

LIVING RELATED TRANSPLANTATION: THE OUTCOMES OF KIDNEY DONATION IN IRAN

ZIBA BORZABADI FARAHANI¹, MARYAM ESMAEILI², MAHVASH SALSALI³, NAHID DEGHAN NAYERI⁴

¹PHD Candidate in Nursing Education, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran and Instructor, School of Nursing&Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran - ²Assistant Professor, School of Nursing and Midwifery, Tehran University of Medical Sciences Tehran, Iran - ³Professor, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran - ⁴Professor School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran

ABSTRACT

Aim: The purpose of the present study was to investigate the donation outcomes among related kidney donors

Methods: this study is a descriptive study and in order to analyze the data, conventional content analysis was used. The sample of this study consisted of 16 related donors (7 female and 9 male) from 4 kidney transplantation centers of hospitals affiliated to Tehran University of Medical Sciences. The instrument used in this study consisted of semi-structured interviews: face to face and on the phone.

Results: After analyzing data, two main categories including individual and family outcomes were emerged. Individual outcomes: donating new life and spiritual opportunities for the donor. Family outcomes: deeper intimacy of families, gratitude and respect to the donor as well as strengthening family ties. According to the findings of donors' points of view in this study, the donation outcomes were described positive.

Conclusion: Related kidney donation is an ideal option among other donation options. The findings of the present study indicated positive individual and family outcomes among related donors. Therefore, in order to improve the culture of related donation, it is suggested that to facilitate and support related donation, appropriate strategies should be presented by the officials and those involved in the transplantation team.

Key words: Outcomes, related donor, kidney donation, content analysis, Iran.

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Introduction

Related kidney donation is of priority compared to donations from those with brain death and this decreases the expectation to receive kidney from dead body or a person with brain death⁽¹⁾ and significantly improves the recipient's life quality and does not bring side effects for the donor⁽²⁾. The results of several studies indicate the positive effects of donation on the overall life, health, communication and life satisfaction of donors⁽³⁾. Most of the studies have reported the outcomes of donation among donors as personal growth⁽⁴⁾, increasing self-confidence⁽⁵⁾, sense of virtue and perfection⁽⁶⁾, high self-satisfaction⁽⁷⁾, and change in attitude towards life⁽⁸⁾.

Despite positive images from donation among donors, some of them reported experiences such as fatigue, despair, anxiety, depression, sense of emptiness and regret after donation⁽⁹⁾. These signs are higher when kidney graft does not have good performance for the recipient. In Iran, donors with brain death do not respond to the need for kidney transplant; therefore, the demand for living donors is high⁽¹⁰⁾. The doctors, first, suggest donation from relatives, since it brings better results⁽¹¹⁾. But, 90% of donated kidneys in Iran are from unrelated donors whose main purpose is financial incentives⁽²⁾. Those who donate kidney for financial incentives have lower quality of life compared to the control group and are often regret from their donation⁽¹²⁾.

Therefore, there is a great deal of concern regarding psychological effects of donation^(13, 14). Due to the lack of studies on investigating the experiences of related donors, the donation outcomes are not specified and in international texts, limited results are available concerning the depth, expand and outcomes for donors⁽¹⁵⁾. Broader implications for donation outcomes from the perspective of kidney donors can be effective in expanding health services in order to conserve safety and welfare of donors⁽¹⁶⁾. Regarding the importance and better results of related donation, identifying the related outcomes can help the donation team, especially nurses, to encourage the community in order to develop and promote related donation. Therefore, a qualitative study to identify outcomes of related kidney donation from the perspective of related donors was conducted.

Aim of the study

This study aims to explore the outcomes of kidney donation in living related donors in Iran.

Methodology

The present study is a descriptive qualitative study. The participants of this study consisted of 16 related donors (7 female and 9 male) from 4 kidney donation centers, hospitals affiliated to Tehran University of Medical Sciences and were selected based on goal-oriented sampling method. Age over 18 years as well as optimal physical and mental conditions for participation in study were considered as the entrance criteria for participants. In order to achieve the maximum variability, the participants were selected from both genders with different educational levels, with different time intervals after donation as well as genetic and emotional kinship (table 1)

Data were collected using semi-structured interviews as face to face and on the phone. Data collection procedure took 8 months (April 2015-October 2015). The durations of interviews varied between 30 to 60 minutes. The main questions of the interviews were as follows: "How were the outcomes of donation?", "What feeling did you experience after donation?"; "How did your attitude change after donation?"; "How was your relationship with the recipient after donation?"; "How did your family relationship change after donation?". Also, explorative questions were used to clarify the answers of participants during interview.

