

Emerging Socioeconomic Trends in Pediatric Liver Transplantation in India

Pediatric liver transplantation (LT) in India has come a long way since its inception in 1998. The program has now matured with multiple centers in the country treating patients coming in from various parts of the world. The initial years saw a very slow growth due to multiple factors including financial constraints, reservations about organ donation and donor safety, in a largely living related program. The initial successes fueled growth with greater acceptance noted in the next decade and finally a boom manifested in the last five years or so due to advent of crowd funding platforms that use social media to reach out to a vast and varied population base of conscientious donors to raise funds, making the modality a feasible option even for the poor.

Apart from the medical advancements and achievements that have made India a regional hub for liver transplantation in South East Asia, the progressive and exponential increase in female recipients and male donors is most encouraging. At our centre, from the year 1998 to 2007, only 16 transplants were performed with 13 males (81%) recipients; amongst these, 10 (62%) were Indian. After 2007, 341 transplants have been performed with 126 (58%) patients being domestic and 215 (42%) international, reflecting the need for greater acceptance and reach for Indian children (total domestic 136/357=38%); 64% of the recipients were males.

In contrast, the proportion of donors was initially largely skewed towards females with as many as 87% ($n=14$) being female in the years 1998-2007. The ensuing years have shown a dramatic shift with the male-female gap becoming significantly

narrower. The proportion of female donors was 55% ($n=189$) post 2007 to mid-2022 ($P=0.01$), reflecting an encouraging statistically significant rise in male donors.

Another heartening development has been the funding support that has now become available for transplantation. In our program, about 7 crore rupees were raised through domestic crowdfunding platforms and individual philanthropic organizations that fund liver transplants in India. About 13 crore rupees were granted by international organizations to recipients from South East Asia who travelled to India for a liver transplant. Only about 20% of the transplants in the last 5 years were fully financed by the family, and the rest all received partial or total financial support. Acute liver failure (11 transplanted in last 5 years out of total 41) constitutes the cohort for which funding is most challenging, due to paucity of time.

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