

Impact of Kidney Donation on Quality of Life of Living Kidney Donor: A Single Center Review

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Abstract

Background: Kidney transplantation is well established as the best treatment for restoring quality of life to patients with end stage kidney disease(ESKD). Living donor kidney transplantation (LDKT) is reported to have better graft survival and overall patient outcomes compared to deceased donation. The safety and quality of life of a Living kidney donor is important both for the sustainability of the transplant programs and for prospective donors aspiring to become living kidney donors.

Methodology: Data was collected from all participants using a self/interviewer administered questionnaire to help evaluate their socio demographic and socio economic status pre and post kidney donation.

Results: During the study period, 84 Living Donors who had undergone donor nephrectomy for kidney donation between January 2010 and September 2014 were interviewed. 48 [57.1%] were male and 36 [42.9%] were female. 64.3% of the donors were discharged from the hospital by the 5th day after surgery and 58.3% resumed their normal duties before 2 months.84.5% maintained their previous occupation and 15.5% changed their occupation with reasons of better paying job than what they were doing previously. 97.6% reported no hospitalization after kidney donation compared with 78.6 % before kidney donation. 84.5% of the respondents reported no change in their social life after kidney donation. 97.6 % could recommend somebody to donate a kidney, 94% reporting that kidney donation changed lives of the recipients and that their lives did not change negatively, they were able to go on with their normal life. Ninety-eight percent (98%) of Living Donors believed that their quality of life did not decrease after Living Kidney Donation.

Conclusion: Kidney donation does not have a significant negative impact on quality of life of kidney donors since even after donation the donors remained physically and mentally healthy and maintained their social life.

Keywords: Kidney transplant; Living kidney donor; End stage kidney disease

Introduction/Background

End stage renal disease (ESRD) is an important contributor of morbidity and mortality among patients with non-communicable diseases globally (Naicker & Ashuntantang, 2017; Abd Elhafeez et al., 2018). Statistics reported Studies have reported that Kidney transplantation is the best renal replacement therapy of choice for ESRD patients as it improves overall quality of life (QoL) (Silverstein & Hopper, 2015). It has an annual global growth rate of 8 -10 % and reported to be more prevalent in women but the disease is more severe in men. The overall prevalence of chronic kidney disease (CKD) in Sub-Saharan Africa (SSA) is estimated to be 13.6% (Chinedum et al., 2011). A report by the Kenya renal association during the world kidney day 2017 celebrations indicated that close to 4 million Kenyans are suffering from chronic kidney disease. A study done in Kenya also reported that the prevalence of chronic kidney disease is estimated at 10% which is in-keeping with the prevalence reported in other parts of the world (Cherono, 2018). It is a known fact that kidney transplant patients have a better QoL than patients in dialysis, while transplants from living kidney donors are a better outcomes than those from deceased donors (Bugeja & Clark, 2017; Sawinski & Locke, 2018, Martínez et al., 2018). While strategies targeted at motivating living kidney donation have been proposed, it is important to optimize living kidney donor transplantation programs to ensure adequate donor safety (Muturi, Kotecha, & Kanyi, 2017).

Problem Statement

In Sub-Saharan Africa, studies indicate that Living kidney donation is the main source of organs for patients with ESKD requiring kidney transplantation (Naicker & Ashuntantang, 2017), but little is known about QoL of these donors after kidney donation. Researchers have reported that information regarding donors' QoL following donation is of key importance to potential donors and will help increase positive attitude towards kidney donation (Gordon et al., 2015). Although the safety of living kidney donation has been well established, studies examining the physical, psychological and socio-economic aspects of the donor's QoL in Kenya is scarce. Lack of adequate information on QoL of living kidney donors makes it difficult to promote living kidney donation (Muturi et al., 2017). Further, lack of a structured donor registry and donor follow-up guidelines, has made it difficult to track impact of kidney donation on QoL of living kidney donors.

Study Objective

To determine the impact of kidney donation on quality of life of kidney donors at Kenyatta National Hospital.

Study Design

This was a comparative retrospective cohort study on all kidney donors who underwent donor nephrectomy for kidney transplant at KNH between January 2010 to September 2014.

Data collection

A semi-structured self-administered and interviewer administered questionnaire was used to collect data from all donors who underwent donor nephrectomy within the study period.

Findings/Discussion

Gender distribution

The study findings indicate that this transplantation program utilizes donors from a young population as represented by a mean age of 34.42. Unlike others studies like India, there were more male respondents registered in this study.

Level of education

Majority of the donors 77 (91.7%) had gone up to secondary level of education and above at the time of kidney donation, and about 77.2% having undergone some form of professional training. The results indicated that at least 8.4 % underwent further training after

kidney donation indicating that the act of kidney donation did not become a hindrance to them pursuing their education.

Social status

Although most of the donors in the cohort were married at the time of donation, the findings indicated that most donors who were single at the time of donation married and were able to proceed on with life. The findings also indicate that more than 50% of the donors had more children delivered after kidney donation.

Health status

None of the donors indicated their general wellbeing after donation as either fair or poor. Most of the donors described their wellbeing after kidney donation as very good (56%), while 23.8% reported to have enjoyed excellent life. The findings indicated that more than half of the donors, 58.3% resumed their normal duties before 2 months following donor nephrectomy. 84.5% maintained their previous occupation and 15.5% changed their occupation with reasons of better paying job than what they were doing before, an indication that kidney donation did not change their life negatively. 97.6% reported no hospitalization after kidney donation compared with 78.6 % before kidney donation. 84.5% of the responds reported no change in their social life after kidney donation and 97.6 % could recommend someone to become a kidney donor. Ninety-eight percent of Living Donors believed that their quality of life did not decrease after Living Kidney Donation.

Conclusions

Kidney donation does not have a significant negative impact on quality of life of kidney donors. The donors remain physically and mentally healthy and they are able maintain their social life after kidney donation and report the experience to be rewarding and satisfying since they can save a life and increase their self-esteem.