

Disparities in Kidney Transplantation

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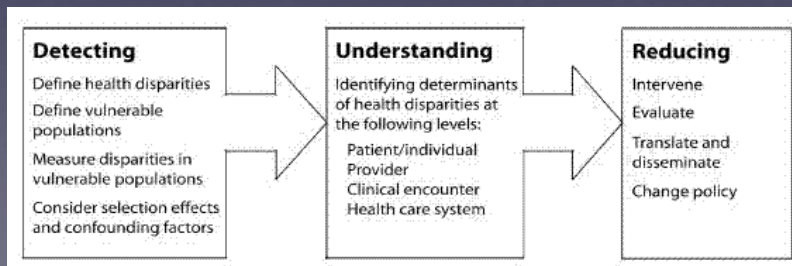
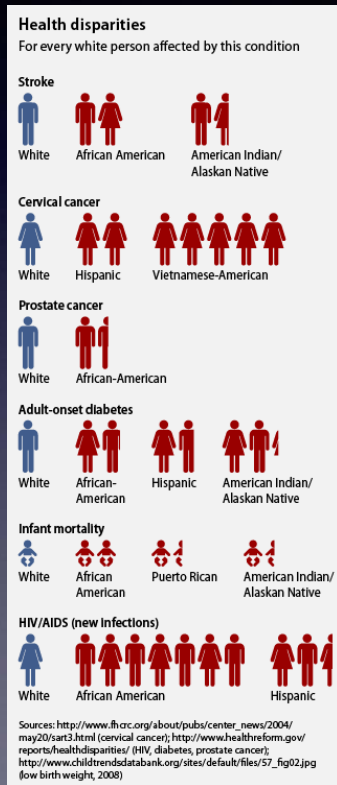
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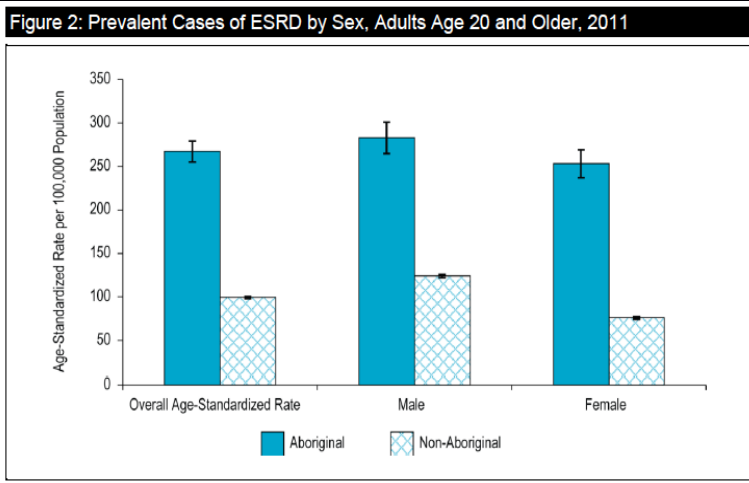
Jessica Nelson



