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ELDERLY HEALTH, ORAL HEALTH PROMOTION AND PRIMARY HEALTH CARE PROFESSIONALS: AN INTEGRATIVE ALLIANCE PROCESS

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ABSTRACT

Objective: Primary Health Care is the strategy that developing countries are following to face the new paradigm of oral health promotion. Preventive techniques, oral health education, and self-care empowerment throughout life can be reflected by satisfactory oral health conditions among the aged. The aim of the present study was to evaluate scientific articles related to oral health and primary health care for the aged.

Methods: As a quantitative cross-sectional research approach, following the Integrative Literature Review method, we used the descriptors 'Oral health' and 'Primary health care' to search articles (n = 91) in the Pubmed/Medline and Lilacs databases. An instrument was developed to analyze each article under three sections: paper identification, research design, and subject category. We used STATA software to perform the statistical analyses. Results: The articles were published from 1978 to 2007, and 69% were published in English. Among other studied categories, 7.8% articles described the necessity of including Primary Health Care in the Dentistry graduation syllabus, 29.4% related to primary-care principles on Dentistry, and 17.6% addressed the political challenges inherent in improving quality of life and oral health among the aged. Conclusion: We concluded that researchers from developing countries need to perform studies and construct partnerships with Primary Health Care services to improve oral health in the aged.

Keywords: *Primary Health Care, Oral health, Heath promotion, Health of the elderly.*

INTRODUCTION

Spreading scientific knowledge occurs with a huge number of ways according to different methods that lead scientists face results from other researches. Among all these ways it is highlighted that the publication of an article is one of the most important way to spread scientific knowledge. In this context, aiming to allow access to information, there are scientific databases that researchers can catch up with a variety of scientific knowledge in many different areas. The search for international researches is a fact easily solved by using descriptors, key-words and uniterms. The descriptors from Medical Subjects Headings (MeSH) allow researchers to find a specific article from a specific journal during a specific period of time. To reach these concepts researchers use the international database thought. Furthermore, there are a number and specific descriptors related to health subjects filled in a variety of international database. Using specific descriptors and specific databases it is possible to access results from different researches which are relevant and essential when studying a specific issue.

Among all the specific issues in the health and social literature, it is relevant to highlight the aging of the world population and the importance of Primary Health Care in order to promote health. The aged population has been increasing remarkably worldwide (*Fleck et al, 2006*). This fact leads to adequate and emphasize the new paradigm of health promotion and the humanization of the public health services, because the aging of the population is the most important demographic change observed in most countries worldwide. Furthermore, the aging of the population

is manifested by the increase of the number of older adults and the higher proportion of older adults and the overall population (*Firmo et al, 2003*).

Gathering with the aging of the population, which is a social challenge to health practitioners, a major challenge in dental practice is the successful management of the complete denture (*Bruno & Mandikos, 1998*). This fact could be changed whether oral health promotion is conduced by means of prevention and early treatment to any oral disease, because according to MacEntee et al, (*1993*) a large proportion of elderly people reported that they sought treatment only for pain. The new paradigm of oral health promotion seeks to change this fact.

The aim of the present study is to evaluate the evidences available in the international literature which approaches the scientific knowledge related to Primary Health Care and Elderly oral health. In the same view this study aims to categorize the main point of each scientific article in order to evaluate what kind of studies are improving the scientific knowledge in health sciences, and describe the researches which are related to Elderly oral health and Primary Health Care.

METHODS

The present descriptive cross-sectional study was carried out supported by the Integrative Literature Review method to reach the presented objectives. Toward this fact the development of this study was guided by the research question: What are the subjects studied and published worldwide related to Primary Health Care professionals and Elderly Oral Health throughout the lasts decades?

According to Ganong, (*1987*) and Broome, (*2000*) an integrative review needs to follow some methodological procedures, which are: the identification of the problem, which was highlighted in the research question, sample selection, definition of the information to be collected from the sample, data analysis, discussion of the full articles that composed the aim of the study and systematization of the acquired knowledge.

The development of the present study was divided into three steps. First of all it was chosen the descriptors which were going to be used to reach the articles in the Pubmed/Medline and Lilacs databases. The descriptors were selected by the MeSH –Medical and Subject Heading- and were related to the objective

of the research. The descriptors used were Oral Health, Primary health care and Dental care for aged. Using these descriptors it was evaluated 91 abstracts. Among all of these abstracts a large number were excluded because of some exclusions criteria that allowed to select a sample. According to this fact some articles were excluded because of incoherence toward the objective and not access to the full article. Another variable of exclusion was the idiom. Idioms as Japanese, German, Italian and French did not allow the authors to read the full articles. After realizing the exclusion of some articles it was selected a sample of study.