Characteristics	N(%)
Sex:	
Female	7(44)
Male	9(56)
Educational status:	
Elementary	2 (13)
Diploma	10 (62)
Bachelor	4 (25)
Age: mean±SD	40±3.45
Time after donation:	
<one year	4(25)
1-5 year	6(37.5)
>5year	6(37.5)

Table1: Donors demographic characteristics.

The interviews were translated to Persian by the first author and then, were translated into English. The interviews were recorded and after each session were written word by word.

This study was confirmed by the ethic committee of the research council, Tehran University of Medical Sciences. The purpose and method of study for the participant in the study have been stated. Moreover, in the study process, the participants could relinquish from the study without any fine, loss and damage whenever they wanted. A written consent was taken from the participants to participate in the study. Also, they allowed researchers to record interviews. The participants were ensured that their information will remain confidential.

In order to analyze data, conventional content analysis was used. This method is usually used for those studies that want to summarize, describe and interpret a phenomenon that a limited number of writings about it are available. Qualitative content analysis reduces the data and gives structure and order to them and identifies hidden and reveal patterns⁽¹⁷⁾. In order to analyze data, the recorded interviews were written word by word on the paper and to make sense from the data, the interviews were read for several times. The texts obtained from the interviews were divided into semantic units. Then, the semantic units were summarized and were labeled by codes and these codes were arranged into class and subclass based on comparison regarding similarities and differences.

In this study, regarding the accuracy and robustness of data, several methods were used

including: long-term engagement with data, simultaneous observation, checking the findings with the participants, and reviewing data by the peers. In order to check findings by the peers, two qualitative researchers confirmed the codes and classes. Accurate record of the stages and research procedure for research verifiability and auditing were considered.

Results

The outcomes of kidney donation from the perspective of relatives include two categories: the gift of life, spiritual opportunity and family outcomes. In the following, the meaning categories and subcategories have been discussed regarding quotes from the participants.

Individual outcomes

According to the experiences of participants, the sense of happiness and life satisfaction is a unique individual experience that only these people are able to understand. Proud, pride, satisfaction and indescribable happiness of life donation are among the individual outcomes of participants. None of the participants reported the sense of regret from donation, but all stated that if the same situation occurs, they will do it again. They stated that the feelings experienced by donation are indescribable and joyful and are only tangible in the way of helping people, including family members.

Life donation

The participants of this study believed that they have experienced life donation concerning those they love through sharing a part of their existence with them. Life donation is resulted from sacrifice, forgiveness, and unconditional love of donors. In this regard, a mother who has donated her kidney to her boy states:

“It seems as if a part of my existence is incorporated in my boy and has given life to him and this makes me happy.”

The findings indicate that the participants never regret life donation and are so happy by that. A brother who has donated his kidney to her sister states:

“I don’t know what to say. I feel a part of my body is within my sister. I’m so happy that she is living like me. I would never regret this.”

According to the participants, life donation and helping relatives, cause their satisfaction from the decision and donation. In fact, the sense of satisfaction is another outcome of donation in this study. Providing another opportunity for life with kidney donation is the main reason of donors’ satisfaction.

“Thanks God. Now that he is living like us is incredibly valuable and is highly joyful for me.”

Spiritual opportunity

Another outcome of donation is the possibility of achieving spiritual opportunities through this process. The participants believed that God has given two kidneys to them, while they can live with one of them. Therefore, they consider donation as the best opportunity to appreciate the blessings of their God. They consider donation as an opportunity to prayer and closeness to God. Some of them believed that they have touched God through donation. They were thankful to God who has given this opportunity to them in order to obtain satisfaction and closeness to God. One of the donors that has donated his kidney to his wife states:

“I feel I am closer to God. I know that I have only considered the satisfaction of God and this has encouraged me to donate my kidney and I hope God accepts this.”

Some of the participants believed that despite problems associated with donation, God has guided them through this path and the existence of God has made this happen. They believed that donation is a spiritual journey and the positive outcomes will always be with them. According to the participants, donation not only brings closeness to God, but provides a way to compensate past sins. The participants in this study considered closeness to God and prayer as the individual outcomes of donation that have led to their satisfaction and happiness.

Family outcomes

According to the related kidney donors, promotion in the dynamics and strength of family connections are among the outcomes of kidney donation. Some of the donors believed that donation reveal the hidden love that leads to more pleasure in being together.

“Indeed, donation has revealed our hidden love, to let us enjoy being together. I did not expect these behaviors, since they express so much love and I am highly attracted by others.”

Donors believed that donation makes the relationships closer and deeper between the donor and the recipient. So that, some have described donation as experiencing sympathy. According to them, donation not only affects the prosperity of relationships between donor and recipient, but affects the relationship between other family members; so that, everybody respects the donor who functioned as a lifesaving angel.

