Introduction
CVDs are one of the main causes of morbidity and mortality worldwide, responsible for 17.9 million deaths in 2019. The burden of these diseases in Latin America and the Caribbean (LAC), especially in SA, has grown over the years, supported by epidemiological, demographic, and lifestyle changes. In SA, the loss of productivity related to these diseases has not yet been well explored. An analysis of these losses would provide an additional understanding for the recognition of health priorities and decision-making for the prevention, diagnosis, and treatment of these diseases.

Methods
This is an exploratory, population-based study. A proxy of the human capital approach (HCA) was used to estimate the cost of permanent productivity losses associated with CVD. To calculate this cost, the sum of the Years of Productive Life Lost (YPLL) for each death was multiplied by the proportion in the workforce (WFP) and the employment rate (ER), and then by the annual minimum wage or Purchasing Power Parity (PPP) in United States dollars (USD) for each country in the economically active age groups. Separate calculations were done for men and women. Epidemiologic measurements by standardized age group among the 12 countries were captured through the Institute for Health Metrics and Evaluation (IHME) website that uses the Burden Study Global Disease, Injury and Risk Factors (GBD) 2019 assessment. Correlation analyses were performed using economic, sociodemographic and health indicators.

Results
The total number of deaths from cardiovascular diseases in 2019 was almost 172,000 and the years of productive life lost were almost 2 million years. The total cost of permanent productivity loss was about USD 3.7 billion based on annual minimum wage and USD 8 billion in PPP, representing 0.11% of the region’s gross domestic product. The cost per death was USD 23,000. The cost of productivity losses differed between countries and by sex. Labor losses caused by early deaths were estimated using different discount rates. There is a correlation between sociodemographic and economic health indicators and the standardized rates of incidence and DALY in the cardiovascular diseases.

Objectives
Describe the burden of disease and estimate the costs of permanent productivity losses caused by CVD in South American countries.

Conclusions
This group of diseases impose a significant economic burden on South America in terms of health and productivity. Characterization of the economic costs of these diseases can support governments in the allocation of resources to develop policies and interventions to reduce their burden.

References