From occupational safety and health to Workers' Health: history and challenges to the Brazilian Journal of Occupational Health

José Marçal Jackson Filho ¹ Eduardo Algranti ¹ Cézar Akiyoshi Saito ¹ Eduardo Garcia Garcia ¹

> Abstract The Revista Brasileira de Saúde Ocupacional (RBSO) - Brazilian Journal of Occupational Health - is an academic peer-reviewed journal in the field of Workers' Health that has been published by Fundacentro since 1973. Its historical trajectory, current performance, challenges and future perspectives were approached, in this paper, from a documental analysis. The journal's history can be divided into three periods, starting during the military government. At the beginning, the journal was the official vehicle for the Brazilian occupational accidents prevention policy, in which Fundacentro played a central role. The early 1980s opens space for technical-scientific publications and the field of Workers' Health emerges on the journal's pages. In 2005-6, a restructuring process is implemented, ensuring independent editorial policy and structures. Since 2006, 139 original papers and 9 thematic issues have been published. The journal is indexed in 9 bibliographic databases, has been ranked B1 in the field of interdisciplinary studies and B2 in the field of public health by CAPES, has an upward trend in the SciELO Impact Factor, and has an h-index of 5 in Google Scholar. Nevertheless, the low scientific production in the field and the high rate of rejection of manuscripts may jeopardize the survival of the journal, which is the main locus for scientific publications in the field of Workers' Health.

¹ Fundacentro. R. Capote Valente 710, Pinheiros. 05409-002 São Paulo SP Brasil. jose.jackson@ fundacentro.gov.br

Introduction

Revista Brasileira de Saúde Ocupacional - RBSO (Brazilian Journal of Occupational Health) is the scientific journal that has been published by Fundação Jorge Duprat Figueiredo de Segurança e Medicina do Trabalho (Fundacentro) since 1973. During its 42 years of existence, 130 issues were published in 39 volumes and, today, it is published twice a year. Its collection of articles reflects part of the knowledge evolution that has been happening in the field of Workers' Health in Brazil.

RBSO is considered as reference by the community that works in this field of knowledge and praxis. It provides a fundamental space for reflecting on and analyzing, in a scientific way, contemporary problems related to the theme and perspectives to cope with them¹, which justifies the continuous search for its editorial upgrading. In recent years, the Journal has opened space for debate, considering aspects related to the social, scientific and technological development of working conditions in diverse sectors of the economy, and to the analysis and proposal of public policies in distinct correlated areas².

The history of RBSO reflects the evolution and interaction of distinct approaches to the relationships between health and work. On its pages, it is possible to find studies that are based on the principles of Occupational Health and studies that are based on the foundations of Workers' Health. After all, Fundacentro is an Institution linked to the Ministry of Labor and created along the lines of Occupational Health Institutions in developed nations³, which played a central role in the occupational accident prevention policy during the military governments. It has undergone important transformations and has become a research and teaching Institute.

The fact that the Journal belongs to the field of Workers' Health and was created during the military government means it has traveled a long way and has overcome many theoretical and practical presuppositions³concerning the understanding of the health-work relationship. Some of these presuppositions are: the workers' role in the process – from passive individuals to subjects of the process –, the shift away from the search of risk factors towards the complex comprehension of the working process and organization in order to understand the health-disease process, and the overcoming of knowledge as an end towards the need to understand in order to transform^{4,5}. Therefore, in this space of publication and de-

bate, the underlying assumption is that "the commitment to change the intricate scenario of the working population's health is its fundamental pillar. This presupposes political, legal and technical action, as well as an ethical positioning."⁴

Thus, the Journal's mission is to publish scientific papers that are relevant to develop knowledge and to enhance the technical-scientific debate in the field of Health and Safety at Work. It aims to contribute to the understanding of and improvement in working conditions, to the prevention of occupational accidents and diseases, and to the provision of subsidies to the discussion and definition of public policies related to the theme.

