

Growth in Brazilian scientific output in public health dentistry

The growth in overall Brazilian scientific output in dentistry is shown by the increase in the number of articles published in dentistry journals by researchers affiliated with Brazilian universities, according to MEDLINE, the largest international index of scientific periodicals in health, as follows: until 1980 = 2; 1981-1985 = 0; 1986-1990 = 16; 1991-1995 = 216; 1996-2000 = 461; and 2001-2005 = 1,564.

Specifically in public health, this growth can be illustrated by the number of articles published in *Community Dentistry and Oral Epidemiology*, *Community Dental Health*, and *Journal of Public Health Dentistry*, as follows: until 1980 = 0; 1981-1985 = 0; 1986-1990 = 0; 1991-1995 = 5; 1996-2000 = 7; and 2001-2005 = 17. The Brazilian public health journals *Cadernos de Saúde Pública* and *Revista de Saúde Pública* have also witnessed a striking increase in the number of dentistry articles published: CSP published 1 article in the period 1991-1995, 9 in 1996-2000, and 52 in 2001-2005, while RSP published 7 articles in 1991-1995, 19 in 1996-2000, and 25 in 2001-2005.

One way of evaluating an article's quality is to measure the interest it has attracted among researchers from the field. If the article has awakened interest, it becomes part of the background for new studies on the theme and is used as an argument in discussions of subsequent findings, a process measured by its citation in later articles.

The number of articles cannot necessarily be interpreted as quality of scientific output. Having articles published is a necessary (but not sufficient) condition for scientific development. It is important that researchers, reviewers, and editors tackle the difficult task of contributing to scientific development and not merely publish more articles, if their publication has limited chances of making such a contribution. For example, studies on dental caries prevalence in a given locality have little chance of contributing to scientific development. Nevertheless, various articles published by Brazilian public health dentistry in recent years have been precisely such caries prevalence reports or their equivalent.

It is important that the positive quantitative leap be accompanied by the pursuit of quality. Researchers need to identify relevant problems based on a solid and interesting theory and formulate specific hypotheses, and the data must be gathered and analyzed to test such hypotheses.

Another negative trend is the reproduction of studies that have already been repeated sufficiently in other populations. Unless there is a good justification for why something that has happened repeatedly in other populations might not occur in the Brazilian population, replication using a similar study in Brazil has limited chances of contributing to scientific development.

In conclusion, the growing number of articles in scientific journals generally signals a positive development towards a more scientific stance, and a specific increase in the number of articles focused on public health dentistry illustrates the growing interest by Brazilian dentistry in the population's health. To contribute to scientific development and the population's health, Brazilian dentistry should be concerned not only with the quantity but also the quality of articles published.

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