

Abstract

This paper examines the inter relationships of various aspects and issues involved on the debate “Should we legalize the market for organs”. Repugnancy seems to act as a constraint in the market design. The legal and institutional framework establishments across some countries are analyzed and the lessons that could be learnt for the Indian context are indicated. A study of economic efficiency in the context of - Procurement, allocation and matching organs to aid in the design and institutional framework of ORBO (organ retrieval banking organization, AIIMS, India) is carried out.

“Kidney markets” a special study. Most transplanted kidneys are from cadavers but there are many transplants from live donors. Low rates of success due to blood and immunological incompatibilities can be addressed with efficient allocation algorithms among these incompatible donor-recipient pairs. This paper considers the housing algorithm utilizing cycles and chains strategies from graph theory to analyze the gains from establishing such exchanges.

In addition to the allocation algorithms we use the survival studies and establish factors impacting the life of the graft and mortality of the transplanted patients. Using these entire factor sets this paper tries to optimize the efficiency and gains from institutions like ORBO.