This paper aims to describe RBSO's historical trajectory and current performance, and to present challenges and future perspectives. This analytical reading of the Journal was based on a documental analysis of its volumes and internal documents, as well as on bibliometric indicators available from the SciELO database and from Google Scholar.

The journal's historical trajectory

By reading the RBSO volumes since its first issue until today, it is possible to distinguish three stages, in which the Journal played different roles:

a) in the first stage, which begins in 1973 and ends around the 1980s, the mission of the Journal - the official vehicle of Fundacentro and of the policy instituted to the field - is to disseminate accident prevention knowledge;

b) in the second stage, which extends into the beginning of the 2000s, the Journal assumes a technical-scientific role and becomes a locus for the publication of studies authored by many Brazilian researchers and scholars about themes that involve health, work and accident prevention;

c) in the third stage, which extends to this day, RBSO is structured as a scientific journal, as it has amplified its thematic scope and has established a clear and independent editorial policy.

The Journal: a means to disseminate knowledge and the occupational accident prevention policy of the military government

In its first stage, RBSO was the official vehicle of Fundacentro and of the Worker Recognition Policy⁶. It published speeches delivered by Labor ministries and even by presidents of Brazil. The

official policy and its results were presented to the community in the Journal's first issue⁷.

The editorial structure was composed by two employees from Fundacentro and an Advisory Board (formed by approximately fifty scholars and specialists), and it has undergone some changes throughout the years.

During this period, the Journal was a quarterly publication, and one issue per year was dedicated to *Congresso Nacional de Prevenção de Acidentes do Trabalho* (CONPAT - (National Conference on Prevention of Occupational Accidents). The content included information on the policy of the Institution and of the Journal itself, a "scientific sector", news reports and services (legal analyses, bibliographic reviews, toxicological information, Fundacentro's publications, agenda and other themes). The editorials were not regularly published during the period. The majority of them were not signed and, at certain moments, they were replaced with texts related to the policy or to Fundacentro.

The scientific sections contained translations of publications coming from many countries that, generally speaking, presented reviews that approached general themes (lighting, noise, toxicology and others). In addition, there were important collaborations from professors/researchers with the School of Public Health of the University of São Paulo (USP), led by Professor Diogo Pupo Nogueira.

As a space for disseminating Fundacentro's policy and role, over 8 years, the contents evolved, from the history of Fundacentro's constitution-9to the presentation of the Worker Recognition Policy¹⁰. The Journal also published an issue dedicated to Law 6514, of December 22, 1977, and to Directive 3214, of June 8, 1978, referring to the regulatory standards for health and safety at work11, the balance sheets of Fundacentro's activities, like the one published in 1978¹², and the report to the International Labor Organization (ILO)¹³. In addition, the Journal was a space for the publication of papers presented at several scientific events other than CONPAT (1st Brazilian Conference on Occupational Health, Conference on Prevention of Blindness, Conference on Pesticides, among others).

RBSO's proposal can be summarized as what was written in an editorial published in 1975. In it, its role was explained as an "invisible field", that is, journals would represent a form of "extension of the university campus towards the specialist or professional, providing them with updated information, new perspectives in their area, and

conclusions drawn at conferences, meetings and symposia"¹⁴. However, this was not performed randomly, as the editorial of the following issue explained. This editorial clarified that the Journal's purpose was to "publish papers aiming at a dynamic articulation between doctrinal conceptualization and practical conduction of occupational health programs"¹⁵.

Thus, although texts that approached organizational issues were published, such as the ones written by Nogueira¹⁶ and Bart¹⁷, RBSO's mission was to publish and disseminate "certain" themes and "values": those which grounded or were objects of the instituted policy, such as tackling unsafe acts or the role of prevention services. Therefore, the Journal's aim was to disseminate the prevention model adopted by the military government, which was officially defended by Fundacentro^{6,18}.