The second step of the present research consisted in reading all the full articles and using the Content Analysis (*Bardin, 1995*), to establish the categories of the main subject of the read articles. After that, an instrument was develop to data collection and it is presented as an attached figure. It is a 4-item instrument that evaluated the identification of the article; the profile of the scientific journal; the method of the study and the main subject of the article. The third step consisted in data collection and presentation of the articles related to the objective of the present research. It was used Epidata software to perform the database and the STATA software to perform the data analysis which consisted in frequency description of the variables.

RESULTS

It was evaluated 91 abstracts which were reached by the Pubmed/Medline (n. 61) and Lilacs (n. 30) database. According to the criterion to select the articles, which were going to compose the sample, the authors excluded 40 (43.9%) articles from the total abstracts evaluated. The total amount of full articles that represented the sample of study was 51 articles. The selection criteria was based in three variables, access to the full article (internet or paper/library based); language (English; Portuguese or Spanish) and coherence according to the article subject which needed to be related to elderly oral health based on Primary Health Care. It was evaluated three decades of publication with a mean of 1.7 articles published per year (Figure 1). It was observed that 27% of the articles were written in Spanish, 61% in English and 12% in Portuguese (Figure 2). Most of the articles were published in Dental Journals (54%) followed by Medical Journals (15.6%) and Public Health Journals
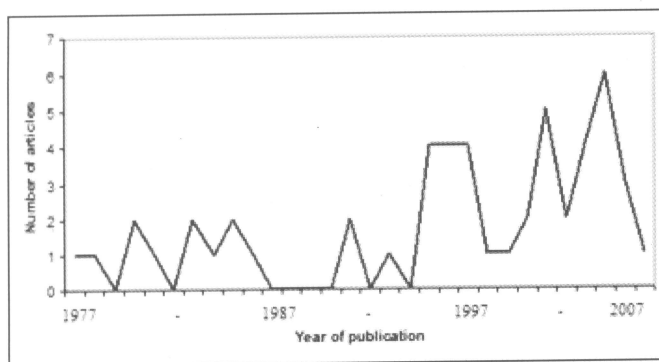
Figure 1- Articles published during the three last decades according to Elderly oral health and Primary Care. Medline/Pubmed and Lilacs, 2007.
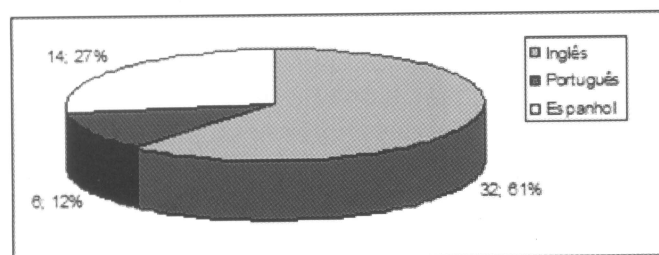

Figure 2- Language of publication. Articles related to Elderly oral health and Primary Care. Medline/ Pubmed and Lilacs, 2007.
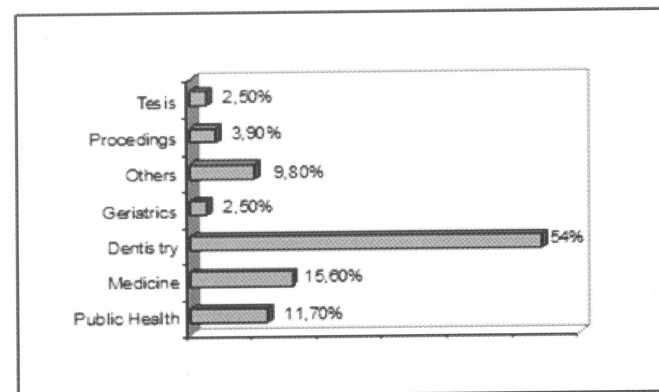

Figure 3- Journal of publication. Articles related to Elderly oral health and Primary Care. Medline/ Pubmed and Lilacs, 2007.

Table 1- Impact factor of the journals with published articles. Web of Knowledge/ISI, 2007.

Abbreviated Journal Title	n	%	Impact Factor
INT DENT J	7	30,4	0.364
REV SAÚDE PUBL	2	9,2	0.343
J PUBLIC HEALTH DENT	3	13,0	0.805
J AM DENT ASSOC	1	4,3	1.162
J AM GERIATR SOC	1	4,3	3.331
AM J PUBLIC HEALTH	1	4,3	3.698
BRIT DENT J	3	13,0	0.848
COMMUNITY DENT ORAL	1	4,3	1.870
FAM MED	1	4,3	1.289
J PROSTHET DENT	1	4,3	0.879
INT J ORAL MAX SURG	1	4,3	1.212
AM FAM PHYSICIAN	1	4,3	1.616

Table 2- Categories of the articles that composed the studied sample of Elderly oral health and Primary care. Medline/Pubmed and Lilacs, 2007.