Health related disparities

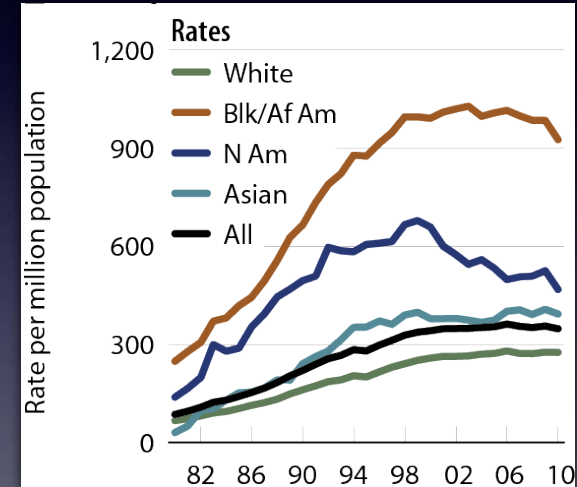


Prevalence of kidney disease

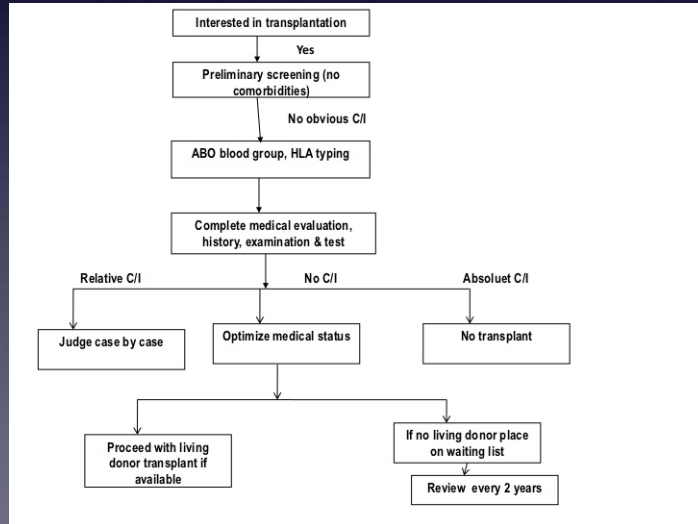
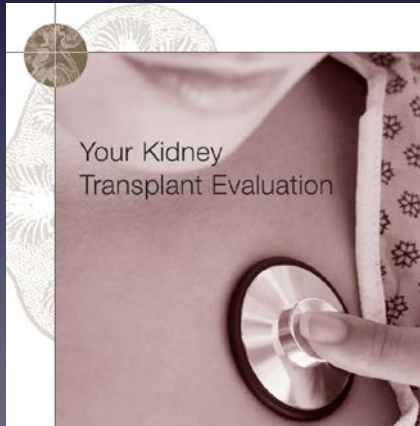


Higher prevalence of ESRD in:

Aboriginal
South Asian
East Asian
African
Lower SES

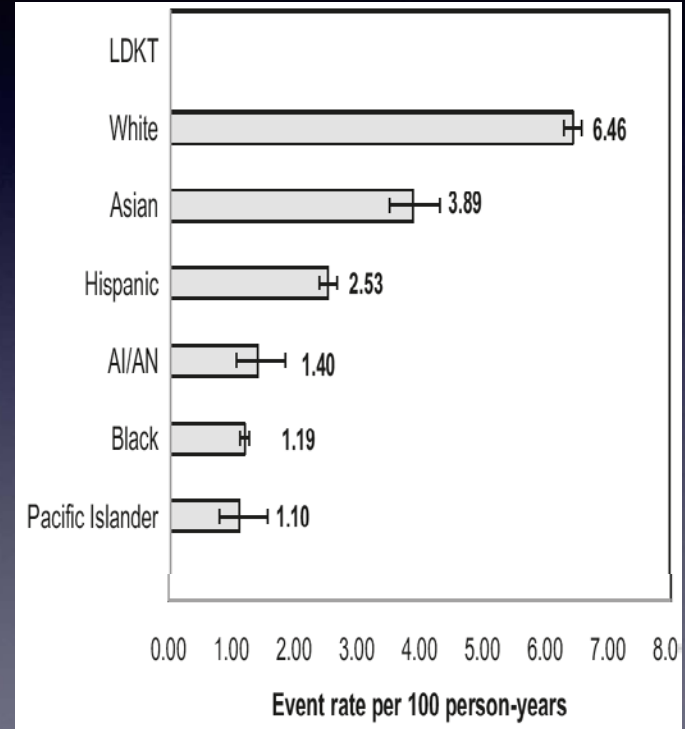
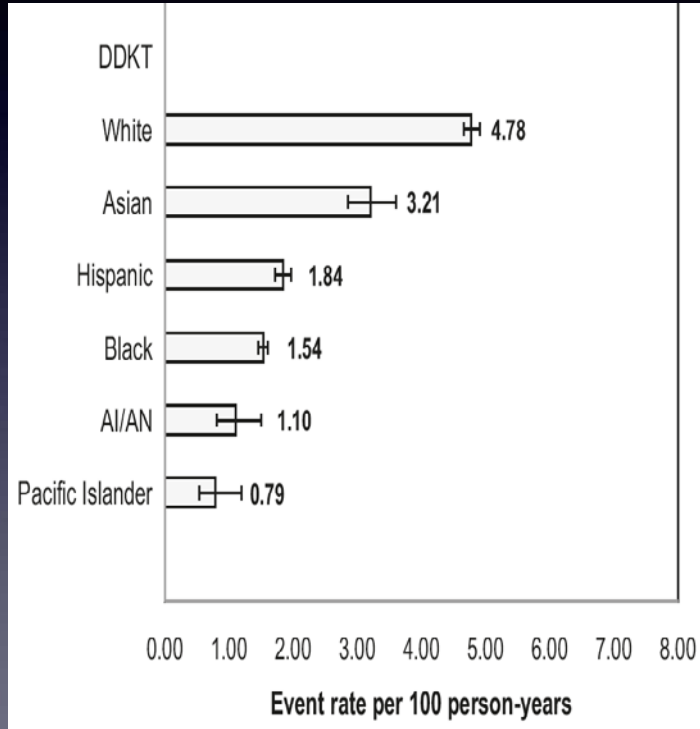