The Journal's editorial structure, whose operation was relatively stable over the years, favored the "official policy", to which the editorial policy was submitted. This relationship was organic, as one of the members of the Editorial Board was the superintendent of the Institution and maintained the two positions for more than 6 years (from 1975 to 1981). However, as the instituted policy gradually lost strength, the technical-scientific character started to gain ground on the Journal's pages.

The transition from technical to scientific: from Occupational Health to Workers' Health

Between 1982 and 2002, the Journal undergoes a long transition phase regarding its role and content. Its editorial policy is little defined and there are large uncertainties concerning its survival. One might suppose that the lack of editorial definition somehow allowed the amplification of themes and approaches towards the field of Workers' Health.

The editorial structure remained the same, with an Editorial Board (composed of 21 researchers and specialists) under the supervision of the Institution's Superintendence (and, subsequently, of the Technical Department/Board). In 1986, the Journal's Editorial Board is renewed and the number of members increases to 8¹⁹. During this long period, this number varied considerably: in 1993, there were only 2 members, and in 2002, this number increases to 5.

At several moments, members of the technical board/department participated in the Edito-

rial Board and maintained the above-mentioned organic relationship between Fundacentro and the Journal, which was "one of the most important communication and dissemination instruments of the entity's work"²⁰.

Despite the discourse, the Journal's operation underwent some difficulties: its periodicity decreased from three to two times a year, with recurrent delays in its publication, which was even suspended between 1995-96 and in 2000.

The main features that characterized the Journal's editorial organization in this period were the lack of an editorial policy, the absence of a scientific editor (a position that was filled by an editing journalist who searched for manuscripts and organized the issues), and the lack of peer review.

Contradicting the Editorial mentioned above, little by little the Journal ceased to be a space used mainly by Fundacentro's professionals to disseminate their work in the field of Occupational Health and started to include many authors and researchers who emerged in the period (marked by the 1988 Federal Constitution). Some trends in the characteristics of the publications can be noticed. The issues started to have texts whose format is more scientific than technical, although in the first years, reports, toxicological records, and technical standards produced by Fundacentro still occupied an important space. Although the publication of translations decreased, the impact of some translated texts (for example, Dejours²¹, Daniellou et al.²², Le Guillant et al.²³) was very important, mainly in the field of Ergonomics and Psychodynamics of Work.

The Federal Government's omission concerning Workers' Health questions and the lack of institutional interest in the Journal seem to have left space for the publication of texts with important themes and a broader view of accident prevention. Therefore, it gradually opened to the field of Worker's Health. Among these themes, we can cite the relation between organizational factors and health, work in shifts and night work, the emergence of Repetitive Strain Injury/ Work-Related Musculoskeletal Disorders, asbestos' impacts on health, contamination by pesticides, Mental Health and work, workers' participation, epidemiological surveillance of pesticides and occupational diseases, new approaches to the analysis of occupational accidents, social determinants of occupational accidents, largescale accidents, and the organization of Workers' Health Care Services.

This trend reflected the evolution of research in the field of Workers' Health at the time²⁴. The

first text published by RBSO explicitly in the field of Workers' Health dates back to 1991²⁵. In the following year, the Journal published the translation of a declaration from the Pan-American Health Organization (PAHO) about the issue of Workers' Health²⁶.

The Journal entered the 21st century under a strong crisis, but in a certain way, free from the role and scope that had been established during the military government. The growth of the Brazilian academic environment and of the field of Workers' Health²⁷created the need of an adequate space for academic publication that could be absorbed by RBSO.

A scientific journal in the field of Workers' Health

With the changes in the new Government instituted in 2003 and in the administration of Fundacentro, a new Editorial Board is defined. It proposes to value the Journal's role and to initiate a process of change to face its operation problems (such as the lack of an editorial policy, irregular issues, incipient peer-review, among others)²⁸. However, the editorial structure was still based on the principles of the previous stages, namely: a member of the Institution's superintendence was part of the Editorial Board, and there was no scientific editor.

