

Barriers To Kidney Transplantation: Single Centre Experience

Dr. Monisha Simon, Dr. Ganesh S Prasad, Dr. Limesh M, Dr. Vinod N, Dr. Akhila Vasant
Department of Nephrology, Narayana Health, Bangalore, India

Introduction:

- Chronic kidney disease is a progressive condition that affects >10% of the general population worldwide¹.
- In India, the approximate prevalence of CKD is 800 per million population (pmp)².
- Renal transplantation is best treatment modality that can be offered to a patient with End stage renal disease.
- While kidneys are the most frequently transplanted organ in India, the current annual figure of 11,243 kidney transplants falls short of addressing the needs arising from roughly 200,000 cases of renal failure each year.
- The available number of studies and quality of evidence on causes for refusal for transplant by ESRD patients on HD scarce.
- Clear understanding of the factors can help us in designing appropriate interventions to increase transplant rates.

Method:

- Prospective study conducted on HD unit of Narayana Health Bangalore.
- Questionnaire to the current patients undergoing regular HD for at least 3 months at our centre to study the reasons for not undergoing renal transplant.
- Study population + Sample size : 100 patients of end stage renal disease undergoing hemodialysis.

Results:

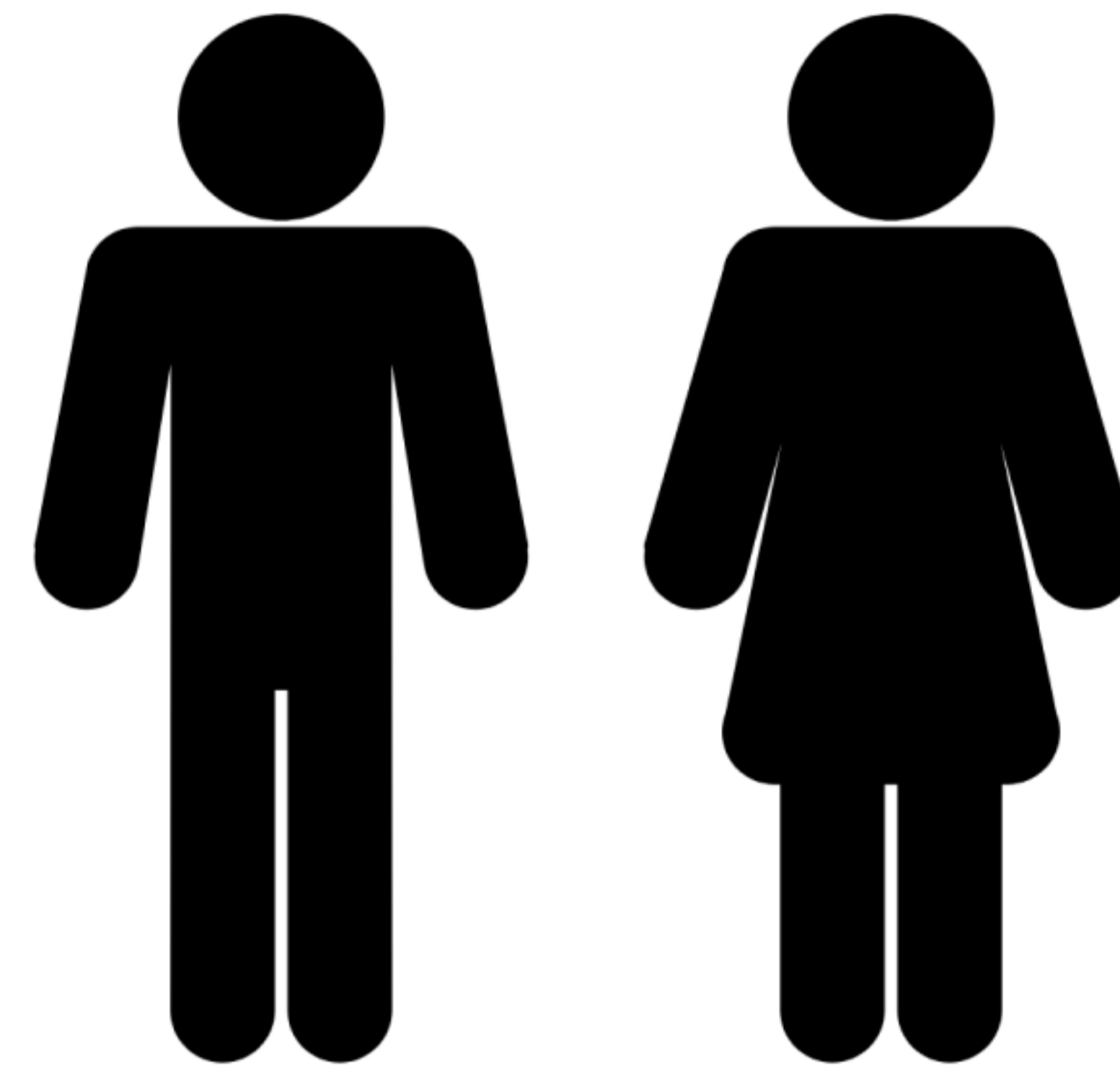
- Demographic characteristics of the baseline population revealed male-female ratio of 71:29. Cadaveric registration was done in 74 of the study population. However, 43 of the patients were unwilling for renal transplants due to financial constraints. 60 of the patients had no apprehensions related to the transplant.
- The most common causes of fear were fear of graft rejection and death during procedure. 15 patients weren't aware of kidney transplantation as a mode of renal replacement therapy. 22 of our patients claimed to be unfit for surgery. Worsening of baseline cardiac function being the most common cause.
- 2 patients were unwilling for renal transplantation due to past surgical history. 16 donors were apprehensive about renal transplantation due to loss of livelihood and deterioration of renal functions.

