc. If for some reason the data can not be obtained from the Net, then I contact directly the primary care physician of the patient. Of course, the tests for transfusion-transmissible infections and cancer are to be conducted.

With the development of clinical signs of brain death, I shall notify the Hospital Administration that gathers a special Committee to make the diagnosis of brain death. This Committee includes two doctors of related specialties: neurologists, anesthesiologists, intensive care physicians, neurosurgeons, specially trained and licensed by the Healthcare Ministry for making the diagnosis of brain death. The following mandatory criteria should be met for this procedure: these doctors should not be linked to transplantation (neither to a recipient, not to a donor) in their professional activities in any way (even relatively), and should not be involved in the treatment of this patient. The Committee members receive all the information about the donor (medical history, diagnostic and laboratory test results), make neurological tests on their own and write a conclusion. Whatever the level of the hospital treatment is, the procedure of brain death diagnosis is standardized for the whole country according to the uniform set of rules. Thus, neither ICU physicians, nor attending physician, or TC are involved in making the brain death diagnosis. The procedure has been set up to demonstrate an absolute uniformity of the principles of brain death diagnosis, thus reassuring the most suspicious skeptics.

After the diagnosis of brain death has been ascertained, the TC meets the family of the potential donor for a talk with the purpose to obtain the consent to the organ donation for transplantation. In case and only after the consent to organ donation has been given, the TC shall contact the NTC and transmit the donor data.

The NTC enters all the information about the donor in a computer database using a software specially tailored to compare the donor data for compatibility with a recipient on the Waiting List making a donor-recipient pair. Then the NTC reports its decision to transplantation doctors in the hospital where the selected recipient is treated. The hospital forms a surgical team that goes out for organ retrieval. In the event of unforeseen circumstances, the organ retrieval may be undertaken by the surgeons of the donor base. Further, the donor organs are transported to transplant centers where the transplantation is to be performed.

- Is neurologist involvement in the Committee obligatory? Does the Committee structure differ in cases when the brain death diagnosis is made in a child?

- The law does not specify an obligatory participation of a neurologist, but we try to make sure the Committee had a neurologist or neurosurgeon. If the brain death diagnosis is made in a child younger than 13 years old, one of the experts must be certified in pediatrics.

- **Does the police or the army assist you in donor organ transportation in any way?**

- Yes. A police escort shall be arranged for donor organ transportation, and in case of traffic jam they provide special transport vehicles.

- **It is understood that the TC is not directly involved in the donor management and brain death diagnosis, but rather coordinates these processes, monitors the implementation of all the necessary legal procedures. The question is the following: Who determines medical contraindications to donation? And will the brain death diagnosis be made if absolute contraindications to donation are revealed in a potential donor?**

- Of course, absolute medical contraindications to donation are quite common. They are clearly defined our instructions. More difficult is the case of a so-called marginal donor (an expanded criteria donor). In this case, the TC refers to a NTC medical consultant (currently this is a competent Critical Care Physician) who reviews the obtained information and make a particular conclusion. If there is any doubt, he/she consults with transplant doctors without disclosing them the information on the donor location and his/her identity.

Whether absolute contraindications exist or not, TC in most cases is trying to work with the patient until the diagnosis of brain death is made, and if the potential donor does not pass into the category of actual donors, the patient's death is stated and then the drug support and mechanical ventilation are discontinued. But in some cases, even when there are no absolute contraindications to donation, we do not go on to the diagnosis of brain death. This is when we know beforehand that the patient belongs to a very orthodox religious group, and we definitely will not get consent to organ donation. The problem is that although the "Act on cerebrorespiratory death" of 2008 equates the brain death to a human death, it allows the families who do not accept the concept of brain death by their faith or ideology to oppose weaning the patient from the ventilator. These patients proceed on mechanical ventilation, but no infusion, nutritional support, cardiotonics, vasopressors, or antibiotics are given. As a rule, they are transferred from the ICU to a regular ward, where they stay till cardiac arrest. The date and the time of death in the Death Certificate is put in accordance with the date and time of the brain death diagnosis.

