

TABLE:1

SF-36 domains(Grp 1)	Before KTx	After KTx	Grp 2	Before KTx	After KTx
Physical functioning	56±18	76±26		54±27	69±28
Role Physical	17±33	51±43		24±36	47±43
Pain	50±21	67±23		55±28	70±25
General Health	39±11	42±16		33±18	42±16
Emotional well-being	44±12	65±18		46±26	64±14
Role-emotional	32±36	64±46		42±45	67±39
Social function	48±27	54±18		52±33	53±17
Energy/fatigue	41±14	62±19		45±25	57±13

TABLE: 2

WHOQOL-BREF domains(Grp 1)	Before KTx	After KTx	Grp 2	Before KTx	After
Physical health domain	49±16	75±12		47±18	73±18
Psychological domain	48±15	72±8		49±16	70±24
Social relationship domain	54±18	68±24		56±24	67±16
Environmental domain	52±13	64±21		55±19	65±23

Conclusions: This study confirms both the SF-36 and WHOQOL-BREF are reliable and valid instruments for assessing QoL in kidney transplant patients. However, the selection of an instrument should be guided by the specific aspects of QoL that researchers wish to evaluate. The weak correlation observed between the two instruments may stem from the differing focuses of the questionnaires, with SF-36 emphasizing capability and disability, and WHOQOL-BREF focusing on individual perceptions of QoL.

I have no potential conflict of interest to disclose.

I did not use generative AI and AI-assisted technologies in the writing process.

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IMPACT OF HIGH DIABETES MELLITUS PREVALENCE ON KIDNEY TRANSPLANTATION IN MAURITIUS



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Introduction: Mauritius has one of the highest rates of both diabetes mellitus (DM) and chronic kidney disease (CKD) worldwide. One in 680 adults receive dialysis. The DM prevalence in dialysis patients (60%) is thrice that of the general population. Living donor kidney transplantation in public hospitals has taken place most years since 1992, but the yearly rate remains a minute fraction of that of new dialysis patients. Transplant workup data should be reviewed to assess the impact of DM and to find ways to improve the kidney transplant rate.

Methods: We retrospectively analysed the transplant workup case notes of all the potential kidney transplant recipients (PKTR) and their potential kidney donors (PKD) that were actively being worked up between 1 August 2022 and 31 July 2024 in all public hospitals in Mauritius as part of the national transplant programme.

Results:

FIGURE 1: KIDNEY DONATION OUTCOMES

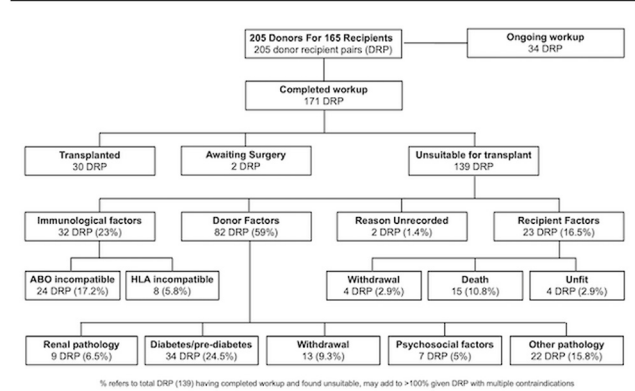


TABLE 1: SEX AND KIDNEY DONATION

Dialysis population <65 years¹ – No.	1120
Female – No. (%)	386 (34.5)
All potential recipients with work up – No.	165
Female – No. (%)	61 (37)
Already transplanted - No. (%)	30 (18.2)
Awaiting surgery	2
Ongoing workup	34
Unsuitable for transplant- No. (%)	99 (60)
Actual kidney recipients – No.	30
Female – No. (%)	13 (43.3)
Transplanted locally – No. (%)	26 (86.7)
All potential kidney donors – No.	205
Female –No. (%)	102 (49.8)
Male donor to male recipient - No. (%)	44 (21.4)
Male donor to female recipient - No. (%)	59 (28.8)
Female donor to male recipient - No. (%)	82 (40)
Female donor to female recipient - No. (%)	20 (9.8)
Wife: husband donor ratio	9:5
Actual kidney donors – No.	30
Female – No. (%)	16 (53.3)
Male donor to male recipient - No. (%)	5 (16.7)
Male donor to female recipient - No. (%)	9 (30)
Female donor to male recipient - No. (%)	12 (40)
Female donor to female recipient - No. (%)	4 (13.3)
Wife: husband donor ratio	7:3