Getting a transplant is a lot of work



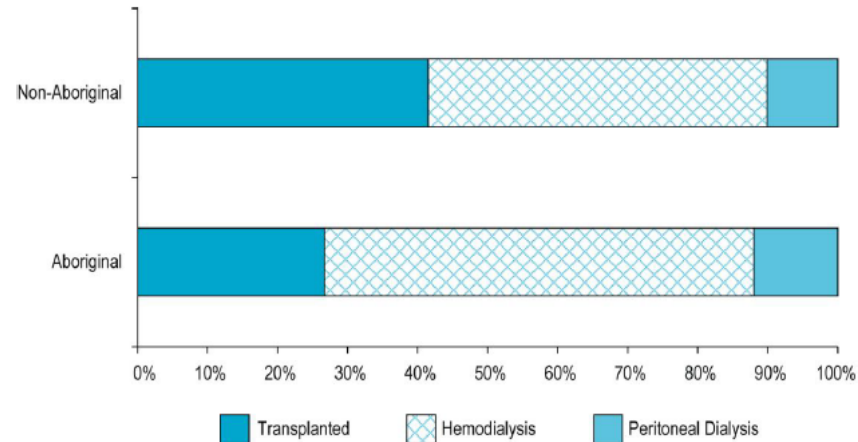
Disparities in transplantation have
been extensively described...

U.S. racial disparities



Canadian racial disparities

Figure 4: Treatment Therapies for ESRD Patients (Prevalent Cases), Adults Age 20 and Older, 2011



Canadian racial disparities

Table 2 | Transplantation by race

	Any transplant			Deceased donor transplant only			Living donor transplant only		
	N (%)	Age-adjusted HR (95% CI)	Adjusted ^a HR (95% CI)	N (%)	Age-adjusted HR (95% CI)	Adjusted ^a HR (95% CI)	N (%)	Age-adjusted HR (95% CI)	Adjusted ^a HR (95% CI)
East Asian	380 (31)	0.88 (0.79, 0.97)	0.71 (0.63, 0.79)	335 (27)	1.03 (0.92, 1.15)	0.90 (0.80, 1.01)	45 (3.6)	0.42 (0.31, 0.56)	0.27 (0.20, 0.37)
Indo Asian	203 (28)	0.69 (0.60, 0.80)	0.69 (0.60, 0.80)	163 (22)	0.74 (0.63, 0.87)	0.82 (0.70, 0.97)	40 (5.4)	0.55 (0.40, 0.75)	0.42 (0.31, 0.58)
White	4841 (25)	1.0	1.0	3576 (18)	1.0	1.0	1265 (6.5)	1.0	1.0

East Asians are 29% less likely to undergo KTX
Indo-Asians are 31% less likely to undergo KTX

