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## REGIONAL INEQUALITY AND GROWING DEMAND: AN ANALYSIS OF CORNEAL TRANSPLANTS IN BRAZIL (2013-2023)

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## INTRODUCTION

Corneal transplantation (CT) is an effective surgical procedure for various serious corneal diseases. Currently, the supply does not match the total demand for donations. As a result, the number of people on the waiting list is rising. This depends not only on the number of donors, but also on the level of socio-education, incentive programs and the medical infrastructure for recruitment.

## OBJECTIVES

Quantitatively analyze the number of CT scans performed by region in Brazil and compare this with the list of patients waiting for a transplant.

## METHODS

In May/24, DataSUS collected the number of CT scans performed between 2013 and 2023, with a breakdown by region of Brazil, and the Brazilian Transplant Registry collected the number of patients on the waiting list in December of each year.

## RESULTS

In 2013 there were a total of 10230 CT scans: 1.5% in the North (N), 16.6% in the North East (NE), 63.4% in the South East (SE), 10% in the South (S) and 8.5% in the Central West (CO). There were 5379 patients on the waiting list.

In the following 6 years, there were a total of 10533 TC in 2014 (5% N, 15.3% NE, 59.6 SE, 13.2% S and 6.8% CO); 10854 in 2015 (7.8% N, 14.1% NE, 60.9% SE, 14.3% S and

2.9% CO); 11360 in 2016 (6% N, 16% NE, 52% SE, 9.6% S and 16.4% CO); 12672 in 2017 (11.8% N, 11.8% NE, 51.3% SE, 11% S and 14.9% CO); 12145 in 2018 (13.2% N, 10.2% NE, 53.6% SE, 9.5% S and 13.4% CO) and 13031 in 2019 (10.4% N, 10.2% NE, 50.3% SE, 10.6% S and 18.5% CO). The waiting list for this period was, respectively: 8602, 10210; 10923; 9266; 8788 and 10741.

In 2020, there was a 52.3% reduction in the number of CTs, totaling 6,938 procedures (9.4% N, 6.8% NO, 53.8% SE, 7% S and 23% CO), as well as a waiting list of 14,984 patients.

In the 3 subsequent years, in 2021 we have a total of 9826 TC (3.3% N, 11.1% NE, 49.3% SE, 10.8% S and 25.4% CO), 9256 in 2022 (7.8% N, 9.8% NE, 52% SE, 10.7% S and 19.8% CO) and 10758 TC in 2023 (7.6% N, 8.7% NE, 51.5% SE, 10.3% S and 21.9% CO). A waiting lists in those years were, respectively: 18894; 21161 and 24907 - the highest figures in the last 10 years.

## CONCLUSION

It can be concluded that between 2013 and 2023 there was an increase in the number of patients on the waiting list and a regional discrepancy in HTs performed, with the SE showing the highest values throughout the period analyzed. The drop in 2020 may be a reflection of the pandemic, since the Brazilian Organ Transplant Association postponed HTs under certain circumstances. In subsequent years, there has been an increase in the number of HTs performed, but without reaching the pre-pandemic standard.

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