¹ Data derived from annual dialysis survey 2023



TABLE 2: DIABETES AND KIDNEY TRANSPLANT OUTCOMES	
Mauritian adult population <65 years² – No.	834,500
Known diabetic – %	10.1
Newly diagnosed diabetic – %	5.6
Pre-diabetic – %	15.3
Dialysis population <65 years³ – No.	1120
Diabetic – No. (%)	504 (45)
PKTR starting work up – No.	165
Diabetic – No. (%)	48 (29.1)
Actual kidney recipients - No.	30
Diabetic – No. (%)	4 (13.3)
Unsuccessful PKTR - No.	99
Diabetic – No. (%)	33 (33.3)
Unsuccessful non-diabetic PKTR - No.	66
Recipient death during workup– No. (%)	6 (9.1)
With donors with diabetes/pre-diabetes– No. (%)	19 (28.8)
Unsuccessful diabetic PKTR - No.	33
Recipient death during workup– No. (%)	8 (24.2)
With donors with diabetes/pre-diabetes– No. (%)	9 (27.3)
PKD with completed diabetes/pre-diabetes screen	196
Diabetic or pre-diabetic – No. (%)	34 (17.3)

2 Statistics Mauritius 3 Mauritius Non-Communicable Diseases Survey 2021

Of 205 donor recipient pairs (DRP) consisting of 165 PKTR and 205 PKD, 34 DRP had ongoing workup. 171 DRP completed workup including 30 (17.5%) DRP who proceeded to transplant surgery, 2 DRP (1.2%) awaiting surgery and 139 (81.3%) DRP unsuitable for surgery. Donor, immunological and recipient factors were responsible in 59%, 23% and 16.5% respectively of the cases unsuitable for surgery. Factors include donor DM/pre-diabetes (24.5%) and recipient death during workup (10.8%). Details are shown in Figure 1. Female patients form 34.5% of the dialysis population eligible for transplant, 37% of all PKTR and 43.3% of actual kidney recipients (Table 1). Female donors form 49.8% of all PTD and 53.3% of actual donors. 26 (86.7%) of kidney transplants occurred in Mauritius but 4 (13.3%) complex cases were referred abroad. Table 2 shows that 29.1% of PKTR have DM compared to 45% of the dialysis population eligible for transplant. Only 13.3% of kidney recipients had DM at transplant. There were 99 unsuccessful PKTR with a diabetic rate of 33.3%. Recipient death during workup occurred in 9.1% of unsuitable non-diabetic PKTR and 24.2% of unsuitable diabetic PKTR. The percentage of unsuccessful PKTR with donors who were diagnosed diabetic or pre-diabetic during workup was similar in the non-diabetic and diabetic subgroups (28.8 vs 27.3%). Finally, 17.3% of PKD screened for hyperglycaemia were found to have DM/pre-diabetes. This compares with a combined rate of newly diagnosed DM/pre-diabetes of 21% in the adult Mauritian population < 65 years old in the 2021 Mauritius Non-Communicable Disease Survey.

Conclusions: In the Mauritius kidney transplant programme, men and women are equally willing to donate and able to access transplantation. The prevalence of newly diagnosed DM and prediabetes in PKD is almost comparable to that of the general population and is a major cause of the high donor dropout. DM prevalence falls significantly from dialysis patients to PKTR and actual transplant recipients. Recipient death during work up is also higher in diabetic PKTR. DM is thus the main obstacle to both kidney donation and eligibility for kidney transplantation. Immunological incompatibility is a close second. Strategies are needed to reduce DM incidence and the subsequent development of CKD in the country. Paired kidney exchange and deceased donor transplant should be considered to expand kidney transplantation in Mauritius.

I have no potential conflict of interest to disclose.

I did not use generative AI and AI-assisted technologies in the writing process.

BARRIERS TO TRANSPLANTATION IN PATIENTS ON MAINTENANCE HEMODIALYSIS: A CROSS-SECTIONAL ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES

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Introduction: Renal transplantation is the treatment of choice for patients requiring Renal Replacement Therapy. Patient survival and quality of life after renal transplant is far better than dialysis. However, factors such as a lack of education and awareness regarding transplantation, lack of a reliable source of information and general distrust of the medical system pose challenges for patients to consider kidney transplantation as a modality for renal replacement therapy.