Canadian racial disparities

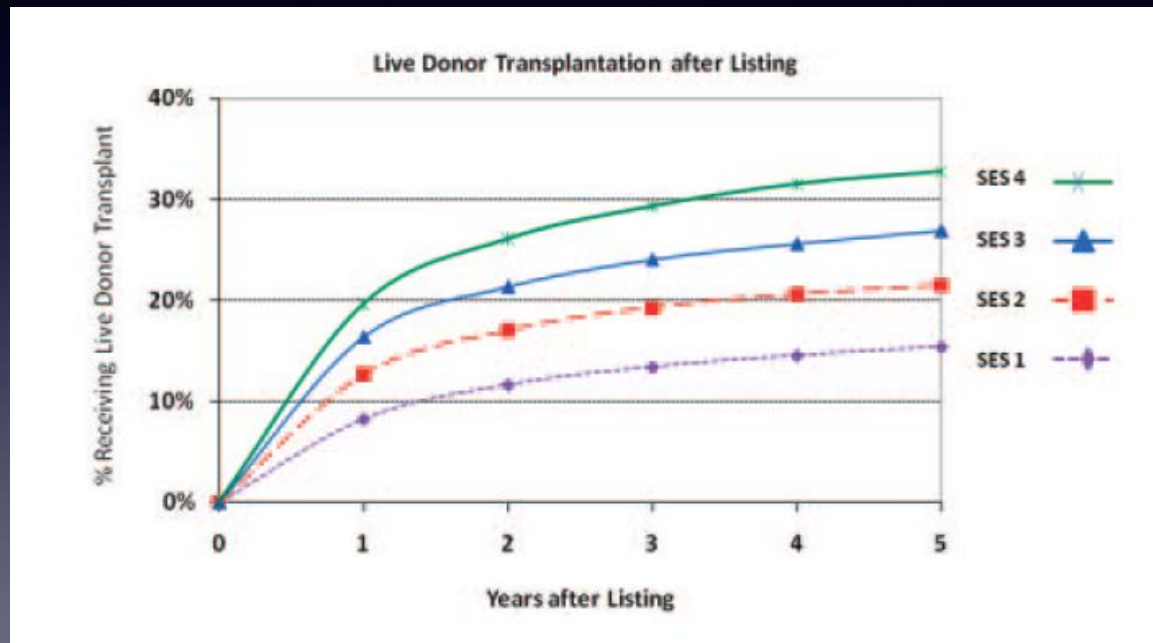
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Indo-Asians are 31% less likely to undergo KTX

East Asians are 73% less likely to undergo LDKT
Indo-Asians are 58% less likely to undergo LDKT

Income-related disparities



Race and income are additive



We haven't moved past these
observations

Theory #1

Lack of motivation to pursue transplantation

- Patients and physicians may not appreciate the benefits of transplantation in certain populations
- 69% of surveyed nephrologists believed transplantation will improve survival in AA compared to 81% in Caucasians