Between 2004 and 2005, two scientific editors were appointed and the editorial signed by them indicates changes in the editorial policy and in the Journal's scope²⁹. Nevertheless, only in 2006 did the restructuring project start to be effectively implemented, guided by the following principles²⁹:

The first is the principle of Editorial Freedom, defined by the International Committee of Medical Journal Editors (ICMJE) as a tool to avoid interferences in the evaluation, selection, scheduling or editing of individual articles either directly or by creating an environment that strongly influences decisions of editors-in-chief, who must have full authority over the entire editorial content of their scientific journal'. Accordingly, the independent editorial board can have a fundamental role as collaborator in the establishment and maintenance of the editorial policy that has been adopted [...].

The second fundamental principle is that of operating as a high-quality public service. In this sense, the operation must emphasize the scientific merit of the published articles and their relevance to society, as well as the offer of free, easy and per-

manent access to the Journal's content through many forms of media.

The conjuncture that preceded the reorganization process that began in 2006 made it difficult for the Journal to rescue its credibility and to restructure itself. The delays and the lack of periodicity between the end of the 1990s and the beginning of the 2000s excluded the Journal from bibliographic databases. This brought a huge editorial loss, with a drastic decrease in the number of submitted articles, low scientific quality of the submitted articles, a reduction in the number of published articles, and the deterioration of the Journal's quality indicators, like Qualis/Capes. This scenario was called "vicious circle" by the editorial body, due to the great difficulties that it posed to its reversion.

In light of this scenario, the reorganization process defined in 2006 established some short-term goals and objectives: to create the Journal's internal regulation; to ensure its autonomy and perennial operation; to redesign the editorial work based on a collective nature; to reconceive the attributions of the editorial body and reconstitute it; to reorganize and accelerate the administrative structures; to upload information on the Journal and on the published issues to its own website; and to submit the Journal, within two years, to an indexing process in the Lilacs bibliographic database.

At the end of 2006, after the institution of the Journal's Internal Regulation, which sustains its editorial autonomy and regulates its relationship to Fundacentro, and after the organization of the administrative support, the Editorial Board was reformulated. It was initially composed of two scientific editors, one executive editor and three associate editors, as well as a new Editorial Board with renowned researchers from distinct areas related to Health and Safety at Work, coming from 10 universities and research institutions in different regions of Brazil.

A fundamental element to give visibility to the Journal was the creation of a specific website for RBSO on Fundacentro's page. This portal was the main means of electronic dissemination of the Journal until it was included in SciELO's portal in May 2012.

To attract articles, two strategies were put into practice: the first was to publish thematic issues; the second was to celebrate a partnership with the Workers' Health Workgroup of ABRASCO (Brazilian Public Health Association). The materialization of the cooperation with ABRASCO's workgroup happened through the publication of

an editorial signed by the workgroup's coordinators¹, which stated that "RBSO has become a very important space of publication aiming at the dissemination of the national knowledge produced by the groups and professionals that have been reflecting on Workers' Health in the scope of Public Health". Subsequently, there was the publication of a thematic issue on "Workers' Health Care Policy" in two consecutive issues³⁰.

Thus, after the restructuring, the Journal started to be guided by what characterizes a scientific journal, publishing original research articles31 without neglecting the need to debate polemic themes and to defend a clear editorial position³². RBSO ceased to be an instrument to communicate and disseminate the entity's work²⁰and has become the "main locus" for publications in the field of Workers' Health, as Wünsch³¹argued. According to this author³¹, "the contemporary production in the area of Health and Safety at Work flourishes and emerges vigorously on RBSO's recent pages; however, there are still challenges to face [...] RBSO is the only Brazilian journal that encompasses the spectrum of specific Workers' Health themes within the large area of Public Health."

The journal's current development

Editorial structure and peer-review process

The field of Workers' Health is characterized by interdisciplinarity, as it involves aspects related to health and to the social sciences. The latter includes sociological, economic and public policy aspects⁴. Views from many areas co-exist, and at the same time that this exhibits a richness of approaches, it constitutes a challenge to a scientific journal. The restructuring of RBSO in 2005-2006 responded to these challenges by creating a scientific editorship and a body of editors to deal with submitted articles from diverse areas of knowledge. Today, the editorial body is composed of 42 editors from 19 universities and institutions from all the regions of Brazil, including researchers from Fundacentro itself. There are two scientific editors, two executive editors, 24 associate editors and 14 counselors who frequently act as associate editors.

