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A bibliometric analysis of global research in Oropouche

Dear Editor:

During the last decades, an emergence and resurgence of arthropod-borne infections (arbovirus) has been observed. These viruses have a great ability to adapt to both host and vector and to the environment [1]. Genetic rearrangements have been described between different viruses belonging to the genus *Orthobunyavirus*, which has resulted in viruses with new pathogenic mechanisms.

The Oropouche virus (OROV) produced an infectious outbreak of febrile processes in 1995 in Trinidad and Tobago [2]. The vectors responsible for transmission in the jungle cycle are *Aedes* and *Culex* mosquitoes (*Coquillettidia venezuelensis* in Trinidad and Tobago, *Ochlerotatus serratus* and *Culex quinquefasciatus* in Brazil), while in the urban cycle *Culicoides paraensis* is the main vector [3]. The clinical picture is very similar to dengue (DENV), it has high fever, joint pain, myalgia's and a rash, although most of the clinical processes are self-limited and are not serious, cases of meningoencephalitis have been described [4].

In order to evaluate their current impact on production, we conducted an observational, descriptive bibliometric study using available information deposited databases, such as SCI, SCOPUS and Medline/Pubmed (using GoPubMed ©) And SciELO. As a search strategy, the terminology "Oropouche virus" OR "OROV" was used, without temporal restriction.

A total of 303 Oropouche associated items were retrieved in our search, available in SCOPUS, were found in 111 articles (56.75% (63) from Brazil, 28.82% (32) from the United States and 10.81% 8 (12) from Peru). SCI, 74 articles (63.51% (47) from Brazil, 29.73% (22) from the United States and 10.81% (8) from Scotland), SciELO found 22 articles (100% from Brazil) and from Medline/Pubmed found 96 articles (36.45% (35) from Brazil, 12.5% (12) from the United States and 6.25% (6) from Peru) (Table 1). The first OROV registry in SCOPUS and Medlline/Pubmed data dates from 1961, in SCI of 2005, and in SciELO of 1989.

Table 1
Top ten countries by scientific production in Oropouche research in SCI and Scopus. (December 11, 2016).

Rank	Country	Number of articles	Database with highest number of articles
1	Brazil	63	SCOPUS
2	USA	32	SCOPUS
3	Peru	12	SCOPUS
4	United Kingdom	8	SCOPUS
5	Scotland	8	SCI
6	Canada	8	SCOPUS
7	Trinidad and Tobago	8	SCOPUS
8	Germany	6	SCI
9	Ecuador	3	SCOPUS
10	Paraguay	3	SCOPUS

It can be seen that Brazil is leading research on this topic, as is the United States. However, another Latin American country such as Peru, where they have isolated for the first time in 1992 and registered an outbreak in May 2010, And by June 2016 there were 120 cases [5]. Given the wide geographic distribution of the competent vector in the Region of the Americas, there is a considerable risk of cases being identified in other countries.

Due to its clinical presentation, Oropouche fever should be included in the differential diagnosis of other diseases caused by arboviruses, such as dengue fever, Chikungunya fever, yellow fever or Zika virus disease, which are endemic in the Region of the Americas.

In conclusion, it is important to implement strategies to promote research in this area, in order to generate greater knowledge and, therefore, to obtain plausible and effective diagnostic methods for early treatment with approaches aimed at controlling tropical viruses with potential Epidemic such as the Oropouche.

Conflict of interest

The author declares no conflict of interest.

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