

Knowledge About Living-Donor Kidney Transplant Among South Asian Patients with Kidney Failure: Association with Immigrant Status

R. AHUJA¹, T. PATEL¹, D. LODGE¹, L. KERR¹, G. THIND¹, M. EL-SURIRI¹, I. MUCSI¹

¹Ajmera Transplant Centre, Toronto General Hospital, University Health Network, Toronto, ON, Canada

INTRODUCTION

South Asians (SA) with kidney failure (KF) are less likely to receive living donor kidney transplants (LDKT) compared to white patients¹.

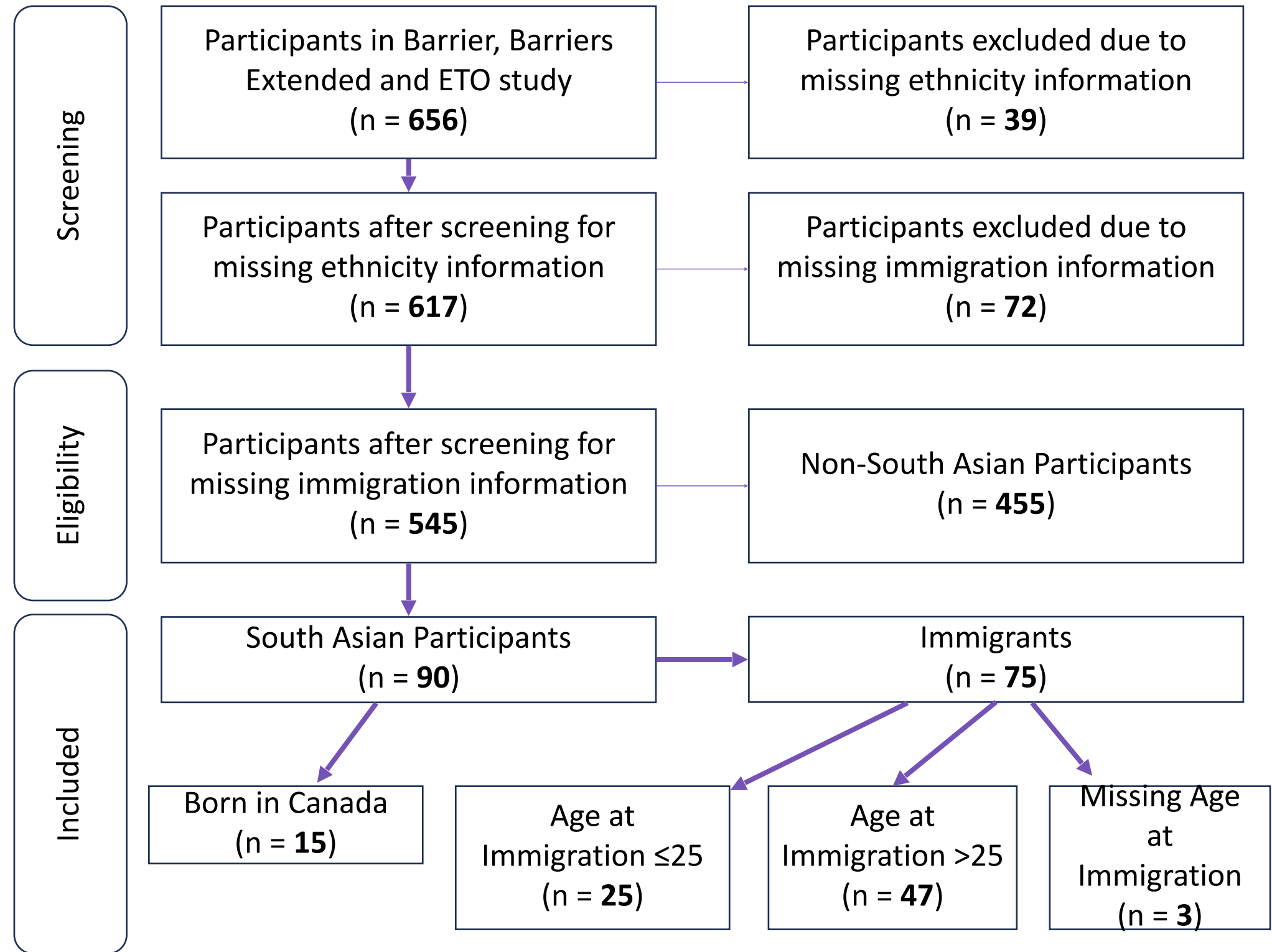
- Earlier, we reported that SA, compared to white patients, have lower kidney transplant (KT) related knowledge⁴.
- Many of the previously studied SA participants were immigrants.
- Previous research shows that immigrants receive less and lower quality healthcare².
- In addition, research has found that age at immigration is a factor in the health status of older immigrants³.

AIM

To investigate if being an **immigrant** and **age at immigration** is associated with **LDKT knowledge** among SA patients with KF.

METHOD

Secondary analysis of a cross-sectional, multi-center convenience sample of South Asian adults with Kidney Failure who completed sociodemographic and Knowledge Assessment of Renal Transplant questionnaires.