Due to the Journal's multidisciplinary characteristic, the peer-review process has involved a large number of referees. From 2006 onwards, the Journal has had the collaboration of 416 ad hoc consultants, researchers with specialties in vari-

ous areas from all the regions of Brazil, including 11 researchers who work in other countries.

Diversity of the published research studies

From 2006 to 2014, 139 articles were published. This modality is the essence of a scientific journal. Of these, 83% originated in universities, the majority derived from theses and dissertations in postgraduate programs, 9.3% came from public services with the participation of universities, 6.4% from public services, and 1.4% from private services with the participation of universities. Articles originated exclusively from private services were not identified. Of the 139 articles, 33% refer to epidemiology and to the occupational health clinic, 31% referred to social sciences and public policies, 11% to issues related to technical aspects of health and safety at work, and 25% approached other themes, including moral harassment and rehabilitation. Interdisciplinary or interinstitutional groups signed 43% of the published articles.

The figures above reflect RBSO's comprehensiveness and richness of views and content and, at the same time, point to the challenge of conducting a journal with multidisciplinary content. In sharp contrast, journals in the area published in industrialized countries have a segmented spectrum of publications according to the different disciplines that approach health-work relations.

The organization of thematic issues

To face the "vicious circle" that was mentioned above, the strategy of publishing thematic issues has been fundamental. The themes, which deal with relevant and current matters, are defined by the editors or proposed by external researchers, and attract high-quality authors and articles. The period of time for the publication of thematic issues is usually long (from one year and a half to two years) due to the peer-review process and to the fact that it is necessary to wait for the completion of the process of all the articles submitted to the thematic issue. The strategy proved to be successful in the majority of times, attracting important authors and relevant articles in the published themes. From 2006 to 2013, 9 themes were published in 11 issues (Chart 1).

Organization of events

Another strategy conducted with the purpose of dynamizing and amplifying the dissemination of the information published in the Journal was the organization of events to launch new issues. In these events, authors of published articles are invited to present their works and to discuss them with the audience. Renowned researchers in the published themes and representatives of public agencies are also invited to discuss the articles and public policies related to the themes.

Chart 1. Thematic issues published by RBSO in the period from 2006 to 2013.

Year	Title
2006	- Work in telemarketing and related health problems
2007	- Work accidents and their prevention - Exposure to chemicals and Workers' Health
2008	- Health workers' health
2010	- Disability, occupational rehabilitation and Workers' Health
2010/11	- The contemporary world of work and worker's mental health - I and II
2012	- Work, health and environment in agriculture: interactions, impacts and challenges for workers' safety and health - Bullying at work
2013	- Integrated care in worker's health: challenges to and perspectives of a public policy - I and II

Seminars were held to each of the published themes and to some issues not connected with them, in partnership with other institutions, such as the School of Public Health of USP, the Health Department of the State of São Paulo, and the Ministries of Health and Social Security. The Journal also started to organize and support technical-scientific events in the areas of Health and Work, jointly with Fundacentro and with its academic Master's program, and also with other entities. Along this line, two courses of scientific writing in English were organized in 2010 with Unicamp and with the international journal Environmental Health Perspectives, supported by FAPESP, EPA (USA's Environmental Protection Agency) and by the international publishing house of scientific journals Elsevier.

Dissemination and distribution of copies

The number of accesses to the Journal's articles that are electronically available has been increasing regularly and, since its inclusion in the SciELO's collection, it has been growing even more, as the annual data presented on Table 1 show us. If we take the month of March as reference, the number of accesses increased by 30% from 2013 to 2014 (from 17,333 to 22,481) and 73% from 2014 to 2015 (38,878 accesses). If we compare March 2013 to March 2015, the growth was of 124%.

