

# CHALLENGES FOR EXPANSION OF THORACIC TRANSPLANT CLINICAL PHARMACY IN BRAZIL: COMPARISON WITH U.S. ACCREDITED CENTERS AND CALL FOR ACTION

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I will not discuss off label use and/or investigational use of drugs/devices.

The following relevant financial relationships exist related to this presentation: No relationships to disclose



## INTRODUCTION

Brazil is the largest country in South America on number of centers and transplants performed with approximately 96% of procedures financed by the Unified Health System (Gómez, 2018; Soares, 2020)

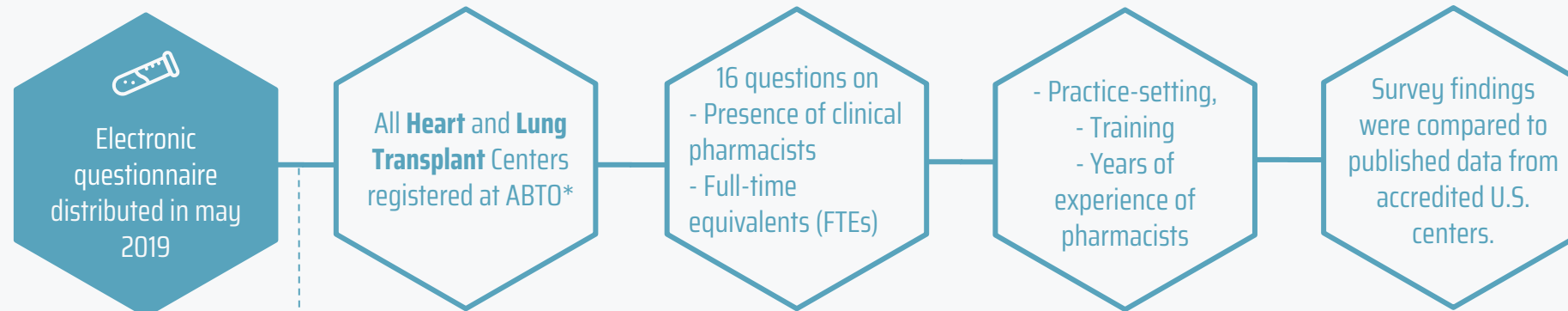
The role of clinical pharmacists in the care of transplant recipients is been discussed worldwide. They are pharmacology experts that provide pre and postoperative pharmaceutical management and education to transplant recipients. Its presence in the multidisciplinary team has become a requirement in the accreditation process of transplant centers in US and in other countries (Taber, 2015; Maldonado, 2020).

## PURPOSE



We conducted a survey to explore clinical pharmacy activities in thoracic transplant centers in Brazil through a national survey and compare findings to available published data from accredited U.S. centers.

## METHODS



---- Centers with no transplant activity registered in 2018 were excluded

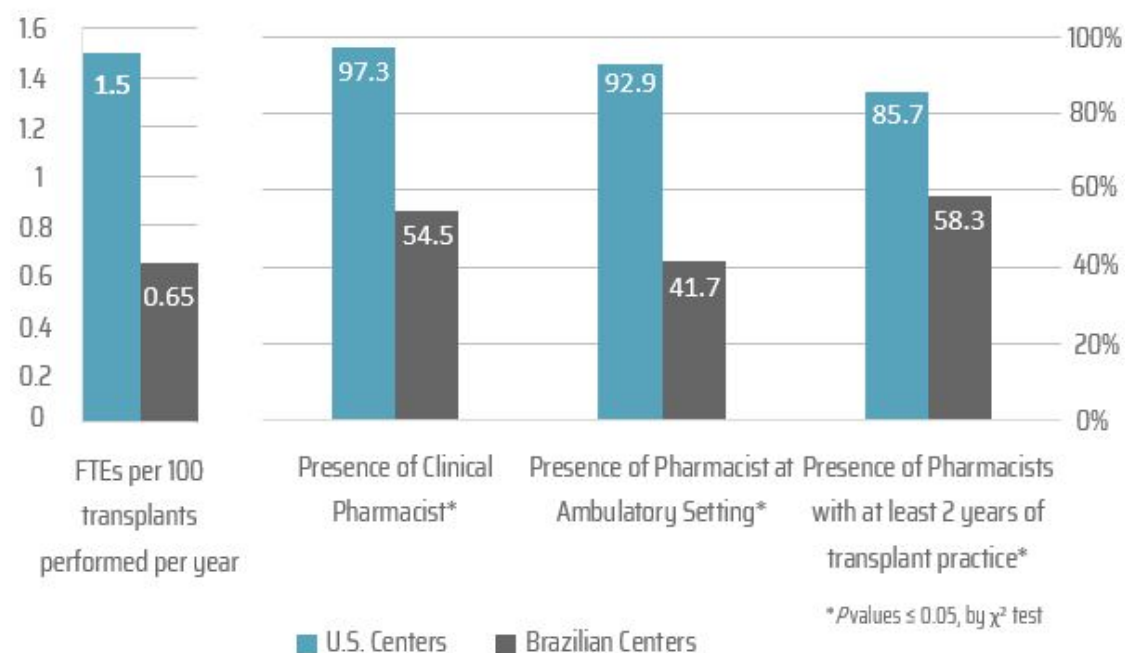
\*Brazilian Organ Transplantation Agency



Overall Respondents: answers were obtained from 22 centers, representing 420 transplants in Brazil in 2018 (88.6% of total)

- Ten centers (45.5%) declared not to have a pharmacist at any part of the transplantation process, which translates into 144 heart or lung recipients **without any direct pharmaceutical care** in Brazil.
- In centers with pharmacists ( $n=12$ ), **none** had a **full-time** professional dedicated for their thoracic transplant programs.
- The majority of professionals started to act after the transplantation and the beginning of immunosuppression (58.3%,  $n=7$ ), thus without **pre-transplant** activities. Samewise, among centers with pharmacists, only 41.7% ( $n=5$ ) across the country, have pharmacists working at **ambulatory** level in outpatient clinics.
- Pharmacists frequently had postgraduate degrees (78.6%,  $n=11$ ), but **none** of them had specific **transplant training** in any level.

Figure 1. Brazilian and U.S. transplant pharmacists median FTEs per 100 cases per center per year and percentage of centers on presence, practice-setting and years of experience of pharmacists.



❖ When compared to previous published data from U.S. centers:

Pharmacist FTE in Brazil was less than half of that observed in North American centers (Figure 1), and had statistically significant differences regarding:

- presence of clinical pharmacists as part of transplant teams;
- participation on ambulatory settings, and;
- years of practice in the field of transplantation.

## CONCLUSIONS



Our findings point to an unmet need related to clinical pharmacist activity within thoracic transplant programs in Brazil.



This study highlights a **call for action** in order to reach higher accredited regulatory standards regarding pharmacist-driven workforce in transplant care in developing countries and worldwide.

## THANK YOU

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