Clinical Trial Trends in Latin America: Communicable Versus Non-Communicable Disease
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Objectives
- Following the recent economic growth in Latin America, this analysis was undertaken to explore the corresponding shift in healthcare trends, by examining the number of clinical trials being conducted in the region and their focus on communicable and non-communicable diseases.

Methods
- ClinicalTrials.gov was searched in July 2015 for all trials with a study start date from January 2000 to December 2014 in five Latin American countries: Brazil, Chile, Colombia, Mexico, and Peru.
- Studies were classified as either related to communicable or non-communicable disease according to the WHO International Classification of Disease-10, with studies that did not focus on disease or injury excluded.
- Mortality rates were obtained from the WHO Global Burden of Disease: Disease and injury country estimates from 2008, and combined for the five selected countries, adjusting for population.

Results
- Between the five selected Latin American countries, 6,346 unique, relevant studies were identified.
- Over the entire time period from 2000 to 2014, 90.7% of studies were concerning non-communicable diseases such as cancer, cardiovascular disease and musculoskeletal disorders, whilst 9.3% focused on communicable diseases.
- An analysis over time saw a trend of an increasing proportion of trials in non-communicable diseases, a fall in the proportion of studies in communicable diseases.
- In 2000, non-communicable diseases accounted for 77.8% of studies, compared with 22.2% in communicable diseases; however, by 2014 these percentages were 95.2% and 4.8%, respectively (Figure 1).

Discussion
- Overall, there appears to be a trend towards increased numbers of studies in non-communicable diseases, compared with those in communicable disease.
- HIV/AIDS was the most commonly researched communicable disease, followed by cardiovascular disease and musculoskeletal disorders.
- The proportion of cancer studies also displays a less consistent decline, from 30.8% of all studies in 2001 to 12.0% by 2014.
- Conversely, studies in endocrine and circulatory diseases, encompassing diabetes and heart disease, show an increase from 3.8% in 2001 to 12.5% and 15.5% in 2014, respectively.

Conclusions
- The healthcare trends of Latin America appear to be changing alongside its rapid economic expansion; fewer clinical trials are being carried out in preventable, infectious diseases more commonly associated with poor healthcare availability and substandard living conditions, and there is an increasing focus on non-communicable diseases such as neoplasms, obesity and heart disease.

References

As infectious diseases can be passed from person to person, there may be more studies with the aim of vaccinating or preventing disease spread in entire communities, whereas studies in non-communicable diseases may be conducted in a small sample of patients with the condition of interest.