References:

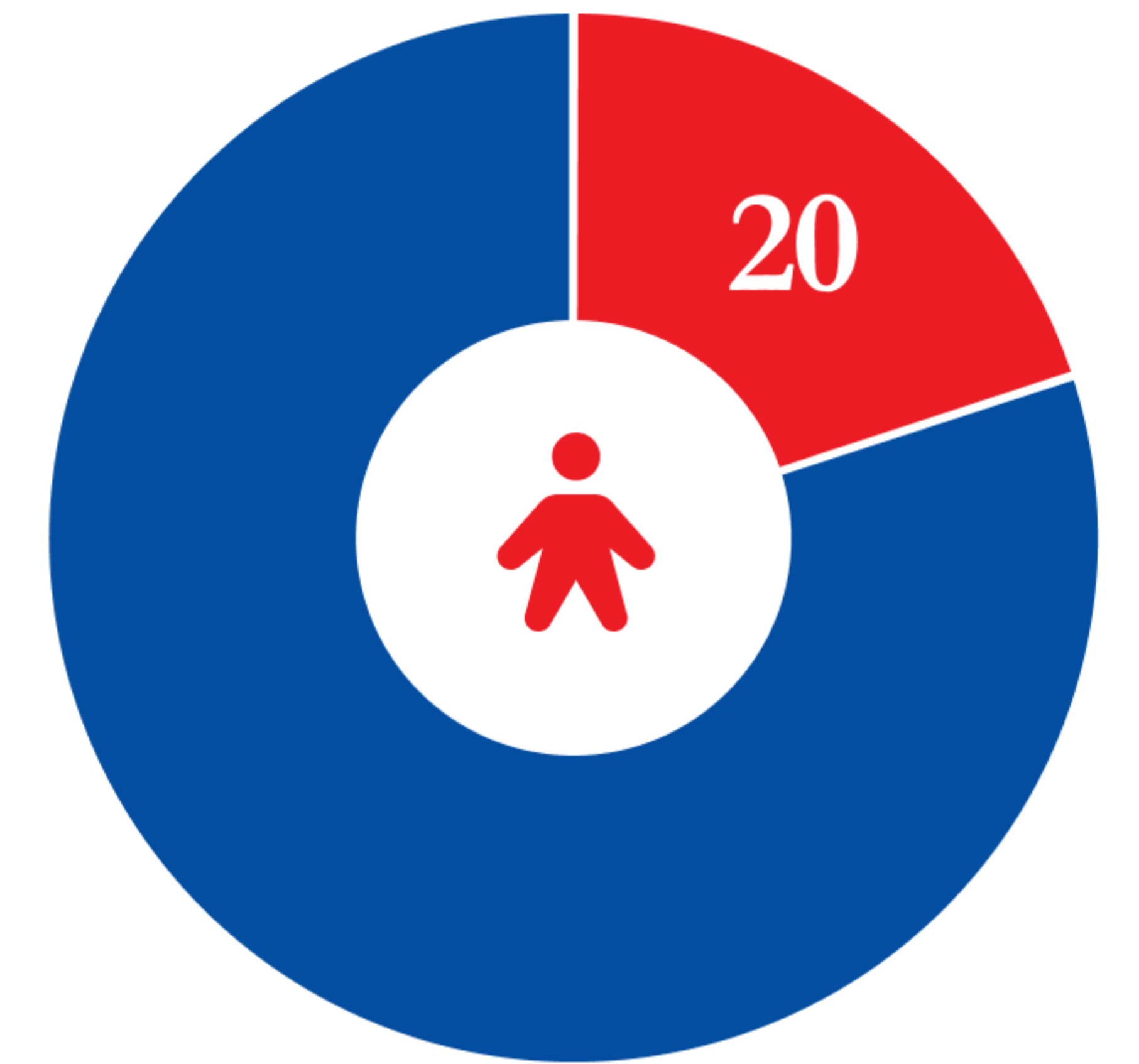
- Kovesdy CP. Epidemiology of chronic kidney disease: an update 2022. *Kidney Int Suppl.* 2022 Apr;12(1):7-11.
- Agarwal SK, Srivastava RK. Chronic Kidney Disease in India: Challenges and Solutions. *Nephron Clin Pract.* 2009 Feb 5;111(3):c197-203.

