

# CICLO CARLOS CHAGAS

DE PALESTRAS

12ª EDIÇÃO

**100+15: O TEMPO NÃO PARA**  
Informação, controle, cuidado e eliminação:  
diferentes estratégias para uma doença com  
múltiplas dimensões

**LIVRO DE RESUMOS**

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Submission area: clinical aspects

## RESUMO 17

### LEVELS OF PHYSICAL ACTIVITY IN INDIVIDUALS WITH CHAGAS DISEASE AND THE IMPACT ON MORTALITY

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There is limited research on physical activity (PA) levels in individuals with Chagas disease (CD). Investigating PA levels in CD patients is important for implementing intervention strategies considering the potential health benefits of increased PA. This study aimed to investigate the association between PA level and mortality in patients with CD. CD patients under regular follow-up at the INI-Fiocruz were included. PA levels were assessed using the short version of the International Physical Activity Questionnaire (IPAQ). Data regarding deaths was acquired through the examination of medical records or by accessing the “Portal Extrajudicial de consultas de nascimentos e óbitos do PJERJ” website. 361 patients were included in the analysis (average age  $60.7 \pm 10.7$  years; 56.2% women). Over a median follow-up period of 7.2 years (interquartile range 25-75%: 5.4 to 8.0 years), 90 deaths (24.9%) were observed. Examining the distribution of deaths across PA tertiles, 39 (32.2%) deaths were recorded in the lowest tertile, 32 (26.7%) in the intermediate tertile, and 19 (15.8%) in the highest tertile ( $p=0.006$  Log-Rank test). The mortality rates were 53.0 per 1000 person-years for the lowest AF tertile, 42.5 per 1000 person-years for the middle tertile, and 22.7 per 1000 person-years for the highest AF tertile. In adjusted Cox regression analysis, the risk of death was 45% lower in the highest PA tertile compared to those in the lowest PA tertile (HR 0.55; 95% CI 0.31 to 0.96;  $p<0.001$ ). The findings from this study showed that higher levels of PA are associated with decreased mortality. This underscores the significance of promoting PA within this population. Consequently, advocating for more active lifestyles among individuals with CD through the implementation of public health policies and programs emerges as a promising strategy to lower mortality rates. This not only underscores the crucial role of PA in health management but also underscores the immediate need for targeted interventions to enhance health outcomes in vulnerable populations. By giving precedence to the promotion of a more active lifestyle, public health initiatives can play a pivotal role in positively influencing mortality rates in individuals with Chagas disease.

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## Introduction

There is limited research on physical activity (PA) levels in individuals with Chagas disease (CD). Investigating PA levels in CD patients is important for implementing intervention strategies considering the potential health benefits of increased PA. This study aimed to investigate the association between PA level and mortality in patients with CD.

## Methodology

CD patients under regular follow-up at the INI-Fiocruz were included.

PA levels were assessed using the short version of the International Physical Activity Questionnaire (IPAQ).

Data regarding deaths was acquired through the examination of medical records or by accessing the "Portal Extrajudicial de consultas de nascimentos e óbitos do PJERJ" website.

The association between levels of physical activity and mortality were determined using survival models, utilizing survival curves, log-rank tests, and Cox regression models.



## Results

- 361 patients were included in the study (average age  $60.7 \pm 10.7$  years; 56.2% women)
- Over a median follow-up period of 7.2 years (interquartile range 25-75%: 5.4 to 8.0 years)
- 90 deaths (24.9%) were observed. 39 (32.2%) deaths were recorded in the lowest tertile, 32 (26.7%) in the intermediate tertile, and 19 (15.8%) in the highest tertile ( $p=0.006$  Log-Rank test).
- The mortality rates were 53.0 per 1000 person-years for the lowest AF tertile, 42.5 per 1000 person-years for the middle tertile, and 22.7 per 1000 person-years for the highest AF tertile.
- In adjusted Cox regression analysis, the risk of death was 45% lower in the highest PA tertile compared to those in the lowest PA tertile (HR 0.55; 95% CI 0.31 to 0.96;  $p=0.001$ )

## Conclusions

- Higher levels of PA are associated with decreased mortality.
- This underscores the significance of promoting PA within this population. Consequently, advocating for more active lifestyles among individuals with CD through the implementation of public health policies and programs emerges as a promising strategy to lower mortality rates.