- **Israel is a multi-confessional and multi-ethnic state, in fact, Jerusalem is the center of the three world religions. Moreover, the problem of confrontation between the Arab and Jewish populations has not been completely solved yet. Are there the situations where Jewish families do not want to donate organs to Arabs and vice versa?**

- An essential feature of Israeli society is that it keeps the national religious traditions in a public and social life of the country. Although the Israelis find a compromise acceptable for religious and non-religious circles of different communities, however, the influence of religious beliefs is great, especially in matters relating to a human death. Many, even secular families do seek advice on the subject from the priests of their confessions. Judaism, as, indeed, Islam, and Christianity, uniquely support everything that is connected with life salvation. This includes the organ transplant, as well. Naturally, when the Judaic laws were written, modern technologies to identify brain death did not exist. Therefore, some Orthodox rabbis do not accept the concept of brain death considering a human being alive while the heart is beating. On this assumption, the TC starts working with the family of a potential donor before the diagnosis of brain death. This work is as follows. Initially, he picks the information about the family and the potential donor: religion, educational level, social status, wealth, etc. TC may receive this information from a social worker available in every hospital department. The relatives also receive all objective information about the patient's condition daily or several times a day. This information is brought out to the family in a legible manner. If necessary, the examination and test results are interpreted with a proper demonstration of reference values and the abnormalities developed in their relative (e.g., CT scans). The TC's work with the family is aimed at getting the family to understand and accept the concept of brain death. If necessary, or when desired by the family, additional consultations by specialists whose opinions are important to families may be arranged. While talking to the family, we often resort to the help of religious and community leaders who are relatives' authority. As for our hospital, a substantial assistance is given by the staff rabbi who is positive to organ donation and accepts the concept of brain death as a human death. A direct request for organ donation comes only after the diagnosis of brain death has been made. This approach, of course, complicates, or at least, delays the process, but this is the only chance to get consent from the family who makes the decision basing rather on general ideology of denomination or society they refer themselves to, than on their personal opinion to organ donation. The Consent does not require signing any documents. It is given orally in the presence of two representatives of a healthcare institution, the TC being usually one of them.

Any conditions expressed by the family as to the donor organ allocation, surely, can not be accepted. First, in Israel as well as worldwide, the donor organ allocation for transplantation takes place according to medical reasons. Race, ethnicity, gender, religion shall not be taken into account. Second, the organ allocation is undertaken by the NTC after obtaining the family consent to donation, i.e. consent to organ donation comes exclusively on altruistic motives. These provisions are necessarily brought to the relatives in the course of the talk with them. If the family of the deceased starts setting conditions, we refuse from donation.

- **Are there any financial incentives to the families of donors? Can donor relatives meet the recipient?**

- Due to the altruistic nature of organ donation, no direct material incentives are provided for donor's relatives. A basic care is provided at the psychological and the social level. TC provides a primary psychological assistance when visiting family in the "funeral memorial week." He remains in contact with the family further on; and should any psychological, medical or administrative questions arise from the donor's family they may be addressed to the TC. As for me, I continue keeping in touch with some of the donor families for over 10 years.

In addition, donor relatives receive a donor commemorative plaque they can install on a tombstone of the deceased donor. Every year donor families are invited to meet with the President of Israel where they are awarded 'A Commemorative Certificate'.

The only financial aid the relatives of the deceased can get is the compensation of burial costs. In some cases, the expenses for the transportation of the body abroad to the place of burial may be reimbursed.

Unlike European countries, in Israel the acquaintance between the family of the donor and recipient is allowed on the consent of both sides. Moreover, it is encouraged and covered by the media, thus emphasizing the unity of society.

- **Is the process of organ donation different if the potential donor is a foreigner?**

- There are no exceptions or peculiarities of the process with respect to foreign citizens. The entire process of a potential donor management, diagnostic procedures for brain death, the talk with relatives of the donor follow the same algorithm as with Israeli citizens. The difficulties sometimes occur because of the necessity to search the relatives via diplomatic channels and to have the talk on the phone. Of course, upon the receipt of the consent to organ donation for transplantation, the organs shall be transplanted to an Israeli citizen. I have had many cases where families of foreign nationals, including those from Russia, agreed to organ donation, or disagree.