Methods: This is a cross-sectional study. A questionnaire with 30 questions was developed with the help of 4 nephrologists. It consisted of 4 subsections: Demographic data, Knowledge, Attitude and Practices (KAP) towards kidney transplantation, KAP towards living donor kidney transplantation, and KAP towards deceased donor kidney transplantation. A pilot study was undertaken with 10 random volunteers from the study group to ascertain the comprehensibility and appropriateness of the questionnaire. The questionnaire was circulated in 3 different languages: English, Hindi and Gujarati to patients undergoing hemodialysis at Institute of Kidney Disease and Research Centre-Institute of Transplantation Sciences and associated Gujarat Dialysis Program (GDP) centres. Patients were asked to fill the questionnaire with the help of attendants and dialysis staff in a language they were comfortable in.

Results: We received a total of 4146 responses. 67.37% of the patients were males, 32.58% were females and 0.05% were others. The average age was 46 years. 53.38% of the patients wanted to get a kidney transplant, 26.27% didn't want a transplant and 20.35% were unsure. Only 11.41% were undergoing an evaluation for living donor kidney transplant, and 12.91% were enlisted for a deceased donor kidney transplant. Only 33.33% of the patients thought they had full information regarding kidney transplantation. 60.32% of the patients thought survival was longer after getting a transplant, and 63.72% of the patients thought that the quality of life after getting a transplant was better than staying on dialysis. 49.47% of the patients agreed that high cost was a barrier to transplantation, and 71.54% of the patients thought that dialysis was cheaper than getting a transplant. Only 30.68% of the patients were willing to accept organ from a family member. 50.38% of the patients thought kidney donation is risky for the donor, 23.03% of the patients thought a donor can not work for several months after transplant, and 16.73% of the patients thought a donor can never work after kidney donation.

Table 1. Socio-Demographic characteristics of the participants

Total participants= 4146		
Gender: n (%)		
Male: 2793 (67.37%)	Female: 1349 (32.58%)	others 4 (0.09%)
Average Age: 46.45 years		
Blood Group n (%)		
A: 716 (17.27%)	B: 1202 (28.9%)	AB: 320 (7.72%)
O: 923 (22.27%)	Don't Know: 985 (23.76%)	
Monthly Income: n (%)		
Less than Rs.10,000 per month : 2434 (58.71%)	Rs. 10,000- 25,000 per month: 1211 (29.21%)	
Rs. 25,000-1,00,000 per month: 399 (9.62%)	> 1,00,000 per month: 103 (2.48%)	
Initial Dialysis Access n (%)		
Jugular DLC (Neck line): 3283 (79.18%)	Femoral DLC (Leg line): 287 (6.92%)	
Fistula: 449 (10.83%)	Permacath: 123 (2.97%)	
Peritoneal dialysis: 4 (0.09%)		
Current Dialysis Access n (%)		
Jugular DLC (Neck line): 275 (6.63%)	Femoral DLC (Leg line): 25 (0.61%)	
Fistula: 3639 (87.77%)	Permacath: 196 (4.73%)	
PD: 11 (0.26%)		
How long have you been on dialysis? n (%)		
< 3 months: 448 (10.80%)	3 months-1 year: 1056 (25.47%)	
1 year-3 years: 1304 (31.45%)	> 3 years: 1338 (32.27%)	
How often do you get dialysis? n (%)		
Once a week: 55 (1.32%)	Twice a week: 2274 (54.84%)	
Thrice a week: 1806 (43.56%)	PD: 11 (0.26%)	
How far from the dialysis center do you live? n (%)		
< 1 hour: 52 (1.25%)	1-4 hour: 770 (18.57%)	> 4 hour: 3324 (80.17%)
How much do you spend on dialysis? n (%)		
Free of cost (Under govt schemes): 3655 (88.16%)	Rs. 1000-2000: 42 (1.01%)	
Insurance/ Govt Reimbursement: 376 (9.07%)	> Rs. 2000: 29 (0.69%)	
What extra expense do you have to bear because of dialysis? (E.g. Travel, Food, blood tests)		
< Rs.500: 3239 (78.12%)	Rs. 500-1000: 733 (17.68%)	> Rs. 1000: 174 (4.15%)
Are you planning to undergo transplant? n (%)		
Yes: 2213 (53.38%)	No: 1089 (26.27%)	Unsure: 844 (20.36%)