Nephrologists' preferences and perspectives on patient's access to kidney transplantation: a systematic review

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Background

While kidney transplantation can offer improved survival and quality of life outcomes, up to 70% of patients requiring renal replacement therapy remain on dialysis. Moreover disparities in access to kidney transplantation are apparent, in part attributable to differences in transplant education, screening, and patient eligibility for kidney transplantation.

Aim

To describe nephrologists' preferences and attitudes to patients' access to kidney transplantation.

Methods

- MEDLINE. Embase, PsycINFO searched to July 2013
- Inclusion criteria: surveys and qualitative studies that assessed nephrologists' preferences and perspectives towards patient referral, screening, and eligibility for deceased and living donor kidney transplantation
- Descriptive synthesis – summarise and compare findings

Results

- 22 studies (n ≥ 4671 respondents)
- UK, US, Australia, Sweden, Netherlands, Iran, multinational
- Nephrologists' preferences varied with respect to: medical suitability - some indicated lower likelihood of recommending transplantation for patients with cardiovascular disease, diabetes, obesity, and infection; non-adherence was regarded by some as a contraindication for transplantation; and socio-demographic characteristics - patients of older age, ethnic minorities, or low socio-economic status were less likely to be recommended.
- Six major themes were identified (Table 1)

Conclusion

Variability in nephrologists' preferences may be contributing to disparities in access to transplantation. Evidence-based guidelines or policy statements supplemented with pragmatic tools for determining medical, psychosocial and behavioural criteria for referral and waitlisting may support more systematic and equitable decision-making. Continuing medical education informed by current evidence on transplant outcomes, and psychosocial and educational interventions, particularly for high-risk or disadvantaged patient populations, could help to reduce overall disparities in access to transplantation.

Figure 1. Factors assessed by studies relating to nephrologists' preferences and perspectives on patients' access to kidney transplantation

