

Status of Kidney Transplantation in Bangladesh



Amit Bari¹, Nura Afza Salma Begum¹, A.K.M. Khurshidul Alam², Sajid Hasan², Muhammad Nazrul Islam², Md Kamrul Islam³, Md. Abul Monsur⁴, Md. Habibur Rahman Dulal², Shakib Uz Zaman Arefin¹, Harun Ur Rashid

1-Kidney Foundation Hospital and Research Institute, 2-Bangabandhu Sheikh Mujib Medical University, 3-CKD and Urology Hospital, 4-Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders

The prevalence of chronic kidney disease has sharply risen in the last several decades and affects >10% of the population worldwide, with a large burden in low- and middle-income countries. Transplantation is widely regarded as the best treatment option for CKD. The scenario in Bangladesh is not much different from the other Asian countries. Although large scale epidemiological studies are lacking, several meta-analyses have reported a prevalence ranging from 16 to 22%. Majority of the patients, however cannot afford renal replacement therapy.

The first kidney transplantation took place in Bangladesh in 1982. The first few decades saw low numbers, the rate has picked up over the last 2 decades, leading to over 2500 live related transplants so far. Starting from a single center, now 10 centers do kidney transplants, 5 of them on a regular basis. The treatment protocol has changed from a triple drug regimen of Prednisolone, Azathioprine and Cyclosporine to the introduction of MMF instead of Azathioprine. Survival has also improved over the decades. In 2023, 317 kidney transplants took place in Bangladesh across 5 centers.

Despite the rise in the number of transplants, there are still several issues that are plaguing kidney transplants in Bangladesh. Financial burden is the main obstacle to transplantation in this country, followed by lack of donors. Since there is no health insurance in place, the entire cost of the transplant has to be paid out of pocket by the patients. Compared to the developed countries, the cost is negligible, ranging from USD 5200 to 7700, which includes the pre-transplant work-up, hospital stay and drugs. But it is still beyond the reach of most patients. Gender disparity is also quite prevalent in organ transplantation in Bangladesh. Women comprise about 80% of the donors and just 20% of the recipients. The main complication in the post-transplant period is infection.

The organ act law was passed in the parliament in 1999 and later amended in 2018 to expand the pool of potential donors. Bangladesh has recently started its deceased donor transplant program, with 2 donations having taken place over the last year. This brings a ray of hope to the millions of CKD patients in Bangladesh, who at the moment have very little of.