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## Attitudes of donors towards organ transplantation in living related kidney transplantations

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**Abstract** The demand for transplantation exceeds the availability of cadaveric organs, which is why the importance of living, related kidney transplantation is increasing. In our study we wanted to evaluate the experiences of living related donors (LRD). Between 1973 and 1996, 1325 kidney transplantations were performed at our Department. Of these 1247 were from cadaver donors while 78 were from LRD. We contacted each living donor by post. We carried out a physical examination, laboratory tests, ultrasound and isotope investigations and they were interviewed and completed a questionnaire. Thirty previous kidney donors came to our Department who were all blood relatives of the recipients. In the recipient group, 16 still have a functioning kidney, the average time since transplantation being 8.92 years. The longest kidney survival time is 18 years. All the donors willingly donated their kidney, none was worried about their own health and their only concern was whether the

kidney would function or not. Regarding general attitudes towards living related organ transplantation, all were in favour of blood relative donor transplantation and also husband/wife transplantation. Opinions regarding non-related transplantation were more mixed; 63.3% would have given their kidneys to a friend, only 46.6% to a stranger. Almost two-thirds (63.3%) of donors were not in favour of selling and buying organs but, controversially, they would have bought an organ had one been available. All agreed that the donation did not change their general health. In conclusion, the donors of living, related kidney transplantation all agreed that it was a good thing to donate; All confirmed they would go through the same procedure again in order to help. Apart from one person, who emphasised that he is agnostic, all belonged to a Christian religion.

**Key words** Living related · Donors · Kidney transplantation · Ethical aspects

### Introduction

The demand for transplantation exceeds the availability of cadaveric organs. This is the reason why the importance of living, related kidney transplantation is increasing. In our study we wanted to evaluate the experiences of living, related donors (LRD) and assess the influence of ethical values, cultural traditions and reli-

gion on their assessment of living, related organ donation [1].

### Materials and methods

Between 1973 and 1996, 1325 kidney transplantations were performed at our Department. Of these, 1247 were from cadaveric donors, only 78 (5.89%) from LRD. The ratio of the LRD transplan-

tation in Hungary is below the European average [3]. We assume this is the consequence of two factors: most families have only one or two children; the general health of the Hungarian population is rather poor, especially above 40 years [6]. We contacted each living donor by post and asked them to come to our Department for a health check and also for an interview, where they could talk about their experiences of donating a kidney. Thirty donors came to our Department. We carried out a physical examination, laboratory tests, ultrasound and isotope investigations.

During the interview, we asked donors to complete a questionnaire with 50 questions which were divided into four groups. The first group included questions regarding the relationship between donor and recipient and the family circumstances of the donor. The second group of questions was designed to analyse the information donors had received about living, related donation and also the considerations of offering a kidney. The third group of questions regarded the impact of donation; i.e. the way the possible positive and negative consequences of donating a kidney were discussed, including the risks; whether the self-respect of the donors changed after donation. The fourth group of questions was intended to analyse the general views of donors on living, related donation, with a special emphasis on the relationship between donor and recipient and also on organ trade.

## Results

Thirty previous kidney donors came to our Department, 25 female, 5 male.

Analysing the answers to the first group of questions, we had the following results. The donors and the recipients were all blood relatives, 23 mothers, 5 fathers, 1 sister and 1 aunt. In the recipient group at the time of transplantation there were 11 children under the age of 14 years. Since then, four had died. We were impressed by the fact that their parents were still prepared to come forward and to talk about their sad experience. In the recipient group, 16 still have a functioning kidney, the average time since transplantation being 8.92 years. The longest kidney survival time is 18 years.

The second group of questions was designed to analyse the decision to donate. Information about living, related kidney transplantation was received by 87.5% from the medical staff, resulting in the first impulse to consider kidney donation. None of the patients felt pressured by anyone to donate [5]; it was an easy decision for 28 donors out of the 30. In those cases where the parents were to be the donors, all told us that when the possibility of transplantation arose they decided to donate their kidney without any hesitation. With only one exception, both parents agreed to organ donation, only better HLA matching or better general health decided who became the donor. All gladly donated the kidney, with a will to help and without feeling themselves a martyr. Three donors experienced pressure not to donate a kidney and it is not surprising that this opposition came always from the parents of the donor. They felt the same worry towards their child as potential donor as the donor felt for his/her ill child.

Analysing the answers of the third group of questions related to the impact of donation, 16% were enlightened by the surgeon and 84% by the nephrologist. The patients had barely any knowledge of the risks to their own health. They all stated that they did not experience any change in their health as a consequence of kidney donation. Regarding their self-respect, none of the donors thought higher of themselves as a result of donating a kidney. Only one patient answered that his general health had slightly worsened after the donation, all the others experienced no change in their general health.

The fourth group of questions revealed the general attitudes of donors towards living, related kidney donation [4]. All the interviewed donors were in favour of donation in the case of close blood-related donors; i.e. parents, brothers, sisters; 87.5% were also in favour of donation in the case of distantly related donors; i.e. cousins. The rest were not sure, but nobody answered no. A total of 93.75% expressed an opinion in favour of donation between husband and wife; the remainder were not sure regarding this decision.

Opinions regarding non-related transplantation were more mixed; 63.3% would have given their kidneys to a friend, only 46.6% to a stranger. In both groups, 15.9% were unsure in their answers, so the refusal was 20.8% regarding a friend and 37.5% regarding strangers.

Only 12.5% of donors were in favour of selling and buying organs, the same proportion was not sure and 73.3% of donors were not in favour of buying and selling organs. Controversially, two-thirds of the interviewed donors would have bought an organ had one been available.

If we analyse only those who were not in favour of selling and buying organs, then this proportion is even higher; 79% would have bought an organ.

All agreed that the donation did not change their general health [2].

## Discussion

The donors of living, related kidney transplantation all agreed that it was a good thing to donate, and they were not worried about their own health. They all confirmed they would go through the same procedure again in order to help. Apart from one person, who emphasised that he is agnostic, all belonged to a Christian religion. Organ donation can be regarded as an altruistic action for the benefit of others.

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