- **There is a widespread view that the well-known (popular, public) people are "protected" from the probability to become organ donors, as if they are supposed being under some taboo.**

- Israel is a democratic state where the laws afford equal justice to all citizens. Moreover, I believe that the civic duty of such people is to popularize organ donation in any way as an expression of the unity of the nation's citizens in their readiness to help each other. A prime example is the tragedy happened to the world famous archaeologist Professor Ehud Netzer, the discoverer of King Herod's grave. In 2010 at the age of 76, he sustained a serious head injury in an accident at archaeological excavations. After 3 days in hospital, he was diagnosed with brain death, and his family not only agreed to organ donation, but said publicly in the mass media about their decision.

- **Tell us about the system of live donations in Israel.**

- Live donations are allowed and practiced in Israel, mainly live donations of kidneys.

The Law defines the following types of live donations:

· donation between the members of one family: the organ is donated for a family member, as defined by the law, for a spouse, partner or cohabitant, parent, son or daughter, brother or sister, grandparent, grandchild, uncle or aunt, nephew or niece, in-law relative.

·living donation from an individual emotionally close to the transplant candidate: a distant relative (different from the above defined), or a living donor who is not a family member, but emotionally close to the patient in need for a transplant (a close friend, etc.);

·altruistic donation: an organ donation from a living person without family ties or emotional bonds with the patient;

·a paired exchange donation for organ transplantation can be exercised in a situation where a family member is willing to be a donor, but his/her organ is not match for the intended recipient.

All live donors shall pass essential medical and psychological tests to confirm the complete physical and mental health of the donor, and to make sure there is no pressure or coercion, no material interest, and the donor's decision means his/her informed and voluntary consent, and also it is necessary to exclude a potential post-transplantation blackmail by the donor with respect to the recipient.

A live donor receives a small fixed amount for reimbursement of costs associated with the operation and temporary disability. A 5-year-long private life insurance is paid to the donor; and since recently, live donors have been exempted from the payment of compulsory health insurance for the period of 3 years. Meanwhile, the donor shall be under a close doctor's follow-up in a local out-patient medical department.

The whole process of supervising live and post-mortem donors is within the NTC responsibility.

- **What is an "ADI" card?**

- The ADI donor card got its name from Ehud Ben-Dror (Adi for short) who died from complications after a kidney transplant at the age of 28 years. He had long been waiting for a transplant and dreamed of creating a system of cards that would be given to the individuals who granted their consent to their post-mortem organ donation. At his thirtieth anniversary, his parents and friends decided to make his dream come true. They created these cards by typing them on typewriters and disseminated among people. In 1989, the Healthcare Ministry took this initiative under its auspices.

The ADI card means primarily a civil position and the will of a person to donate his/her organs after death to save other people. Although the procedure for obtaining the consent to organ donation from the family is not ruled out, the ADI card is a kind of testament that would help the family to make the right decision.

Currently in Israel, more than 800 people have signed the ADI card.

A Priority Transplantation Programme came into force in 2012. From April 1, 2012, all signatories to the ADI card were entitled to a benefit in the transplant Waiting List at 3 years after ADI signing. In 2013, about half of patients who received organs from postmortem donors (109 of 248) were those who had had an advantage in the queue for a transplant thanks to the signed ADI card.

- **What educational work on organ donation is exercised in Israel?**

- All educational activities on donation are funded and coordinated by the NTC. This work is targeted to all population groups and all ages. There is a Programme of Organ Donation and Transplantation officially approved by the Ministry of Education. Therefore, the curricula in schools, universities and other educational institutions, including religious ones, include a compulsory lecture course on this subject. There are also books and comics available for children.

The adult population gets basic information through mass media. The electronic and print media constantly publish information related to transplantation and organ donation. Centralized campaigns and actions are regularly arranged on central TV channels with the involvement of well-known actors, political leaders, and public figures. Billboards have been installed on the roads, commercials are demonstrated on central channels and the internal channels of hospitals.

Educational work is also within the scope of TC responsibilities. In addition to work with the population, TCs arrange regular educational sessions with the staff of the hospital where they work.