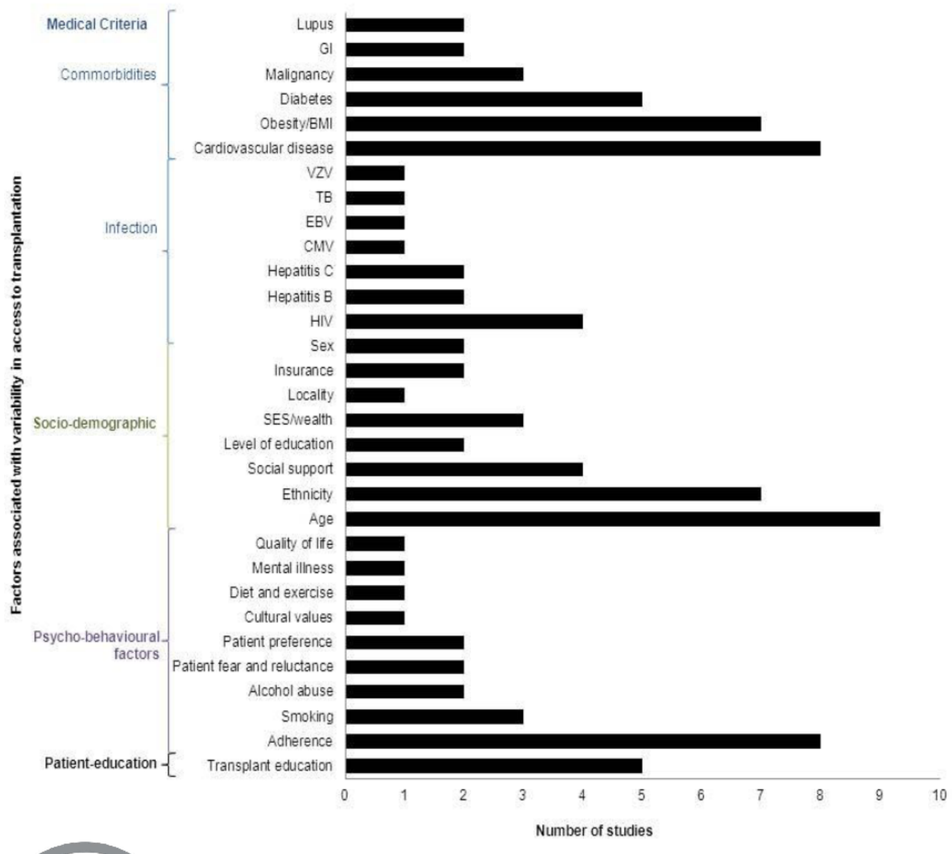
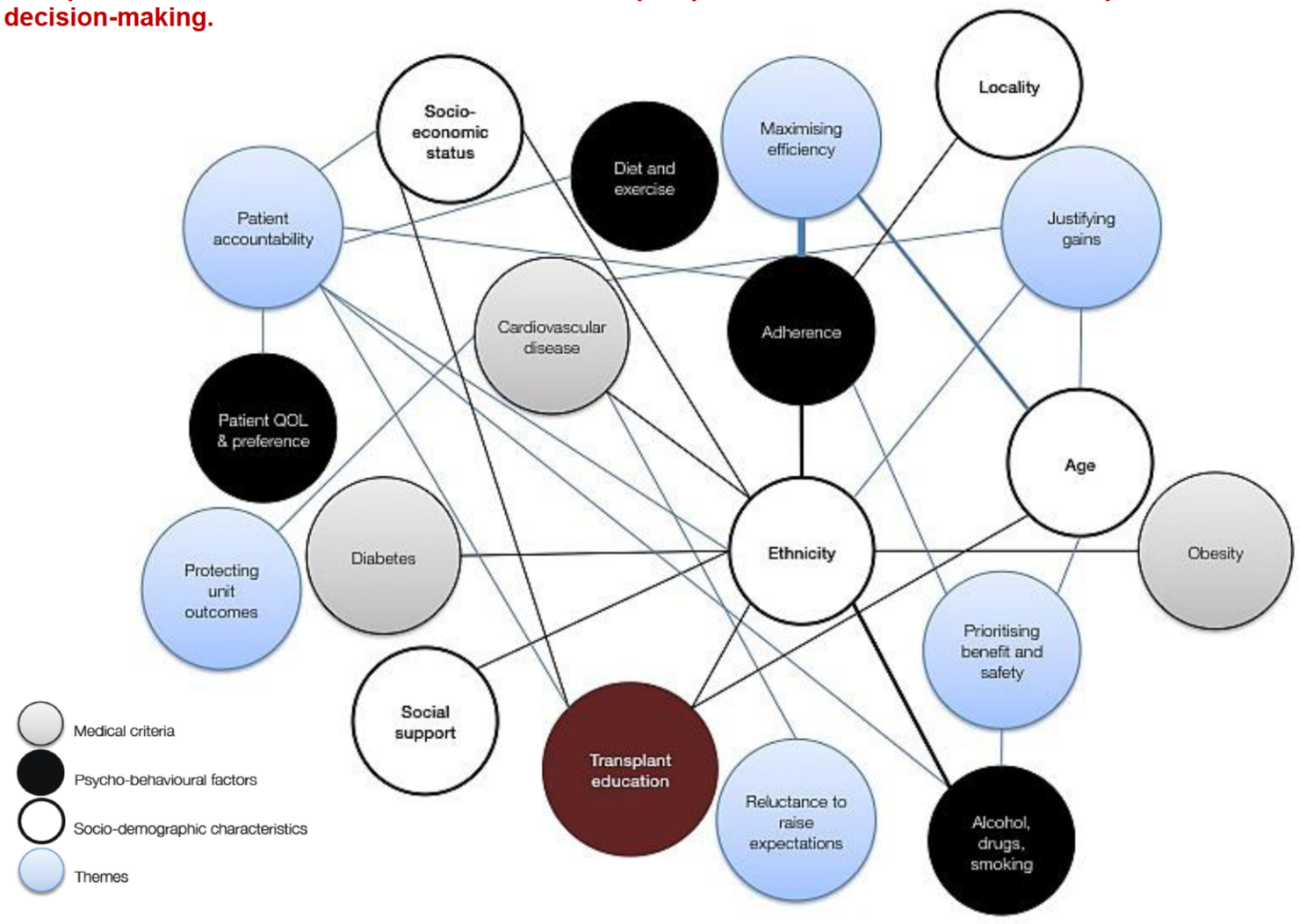