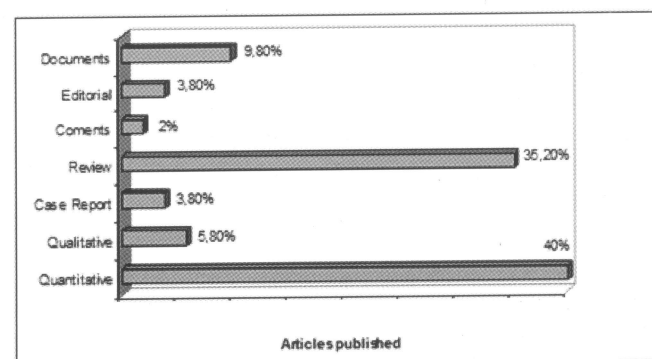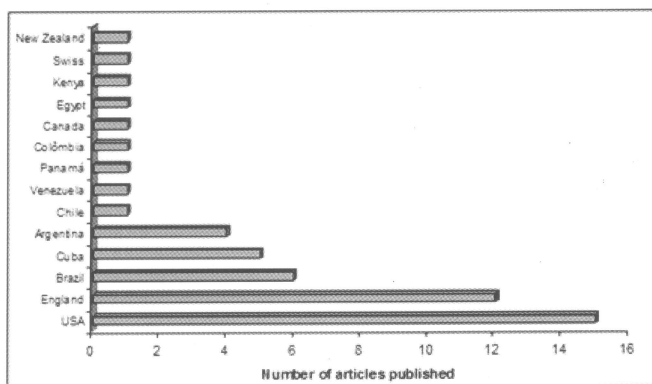| Categories/ Main point of the article	n	%
Community Health Network	2	4,2%
Syllabus/ Professional development	4	7,8%
Challenges/ Strategies/ Programs	9	17,6%
Elderly/ Primary Care/ Oral Health	5	9,8%
Primary Health principles/ Dentistry	15	29,4%
Oral Health/ Family health	4	7,8%
Health Services/ Staff work	4	7,8%
Indicators of oral health	8	15,6%

Figure 4- Type of research. Articles related to Elderly oral health and Primary Care. Medline/Pubmed and Lilacs, 2007.

Figure 5- Country of publication. Articles related to Elderly oral health and Primary Care. Medline/ Pubmed and Lilacs, 2007.

(11.7%) (Figure 3). Related to this topic only 25% of the articles were published in journals which were filled in the Web of Knowledge/ISI. The higher impact factor was 3.698 and the lower was 0.343 (Table 1). The mean of the Impact Factor was 1.451. The higher prevalence of published articles were Quantitative researches (40%) and Literature Review (5.2%) (Figure 4). United Sates were responsible for the higher number of articles (n. 15) followed by England (n. 12) and Brazil (n.6) (Figure 5). According to what is shown in the Table 2, only 9.8% of the evidences in the literature are related to Elderly/ Primary Care/ Oral health and 29.4%, which is the most prevalent category though, were represented by the principles of Primary Health Care in dentistry.

DISCUSSION

The access to the international publication allows researchers worldwide to get acquainted with trends, challenges and issues that are being discussed in many different universities in the world. A Literature Review represents an important tool which allows the researcher to face current publications in a specific issue. According to this fact, the present study was developed based upon the Integrative Literature Review, in order to summarize the researches once realized and drew conclusions with determined topic. This method, when well developed, demands the same clearness and severity like any other empiric study (*Beyea, 1998*).

According to the publications evaluated in the present study, since 1978 it is observed an increase of the number of articles published until these days.

This fact probably happened because of the Ottawa conference that improved a world conscious way to deal with health promotion and indeed it is related to the Primary Health Care principles (*Buss, 2000*). As shown in the Figure 1, less than two articles had been published during the last three decades and this fact suggests that more researches relate to elderly oral health and Primary Health Care should be developed. Developed native English Language Countries are responsible for the higher amount of publications, although a little number of articles were published in journal with representative citations, as shown in Table 1. This fact means that the subjects evaluated in the present student do not represent a focus of study in the literature yet.

As expected, more than a half of the articles were published in dental journals (54%). This fact reflects the support that Dentistry devotes to Primary Health Care studies. It is relevant to state that oral health promotion involves different situation and issues as public health strategies to control caries disease, oral health education and population access to dental treatment. Now a day, all of these facts are being included in the scope of Dentistry curriculum.