Male-Female ratio:

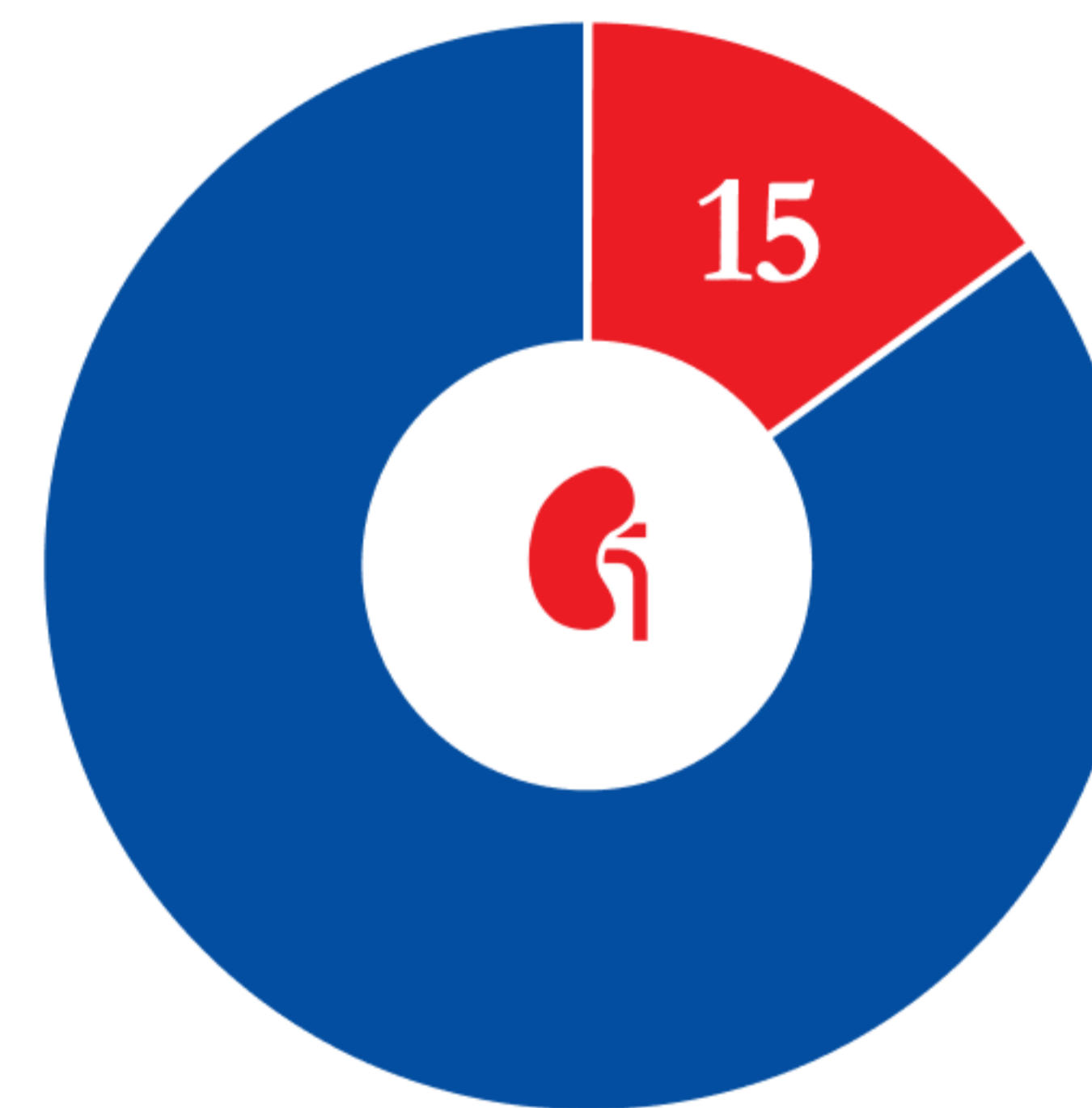
71 : 29



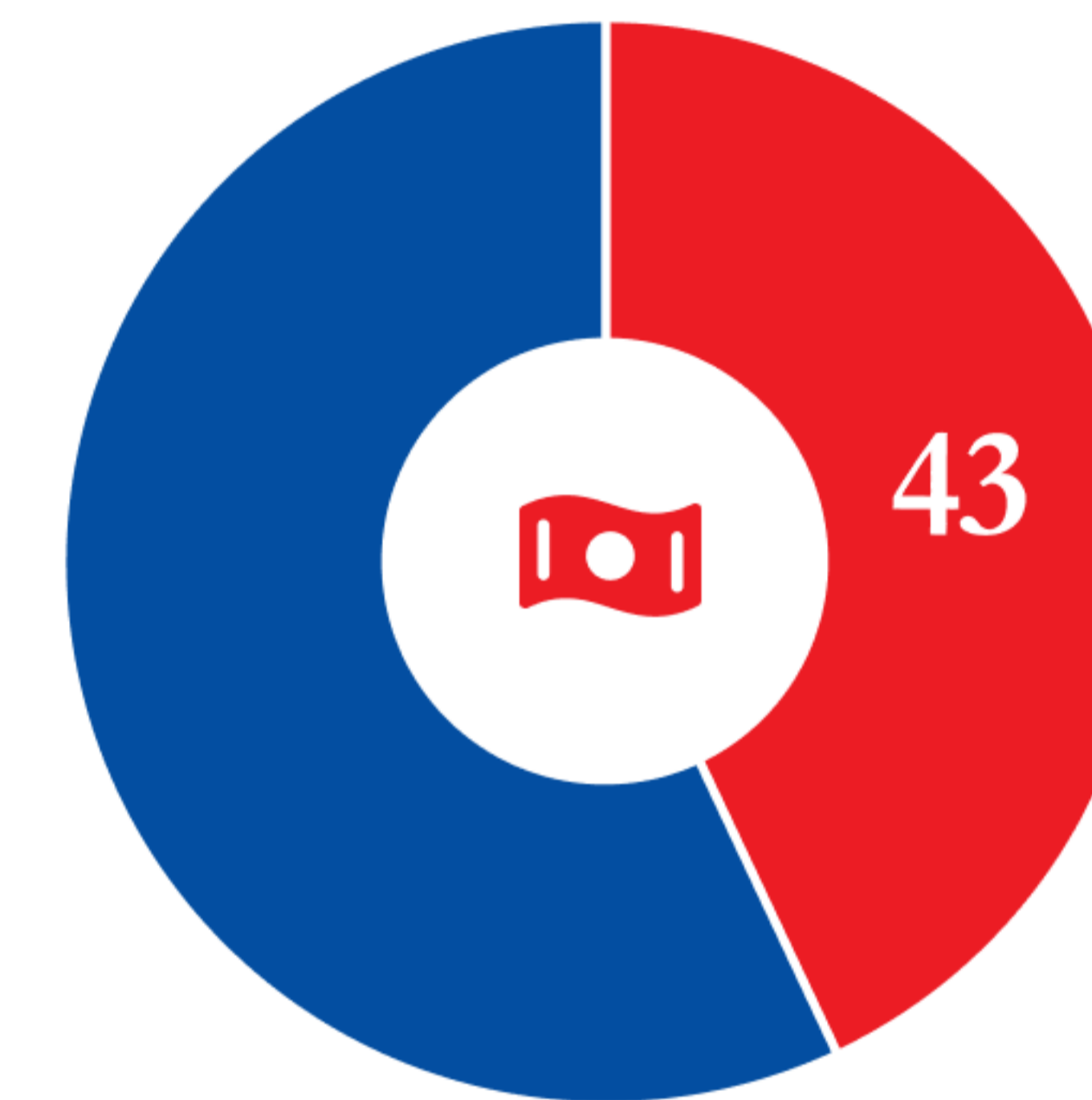
Cadaveric registration was done in 20 out of 100 of the study population.



