Scientific Production of a Public Health Institution: a 30-year trajectory—1978 to 2008.

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Introduction

The Heart Institute - Instituto do Coração (InCor) is a high-complexity public hospital specialized in cardiology, pneumology, cardiac and thoracic surgery. supported by the triad "Assistance, Teaching and Research", InCor concentrates all of its capacity of assistance and teaching on scientific and technological research.

The instrument of science: to count, measure, compare amounts and analyze measurements has transformed scientific research into a complex and specialized enterprise and the personal knowledge and experiences are no longer enough for the understanding of trends or for decision-making (Thomson Reuters, 2008).

The quantitative and qualitative analysis of the scientific production of an institution (Pinto, 2008), involves bibliometric indicators that define the study of assessment measures and indices, which are the basis of the so-called "H Index", according to Santos, Oliveira Neto, Zander & Romano (2008).

Objective

To quantitatively analyze the scientific production of InCor from 1978 to 2008.

Method

The analysis of the scientific production of InCor was carried out based on the database of the Service of Library and Scientific Documentation (SBDC), using the MicroIsis software, which makes it easier to store and retrieve information (Mugnaini, Jannuzzi, & Quoniam, 2004). This database includes all categories of InCor publications and only the studies published in national and international journals are analyzed here.

This study was carried out using the publication and citation indicators from the Web of Science database (Thomson Reuters) – H Index. The retrieval of studies for the calculation of the H Index used with key words studies from the "Heart Institute, Incor, São Paulo, USP" (Thomson Reuters, 2008).

Results

Considering the applied clinical and basic researches, the performance of InCor in science and technology resulted in 26,933 published studies, of which 4,130 studies published in national journals and 2,376 studies published in international journals, are especially noteworthy, representing an increase in the number of publications/year in the last 30 years. (Figures 1 and 2). Among these researches, more than 20 of them originated patents or products currently being used in the medical area (Instituto do Coração [SP], 2007).

In order to use the bibliometric indicators, we considered the international publications and their respective citations, observing the increase in the number of publications/year and citations/year during the analyzed period.

The Web of Science database creates demonstrative charts of publications/year and citations/year (Thomson Reuters, 2008). Table 1 shows the H Index of the institution (H Index = 41.0), considering a total of 1,220 published and studies, with an average of 6.03 citations/study. It was observed that 51.3% (1,220) of the 2,376 studies published internationally were retrieved by the Web of Science database (Thomson Reuters, 2008), demonstrating a retrieval deficit. Such deficit can be attributed to the lack of standardization reporting the name of the institution (InCor) when submitting studies for publication, as different key words were found.

Studies published in national jornals

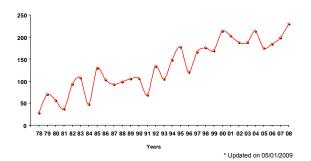


Figure 1. InCor' studies published in national journals. Period 1978 – 2008

Studies published in international journals

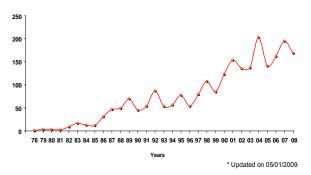


Figure 2. InCor' studies published in international journals. Period 1978 – 2008

Table 1. H Index of the institution based on the cited studies.

Results Found	1,220
Sum of the times cited	7,362
Average citations per item	6.03
H-index	41

Conclusion

It was observed that only 51.3% of the studies published internationally were considered for the calculation of the H Index of the institution, a fact that can be justified by the lack of standardization reporting the name of the institution when submitting the studies for publication. We conclude that it is necessary to standardize the reporting of the name of the institution where the study was carried out, so that the Bibliometry and Scientometry tools can be adequately used and produce reliable results (Thomson Reuters, 2008).

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