“I feel we are closer by now. At this time, you understand your partner more, since a part of your body is in his body. This makes you feel you are closer to each other.”

According to the donors, one of the family outcomes of donation is the gratitude of the family for this action while the other party considered donation as a duty and did not expect any gratitude and believed that it is better not to talk about this and not to let the recipient feel any duty to return the favor. In this regard, one of the participants stated:

“I did not do anything to make myself valuable and I believe everything is normal. Nothing has changed and I do not expect any favor for this.”

The donors in this study believed that they would do anything to rescue their relatives and donation is the least they could do in this regard. So that, some of them have forgotten the donation after several years without any expectation from the recipient's family.

Discussion

In this study, the kidney donors were asked to express the outcomes of donation. Generally, they consider the outcomes of donation as positive and encourage others to do that. In the first class, the donors described the individual outcomes of donation as satisfactory, joyful and are pride of this divine opportunity to give a new life to those they love. Consistent with the findings of this study, some of the studies indicate that donors often consider the personal benefits in donation as higher self-esteem, personal growth (increasing appreciation of life), interpersonal benefits (increased respect and admiration by family and friends), and even spiritual benefits (donation as a symbol of protecting the highest spiritual values⁽¹⁸⁻²⁰⁾). The findings of a study by⁽²¹⁾ reported spiritual growth, improved self-esteem and satisfaction as the outcomes of donation

In a study by⁽⁷⁾, the donors were so happy regarding giving a new life to those who needed and this caused incredible satisfaction. The sense of satisfaction concerning helping others was the experience of donors after donation⁽²²⁾. Despite positive outcomes, some of the donors reported lack of experience of donation⁽²³⁾, especially in the case of failure in donation⁽²⁴⁾ and factors such as depression, disorder, and anxiety regardless the positive outcomes of surgery and no side effects for the recipient^(25, 26).

Although most of the negative outcomes of donation such as sadness, grief and depression have been after donation⁽⁸⁾, the results of several studies reported these signs can be found in a limited number of donors^(27,28). Also, they reported that there were no signs of regret among the donors and they state that when needed, they will do it again^(29, 7).

In investigating the second class of the study, the donors considered the intimacy between recipient and donor and other family members as the family outcome of donation and believed that donation has caused gratitude, respect and more attention of the family toward the donor. In this regard, the results of a study by⁽³⁰⁾ indicates that the donors have reported increased happiness and life quality after donation and this act has led to closer relationships, so that they celebrate this each year⁽³¹⁾. Also, in a study by⁽⁷⁾, the donors were so happy regarding their donation that had caused improvement in the lives of the recipients and their families and were highly satisfied with their donation. Some of the donors were feeling that their communication levels have been increased after donation, but most of them believed there has been no change in their interactions. The donors of a study by⁽²⁾ stated that the intimacy between the donor and recipient has been increased after donation and the relationship between the families of both parties became closer. On the other hand, the results of several studies indicated that the relationships have not underwent any significant change concerning the donor and recipient^(27, 4) or have decreased⁽³²⁾.

The donors of this study donated their kidneys without any expectations and tried to pretend that everything is normal. Consistent with this study⁽³³⁾, indicated that the donors tend to show off their donation and emphasized that they do not have any expectations from the recipient. In a study by⁽³⁴⁾, the positive outcomes of donation included conformity and respect for family members, promoting self-esteem and sense of life and family relationships.

On the other hand, the findings of a study by⁽²⁾ indicated that some of the donors ask for appreciation and respect and some asked for money.

Limitations of the study

One of the limitations of this study was related to the selection of participants. In this study, most of the donors had not any mental and physical disorder and this would make the experienced outcomes positive. The results of the present study cannot be generalized, since it was conducted on a limited numbers. This study considered related donors and if the unrelated donors were considered here, probably richer data could be obtained

Conclusion

According to the findings of this study, the results were positively described and the outcomes of donation, not only provide individual outcomes (i.e. the gift of life, satisfaction and spiritual opportunities), but bring family outcomes as intimacy and closeness as well as respect to the recipient and this leads to the strengthening family ties. The findings of the present study provide insight and information for the transplant team, especially nurses, regarding the outcomes of kidney donation.

Therefore, this possibility will be provided for nurses to improve the strategies regarding more positive outcomes for donation. It is suggested that more studies should be conducted on the outcomes of kidney donation of relatives from the perspective of recipient and other qualitative studies in this regard, such as investigating factors affecting the outcomes of donation that are of high importance.

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Ethical clearance

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Corresponding author

MARYAM ESMAEILI

School of Nursing and Midwifery, Tehran University of Medical Sciences, Nosrat St., Tohid Sq.,

Tehran

Email: esmaeiliem@yahoo.com

(Iran)