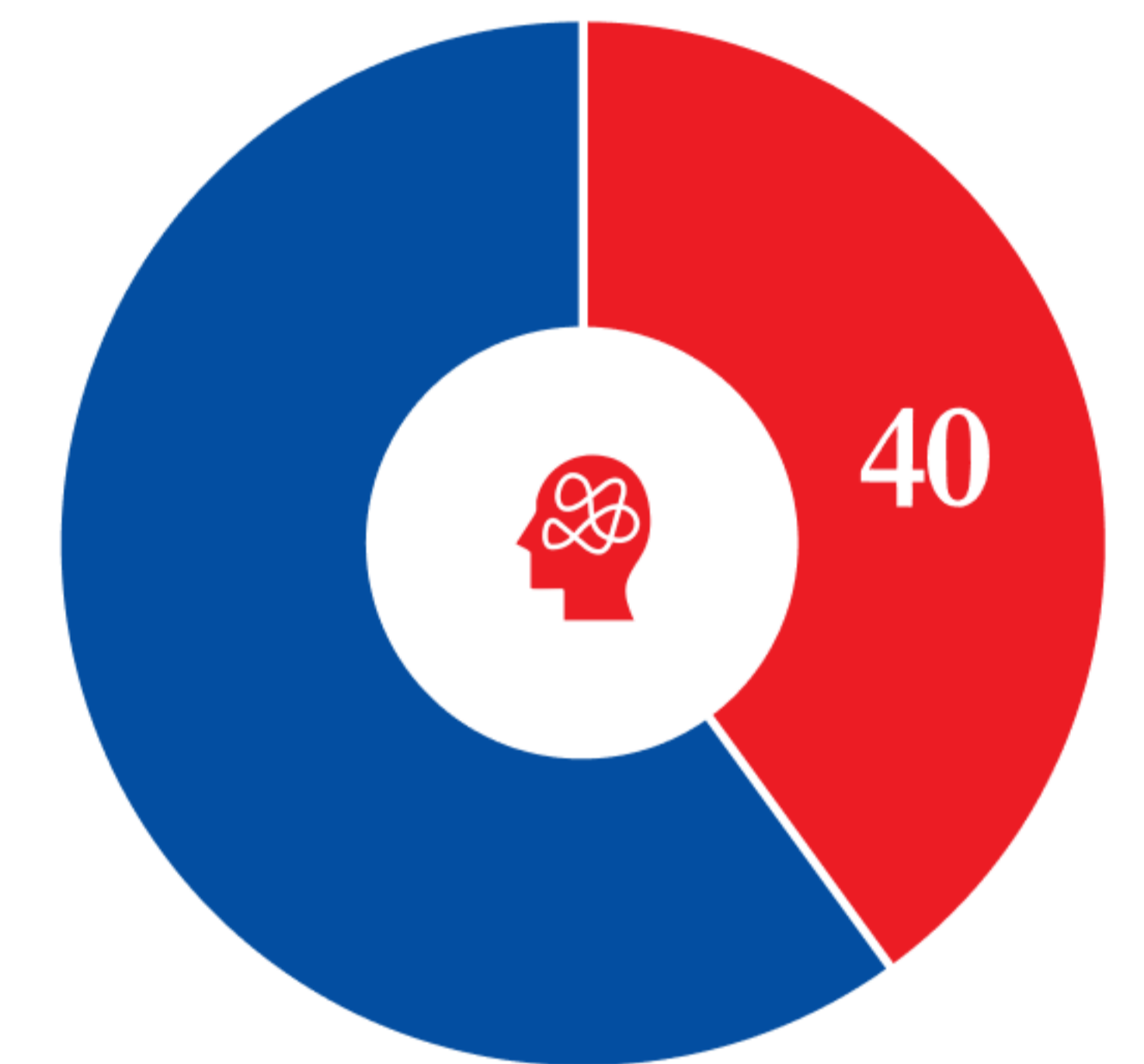
Patients who weren't aware of kidney transplantation as a mode of renal replacement therapy: 15/100