RESULTS

Table 1. Sociodemographic characteristics of participants, by immigrant status and age at immigration

		Non-Immigrants		Immigrants	
		Age At Immigration			
	Total (n=90)	Born In Canada (n=15)	≤25 (n=25)	>25 (n=47)	
Mean age (SD)	55 (15)	41 (12)	51 (16)	62 (10)	
Male, n (%)	57 (63)	6 (40)	15 (60)	33 (70)	
Education, ≥12 years, n (%)	63 (70)	10 (67)	18 (72)	34 (72)	
Religion (Muslim), n (%)	12 (13)	1 (7)	5 (20)	3 (6)	



Figure 1. Mean LDKT Knowledge Score by Immigration Status (p=0.043)

Figure 2. Mean LDKT Knowledge Score by Age at Immigration (p=0.286)

CONCLUSIONS

Findings

SA immigrants, compared to non-immigrants with KF, have lower LDKT-related knowledge; however, participant age was an important confounder in our analysis. Limitations include a small sample size and the exclusion of non-English speakers.

Future Directions

Examine the effect of age, age at immigration, and years in Canada on LDKT knowledge among other cultures as well, with the aim of improving patient education about LDKT for immigrants.

REFERENCES

- ¹Bansal A, et al. Ethnocultural barriers to pre-emptive kidney transplantation: a single centre retrospective cohort study. *American Journal of Transplantation* 2017
- ²Deroose K. P, et al. Immigrants and health care: sources of vulnerability. *Health Aff (Millwood)* 2007; 26(5): 1258-1268
- ³Gubernskaya Z. Age at migration and self-rated health trajectories after age 50: understanding the older immigrant health paradox. *J Gerontol B Psychol Sci Soc Sci* 2015; 70(2): 279-290.
- ⁴Jolly S, et al. Kidney Transplant-Related Knowledge Among South Asian Compared to White Canadian Patients. *Nephrology Dialysis Transplantation* 2023; 38.

Table 2. Linear regression models which assesses the association between age at immigration >25 and LDKT knowledge scores (Born in Canada & ≤25 as comparison group – binary comparison).

Model 1: Age at immigration

Model 2: 1 + sex

Model 3: 2 + religion (Muslim/Non-Muslim), education

Model 4: 3 + age

Model	Coefficient	Standard Error	P-value	95% confidence interval
1	-0.75	0.32	0.022	-1.38, -0.11
2	-0.82	0.32	0.013	-1.46, -0.18
3	-0.88	0.33	0.010	-1.54, -0.22
4	-0.33	0.35	0.35	-1.04, 0.37

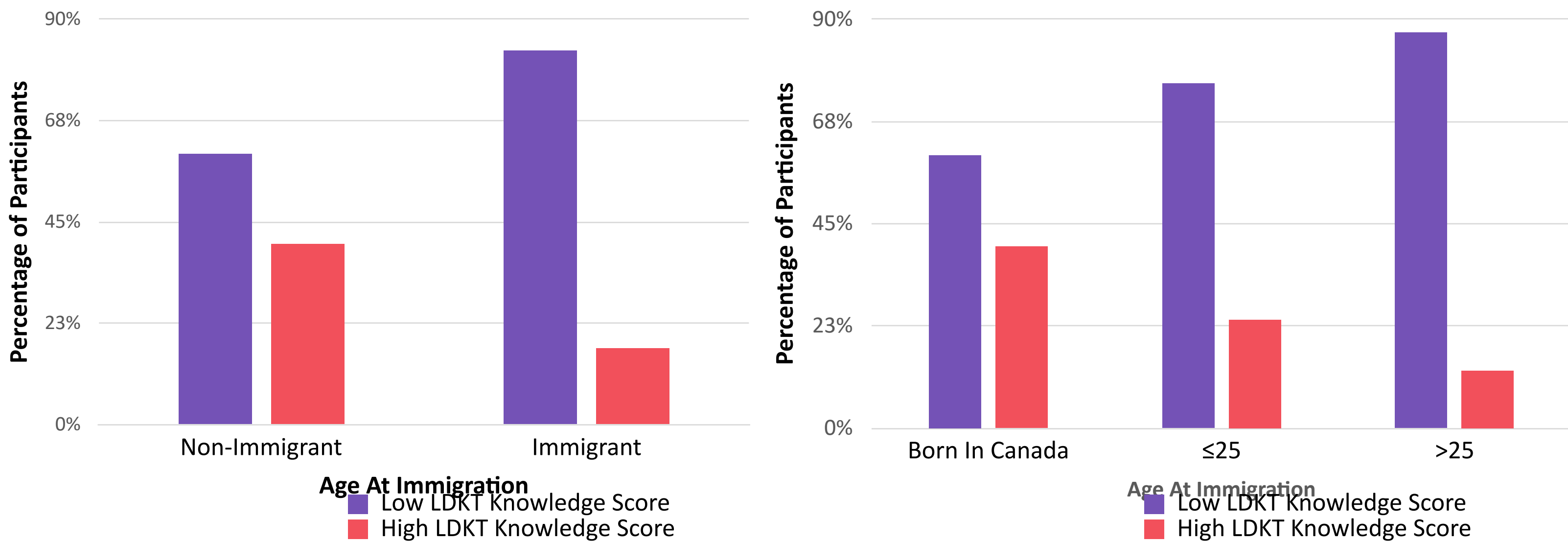


Figure 3. Immigration Status vs Percentage of LDKT Low/High Knowledge Scores (p=0.050)

Figure 4. Age at Immigration vs Percentage of LDKT Low/High Knowledge Scores (p=0.068). Trend Analysis: p=0.022

ACKNOWLEDGEMENTS

I would like to thank my supervisor Dr. Mucsi for his mentorship and guidance, my fellow lab members at the Kidney Health and Research Group for all their support and UHN, and The University of Toronto for this opportunity.

CONTACT INFORMATION

Email: ahujaram0204@gmail.com