One way to see whether published articles are being cited in the international literature is the impact factor of the journal where an article had been published. This impact factor evaluates the way that a journal is relevant to its specific area to spread scientific studies and the amount of readers it has all over the world. The international impact factor is evaluated at the Web of Science/ ISI - Institute for Scientific Information- (http://portal.isiknowledge. com) data base. Accessing this web site a researcher can obtain the impact factor of a specific journal. In the present study only 25% of the journals were included in the Web of Science/ISI. The only Brazilian journal, where two articles were reached, included in the web of science is the Revista de Saúde Pública which has an impact factor 0.343 in 2007 (Table 1). It shows that the subject Elderly oral health and Primary Health Care is not published in well-developed and high-impact international literature. To spread a research by an international data base, the researchers should publish their articles in English which is an universal scientific language. Toward this fact a large number of studies are published in United States and England as shown in Figures 2 and 5. Publishing in English allows researchers from different origins to analyze

and study from a variety of international studies. According to the categories emerged in this study only 5 articles (9.8%) were related to Elderly oral health and Primary health care. This fact highlighted the necessity of boosting the studies about these subjects because aging is a very important public health topic which is straighten related to health promotion, where oral health is included (*Bulgarelli & Manço, 2006*).

The fist article observed in this category was related to medical practitioners' perceptions of the oral health of their elderly patients. It was a qualitative study with semi-structured interviews about experiences and perceptions of the oral health of their patients. It concluded that the main point of perception is the culture differences between the elderly and the professional. This fact requires a closer integration of culture, oral care and general health of the elderly patients and professionals (*Anderson et al, 2007*). Another interesting articles from the category Elderly/Primary Care/Oral health is about integrality of elderly oral health and general health. The object of that article was to examine the association between depressive symptomatology and oral quality of life. It was a quantitative study conducted by hierarchical regression analyses that showed that elderly with more depressive symptoms reported worse oral quality of life which persisted across multiple samples and both sexes. These facts emphasized the importance of the integrality of treating depression among older and suggested that both dentists and physicians have a role in recognizing patients for such treatment. This article was published at J Public Health Dent (Impact factor 0.805) (Table 1) (*Kressing et al, 2002*). Another article from the category Elderly/Primary Care/Oral health is related to the role of geriatrician and the oral health of their patients. The integrality of oral health and general health was again observed in the literature with this Review of Literature. According to the authors, geriatricians needs to be acquainted with elderly oral health which included oral health promotion and oral health care education. This ariticle was published at J Am Geriatric Soc (Impact factor 3.331) (Table 1) (*Shenkin & Baum, 2001*). Among the articles included in the studied category related to elderly oral health and primary health care, it was observed a case report that focused the removable partial prosthesis for the elderly as a treatment to restore the quality of life. The association between elderly oral health and prosthesis

rehabilitation treatment is an important tool to improve elderly quality of life. The related case report was published at the J Prosthet Dent (Impact factor 0.879) (Table 1) (*Fenton, 1994*).

Among all the articles that composed the sample related to the category Elderly/Primary Care/Oral Health only one was reached in the LILACS data base, the other were found in the Medline/Pubmed database. This unique article was published in Spanish in a journal named Cuad Méd-soc from Chile. It was about an elderly population diagnosis related to oral health care. It was a quantitative study. This study concluded that the related population needed oral health services as emergency treatment services and periodontics treatment. The oral health self-care and treatments related to primary care was an issue that was emphasized by the authors (*Misrachi et al, 1997*).

CONCLUSION

This study found that most of the publications about Primary Care and Oral health were quantitative studies and Literature review related to the principles of Primary Care applied on the dental practice. It is a very important fact that reflects the new paradigm of oral health promotion. This paradigm fits the oral health in the general health as a holist view of the patient. Another conclusion is that the subject analyzed in this study was not published in journals with high impact factor which means that researchers needs to face this fact as a challenge to spread elderly oral health and Primary Care knowledge in well developed journals worldwide. English is the hegemonic language of publication which allows every researcher to be acquainted and have access to overseas scientific knowledge and experiences. This language factor explained the higher number of publication in countries as USA and England. According to these conclusions the results of this study suggest that researchers from developing countries with native language different from English should publish researches related to Primary Care and Elderly oral health in high-impact-factor journals in order to spread their knowledge. In order to develop new researches related to this issue, this study suggests that researchers from developing countries need to perform studies and construct partnerships with Primary Health Care services to improve oral health in the aged people because this population is not a priority to oral health care yet.

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