

Increasing violent deaths and organ transplantation in Brazil: is there a parallel?

Aumento do número de mortes violentas e transplante de órgãos no Brasil: há um paralelo?

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ABSTRACT

Mortality from violent causes has significantly increased in Brazil, as well as the number of deceased-donor organ transplantation. Although the increase in the number of transplants correlates with higher organ availability, through the increase in potential donors, this is not the unique aspect to be considered. The effective and articulated action of transplantation network seems to be decisive to this outcome.

Keywords: brain death; Brazil; mortality; tissue donors; transplantation; violence.

RESUMO

A mortalidade por causas violentas tem aumentado de modo significativo no Brasil, bem como o número de transplantes de órgãos com doador falecido. Apesar de o aumento do número de transplantes correlacionar-se com o aumento na disponibilidade de órgãos, por meio do aumento no número de potenciais doadores, este não é o único aspecto a ser considerado. A ação efetiva e articulada das centrais de transplante parece ser decisiva para estes resultados.

Palavras-chave: Brasil; doadores de órgãos; mortalidade; morte encefálica; transplante; violência.

Dear Editor,

According to official data published by the Brazilian Ministry of Health and information from the 2013 Map of Violence, the Brazilian Organ Transplant Association, and the Brazilian Organ Transplant Registry, the number of deaths from violent events or external causes has significantly increased in recent years along with the number of organ transplants from deceased donors. Brazil has the fourth highest homicide rate of individuals aged 19 years or younger (13 per 100,000 people) in the world.¹

Violent deaths rank third among cause of death in the general population and first for individuals aged 1-39 years.² The number of violent deaths increased by 46.6% from 1995 to 2012 (Figure 1). The pooled number includes traffic-related deaths, which alone grew by 38.9%; suicides, with an increase of 56.5%; and murders, whose number grew by 51.7%.³

In Brazil, heart, liver, lung, pancreas, cornea, and kidney transplants added up to 2,588 procedures in 1995. In 1997, with the establishment of the National Transplant System (SNT), the number went up to 3,777. Since then, the growth of a decentralized network of collaborators operating at a national, regional, and intra-hospital level grew the number of transplants in Brazil to 22,737 in 2012.⁴

Brazil occupied the eighth place in terms of youth homicide rate (per 100,000 people) from 2008 to 2012, in a list that included Venezuela (3rd) and Colombia (4th).³ However, when compared to 54 other countries for number of organ donors per million population, Brazil was ranked 28th in 2012, ahead of Colombia (31st) and Venezuela (44th).⁴ In other words, more transplant procedures are carried out in Brazil than in other South American nations with lower homicide rates and similar levels of violence.

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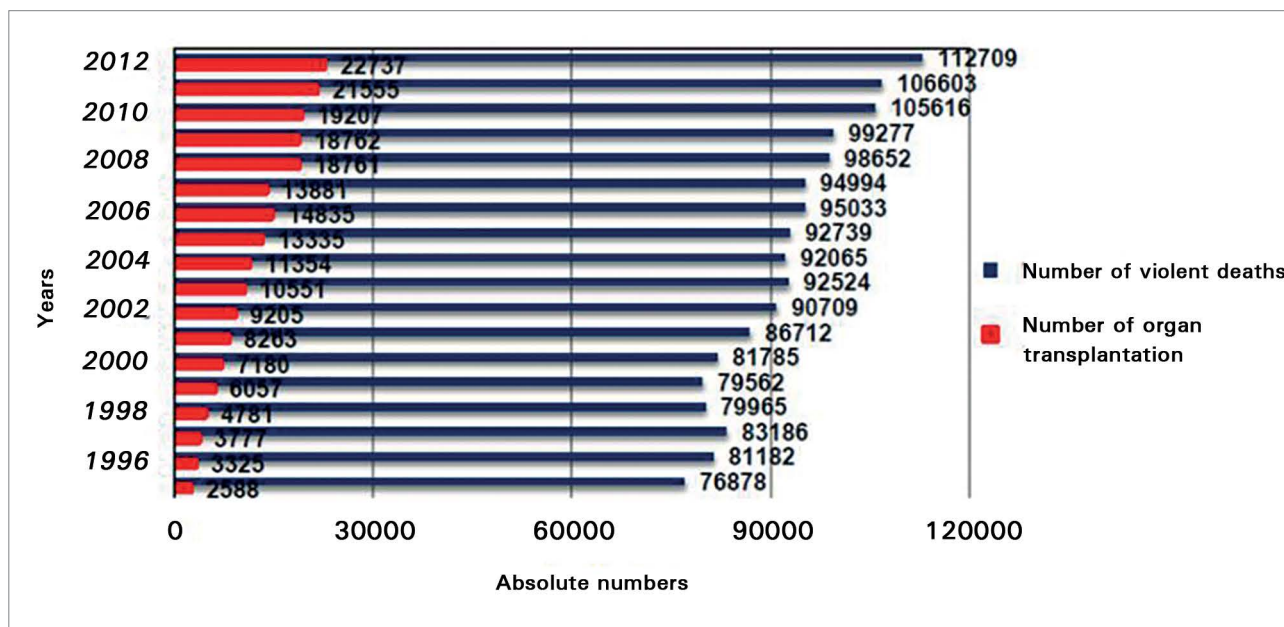
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Figure 1. Number of violent deaths and transplants in Brazil, 1995-2012.

Although these comparisons shed light on many factors worthy of further investigation, one should not lose sight of the care structure available in Brazil, the demand and supply sides of notifications of deaths and potential organ donors, the improvements in the maintenance protocols provided to donors made possible by the training of emergency and intensive care unit teams, the introduction of new transplant centers, and the role played by awareness-building campaigns designed to educate the population on the importance of organ donation.

The growing and unacceptable level of violence in Brazil seems to contribute to the increase in the number of organ transplants performed in the country. The high number of youth deaths from external causes creates a favorable scenario for organ donation, since in most cases these donors provide for healthy organs. Nevertheless, the growing number of transplant procedures stemming from the greater

availability of organ donors is not the only factor to be considered; the effective job done by the integrated transplant network seems to have been decisive in the materialization of this outcome.

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