Relevance of cohort studies for the study of transplant infectious diseases

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PURPOSE OF REVIEW: The debate on the merits of observational studies as compared with randomized trials is ongoing. We will briefly touch on this subject, and demonstrate the role of cohort studies for the description of infectious disease patterns after transplantation. The potential benefits of cohort studies for the clinical management of patients outside of the expected gain in epidemiological knowledge are reviewed. The newly established Swiss Transplantation Cohort Study and in particular the part focusing on infectious diseases will serve as an illustration.

RECENT FINDINGS: A neglected area of research is the indirect value of large, multicenter cohort studies. These benefits can range from a deepened collaboration to the development of common definitions and guidelines. Unfortunately, very few data exist on the role of such indirect effects on improving quality of patient management.

SUMMARY: This review postulates an important role for cohort studies, which should not be viewed as inferior but complementary to established research tools, in particular randomized trials. Randomized trials remain the least bias-prone method to establish knowledge regarding the significance of diagnostic or therapeutic measures. Cohort studies have the power to reflect a real-world situation and to pinpoint areas of knowledge as well as of uncertainty. Prerequisite is a prospective design requiring a set of inclusive data coupled with the meticulous insistence on data retrieval and quality.