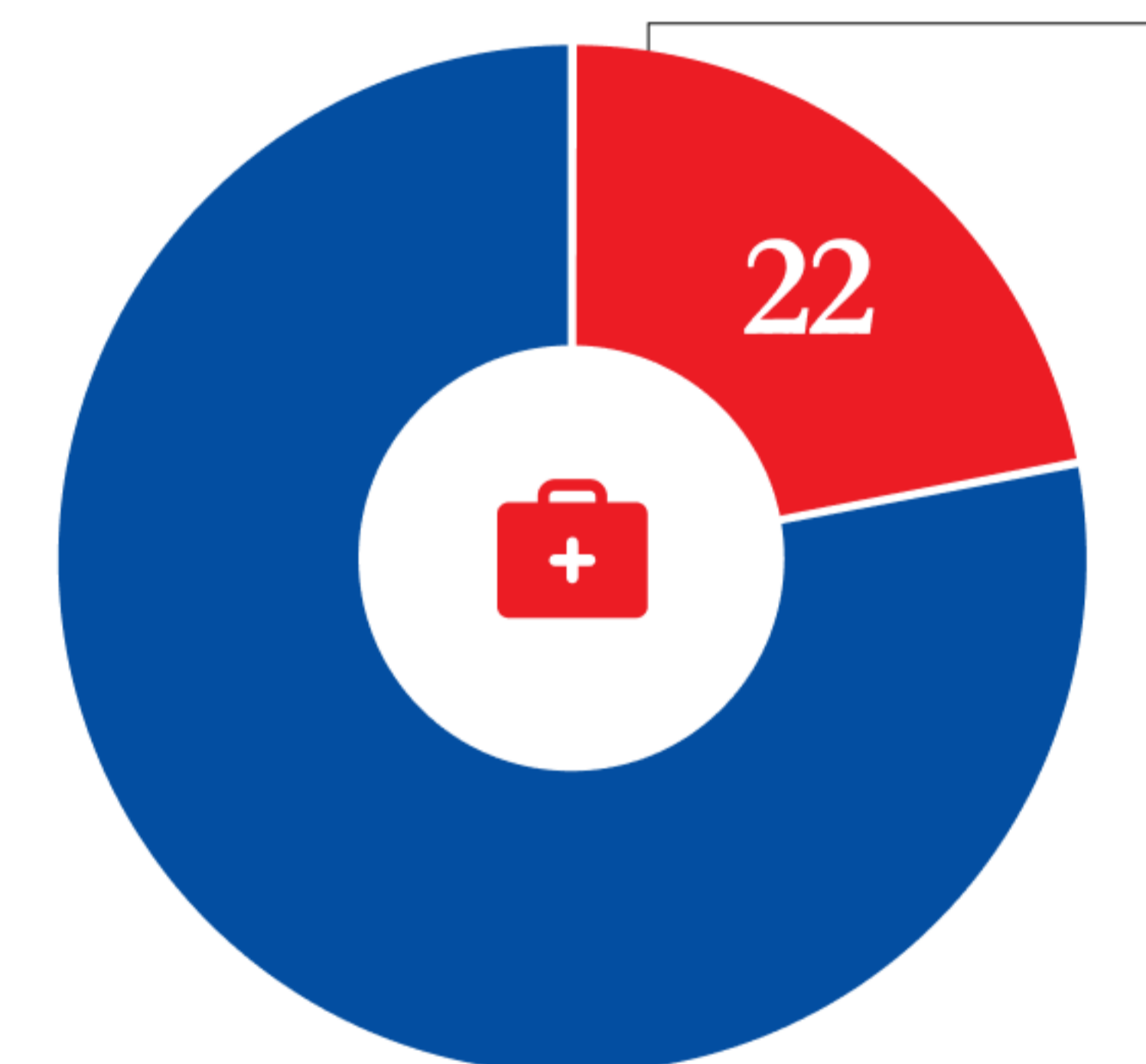
Financial constraints: 43/100



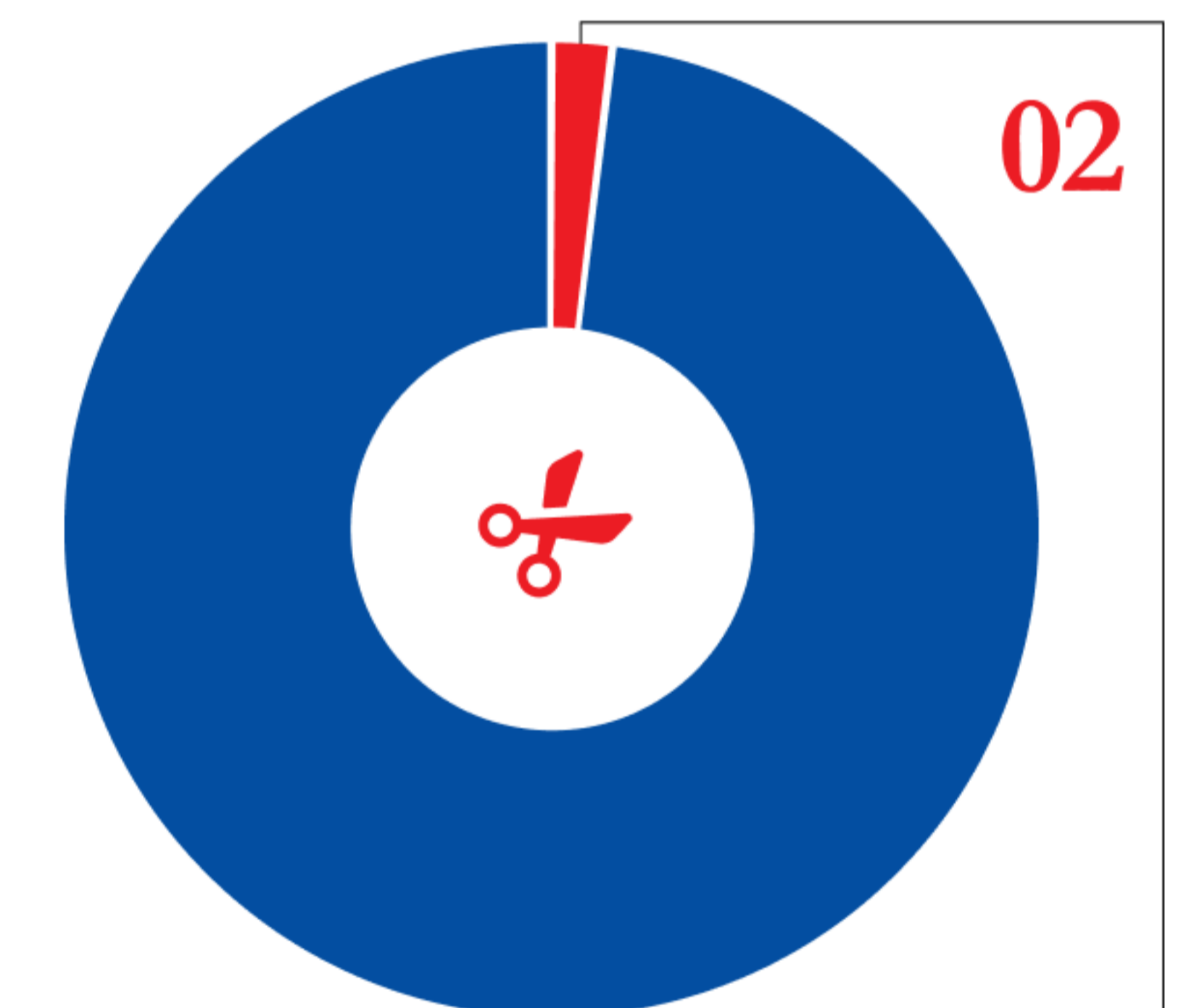
Fear / Anxiety related to the procedure: 40/100



Medically unfit: 22/100



Surgically unfit: 02/100



Poor cardiac function: 10/22
CVA: 1/22
B Cell Lymphoma: 1/22
Uncontrolled blood sugars: 8/22
Poor blood pressure control: 2/22

SMA occlusion + bowel resection: 1/2
Descending thoracic aorta aneurysm repair: 1/2

Conclusion:

- Financial constraints and a lack of awareness regarding kidney transplantation are prominent barriers to accepting transplant as a mode of renal replacement therapy.
- Additionally, concerns about graft rejection, procedural mortality, and pre-existing health conditions such as cardiac function impairment substantively contribute to the refusal of renal transplants.
- It is imperative that educational interventions and support mechanisms be implemented to address these concerns and barriers, potentially increasing acceptance rates of renal transplantation among patients with CKD on dialysis.