Figure 2. Conceptual map of factors and reasons contributing to variability in patient access to kidney transplantation – the themes reflect clinicians' perspectives which influence their preferences and decision-making.



All relationships among the factors and themes identified in the studies were mapped. The widths of the connecting lines are weighted according to the number of studies which identified the association or relationship. The complex and multifaceted issues associated with patient ethnicity and patient accountability were demonstrated by the higher density of interconnecting lines. Of the medical criteria, cardiovascular disease was the most connected, with links to ethnicity, transplant education, and the themes of justifying gains, reluctance to raise expectations, and protecting unit outcomes. Multiple studies indicated that maximising efficiency influenced nephrologists' preferences for patient access to kidney transplantation based on adherence and age. Transplant education for patients had multiple connections, particularly to socio-demographic and medical factors.

Table 1. Themes and illustrative quotations

Themes	Quotations
Prioritising individual benefit and safety	"We tend to transplant the Aboriginal patients in the hope that they will be one of the group that does well. Now, you could argue, that that's not very evidence-based, nor is it particularly utilitarian; but I'm not one of those physicians who is bound by evidence, by cost utility . . . I think [Aboriginal patients] deserve to be transplanted, because for those in whom there has been successful transplantation... it's probably a greater advantage for them than it is for the non-Indigenous, because the benefits in terms of cultural and society are greater." (Anderson 2012) "They believed the decision to waitlist a patient should be based solely on patient factors and not influenced by potential benefit or loss to the community."(Tong 2011) "Priority to the worst off is illustrated by the consideration given to a patient's negative experience with dialysis, where the patient's relative well-being is taken as a value input at the assessment stage."(Omar 2013) "Lifestyle factors such as smoking and social circumstances were considered solely in terms of the impact on patients' surgical risk and their ability to cope and adhere to the post transplant regimen. Patients older than 65-70 years were excluded primarily based on potential medical risks, not on their ability to contribute to society. A few acknowledged they had personal biases, but said they attempted not to let these drive their decisions."(Tong 2011) "The biological age, which relates to the physical condition, needs to be assessed because the transplantation operation itself and the medication afterwards can cause serious complications."(Varekamp 1998)
Maximising efficiency	"Not only are we in a position to try and make [patients] better . . . I think we're also paid to safeguard resources, you know, society's resources . . . And although we're trying to make life better for this person, I think we could be judged poorly if we, we squandered something you know . . . I think it's our job and our duty to make sure it's used wisely."(Anderson 2012) "At the same time, there is an appeal to maximisation of benefit since younger patients have gains in quality of life that are higher than for older patients; they will predictably also have a longer graft life, thus making use of the donor kidney to a larger degree."(Omar 2013) "A lot of the judgement has come down to the fact that it's a limited resource and we are allocating partly in the interests of the patients, but partly in the interest of the kidney. We're trying to get value for the community out of the kidney as well as value for the patient." (Tong 2011)
Patent accountability	"Mostly they are our patients because they had a big hand in getting the disease."(Spigner 2011) "They [racial minorities] don't seem to be able to take anything very seriously…particularly when it comes to issues that require a lot of discipline on their part."(Spigner 2011) "For patients who were ineligible for waitlisting due to modifiable factors, nephrologists deferred some responsibility and power to patients by encouraging them to exercise better health management to gain access to transplant."(Tong 2011)
Justifying gains	"However, when arguing that chronological age does not matter, some nephrologists use examples of patients with a life expectancy of 5 yr, which suggests that this is the lower limit beyond which they do not consider transplantation to be an option."(Tong 2011)

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