Similar survival after transplant in all races

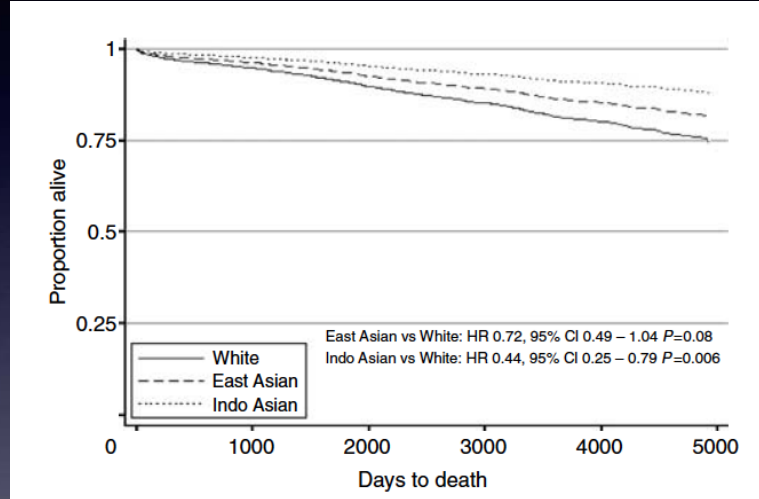
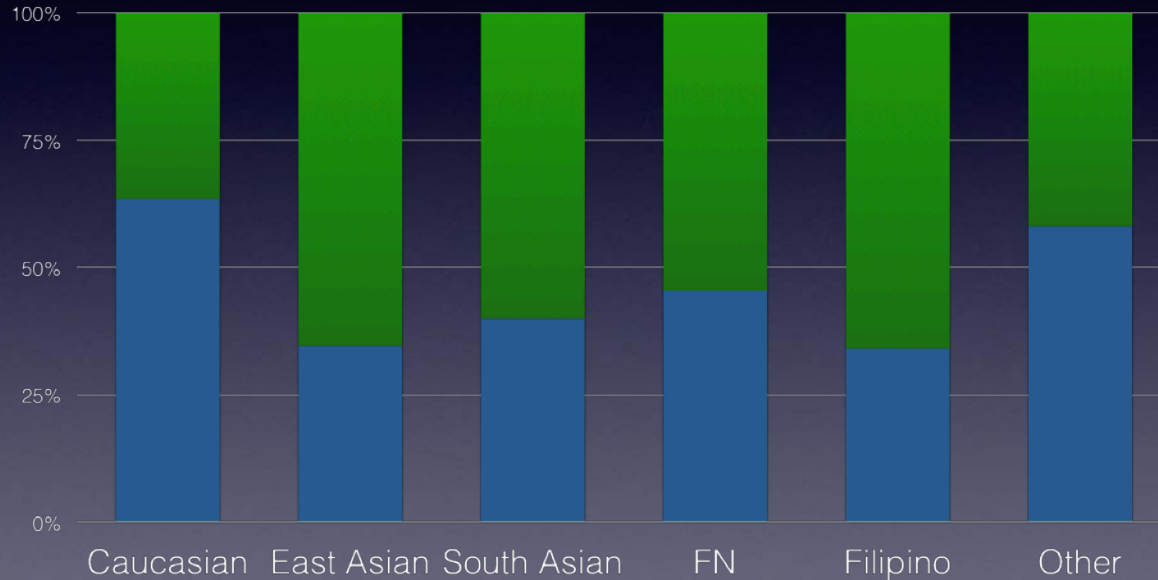


Table B3: Adjusted Graft Survival Rate (Percentage) for Adult Transplant Patients (Incident Cases) Age 20 and Older, Canada

	One Year	Two Years	Three Years	Four Years	Five Years
Aboriginal	94.2	91.8	89.2	86.6	83.6
Non-Aboriginal	94.6	92.3	89.8	87.3	84.4

Theory # 2

Lack of living donors



Source: BCT , 2003-2012

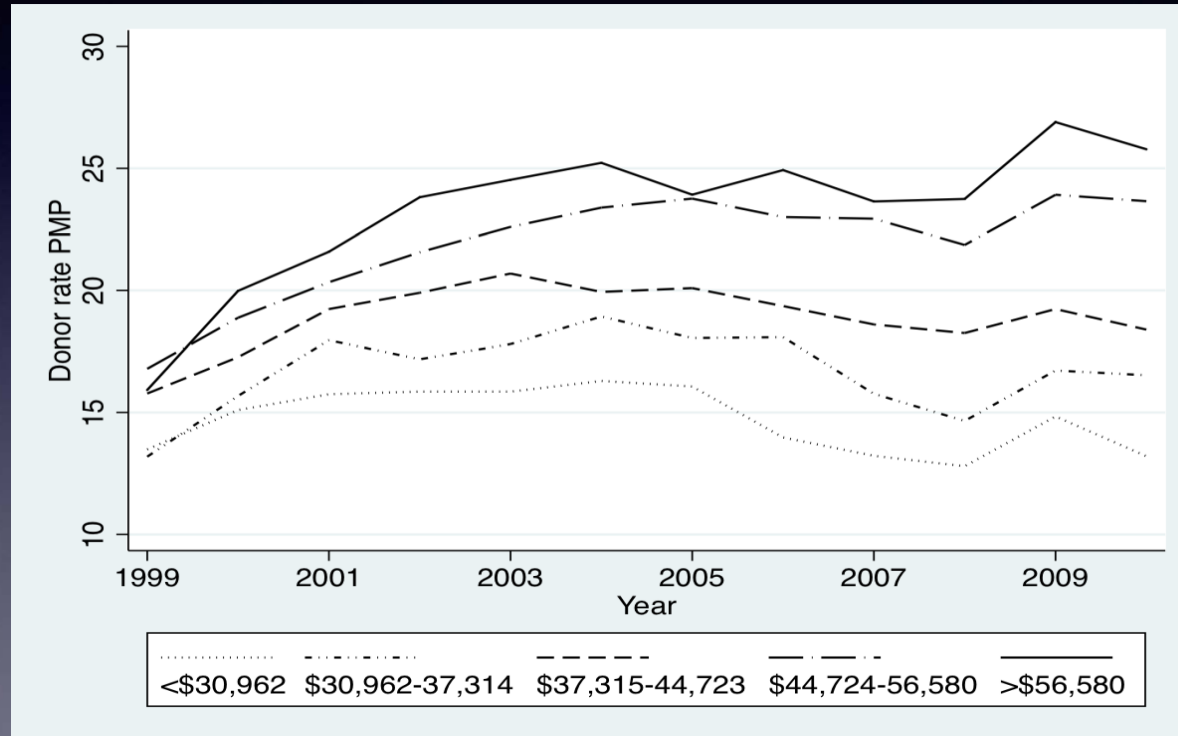
■ LDTX

■ DDTX

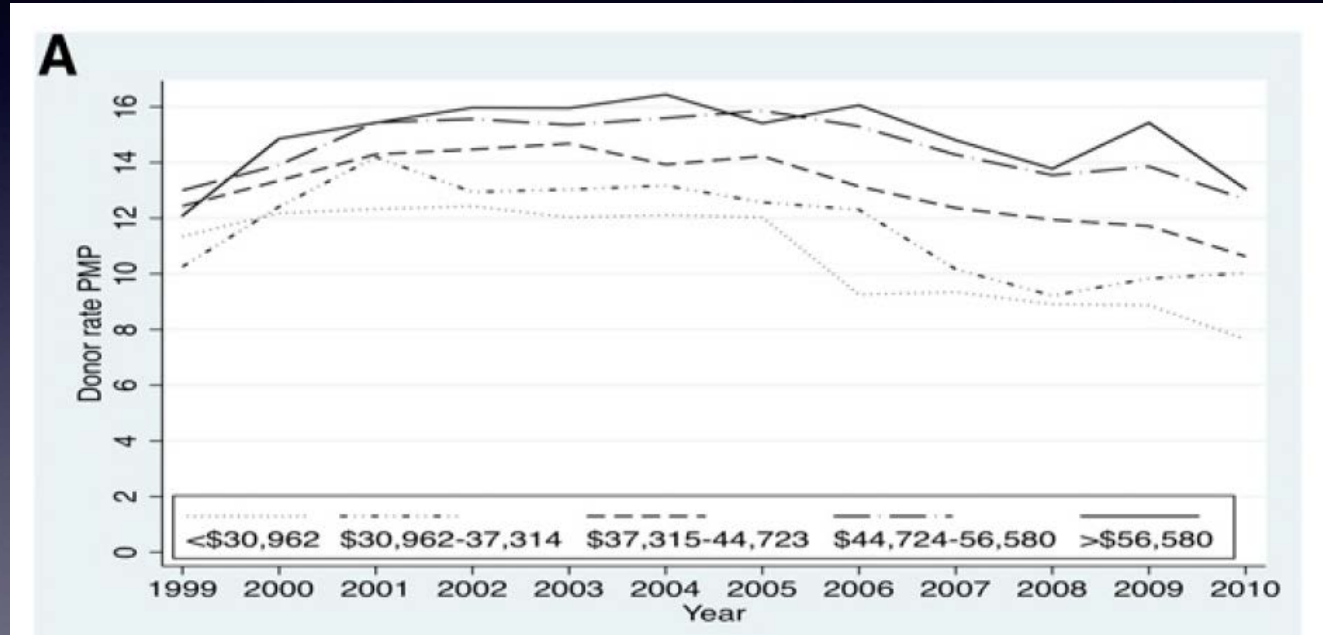
Why is LDKT less common?

- Most patients find their donors from within their race/socioeconomic status
- Fewer willing to consider living donation (cultural, religious)
- Fewer medically suitable donors
- Fewer people that can afford to donate

Living donation rates lower in poor populations



Finances are a barrier for Related Donors



May be more open to 'alternative'
options

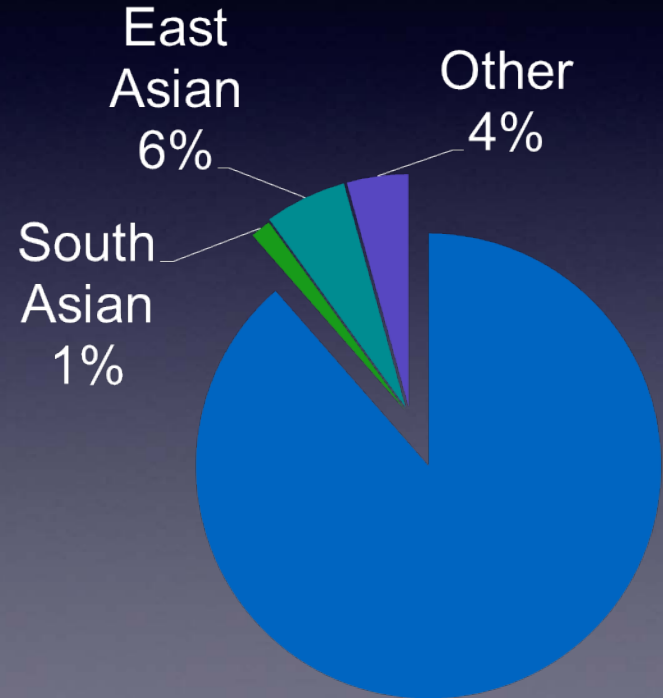
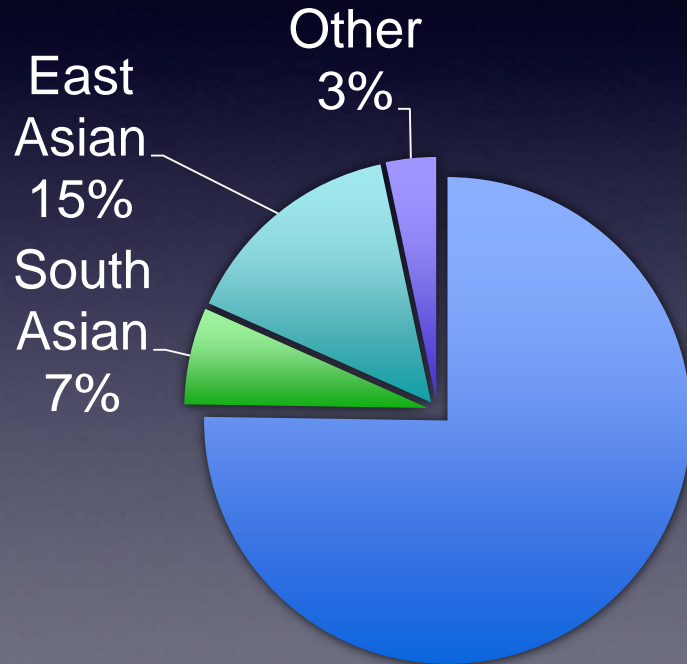


Theory # 3

There are not enough deceased
donors

The “Blood type B” problem

Total BC Population Kidney Disease



Reasons for this unexplained

- Cultural or religious objections to donation
- Fewer “eligible deceased donors”
- Mistrust/lack of understanding on the process surrounding deceased donation

How do we move forward?



A Survey Study on LDKT and Transplant Tourism

- potential for living donation within their social network
- level of knowledge about benefits of LDKT
- views on asking and receiving offers of living donation
- views on transplant tourism

Quantifying deceased donation in ethnic minority populations

- Systematic analyses of the stages in deceased organ donation in Aboriginal, South Asian, and Chinese Canadian in B.C.
- Data from BCT and Statistics Canada

In the meantime..

- Enhanced education on merits of transplantation (be self aware)
- Early support for living donor outreach
- Linguistically and culturally appropriate tools
- Remove financial disincentives for living donors
- Engage members of various communities (role models)