Another aspect that stands out concerning the Journal's visibility is the average of accesses per manuscript in the SciELO database. Despite the small number of available articles, RBSO, in the month of March 2015, was the journal that had the highest average of accesses per available

Table 1. Accesses to the articles published by RBSO available online from the websites of Fundacentro and SciELO.

Year	Accesses	Accesses/month (mean)
2007 (May/Dec)*	24,003	3,000
2008*	110,185	9,182
2009*	117,289	9,774
2010*	126,017	10,501
2011*	172,539	14,378
2012 (Jan-Apr)*	46,994	11,749
2012 (May-Dec)**	53,197	6,650
2013**	173,221	14,435
2014**	248,467	20,705
2015 (Jan-Mar)**	76,562	25,520
Total	1,148,474	-

^{*}Data referring to access to the Journal's page on Fundacentro's website. *Data referring to access to the Journal's page on SciELO's website

manuscript compared to the main Public Health journals that integrate the database, as shown by Table 2.

The strategy of giving greater visibility to the Journal also took advantage of the demand for printed copies of RBSO, which has always existed, even with the electronic availability. Today, its print run is of 1,500 copies per issue. With the normalization of its periodicity, approximately 800 entities, mainly libraries and public agencies related to areas connected with the Journal's scope, started to receive or are receiving RBSO again for free and on a regular basis. The remaining copies are distributed in scientific events organized by Fundacentro or by other entities, such

Table 2. Accesses to the manuscripts of the main Public Health journals available from the SciELO database in March 2015.

Journal	Nº of accesses March 2015	Nº of available manuscripts	Average number of accesses per manuscript
Rev. Bras. Saúde Ocupacional	38,878	232	168
Saúde e Sociedade	110,875	910	122
Ciência & Saúde Coletiva	348,963	3,116	112
Physis	65,433	663	99
Interface	79,800	830	96
Trabalho, Educação e Saúde	33,085	361	92
Rev. Bras. Epidemiologia	76,649	884	87
Cadernos Saúde Pública	320,813	4,511	71
Rev. Saúde Pública	253,344	3,791	67

Source: SciELO.

as those connected with labor unions and those that provide public services.

The fact that the Journal is read by non-academic institutions shows that the information published by RBSO is also used by the community that works in the area of occupational safety and workers' health, and that the Journal is recognized as a technical-scientific reference. One example of such use is the citation of information published in RBSO as grounds for judicial decisions³³.

Bibliometric indicators

The reorganization of the Journal and the adopted strategies progressively reverberated on some indexes. Some bibliographic databases that had been lost were recovered, like Lilacs, and the Journal was indexed in other databases. Today, it is indexed in 9 regional databases, a process that culminated in the entrance into SciELO.

As for the Qualis/CAPES classification in 2008, which basically reflected only the first year of the restructuring, RBSO's classifications were few and in inferior levels, as in the cases of the areas of Public Health, Nursing, Interdisciplinary Studies and Psychology, with B4. In 2013, which is the last datum available, the Journal was classified as B1 in the area of Interdisciplinary Studies and B2 in Public Health, Psychology, Nursing, Sociology and Environmental Sciences.

Concerning citations, it is important to notice that RBSO's repertoire focuses on the theme of Health and Safety at Work, it is not included in databases that provide great visibility, such as Web of Science and PubMed, and it publishes relatively few articles. In spite of all this, it is important to observe the relevance of the number of citations of articles published by RBSO in the main Brazilian journals of the area of Public Health, according to data provided by SciELO (Table 3).

According to Chart 1, the three main journals of the area of Public Health are also the three journals of the SciELO collection that most cite RBSO. Of the current 285 journals of the SciELO Brasil Collection, 96 (34%) have already cited RBSO (excluding RBSO itself), which totals 790 citations (not including 169 self-citations, which represent 18% of the total). The Journal's Impact Factor (IF) has also been growing. The IF (for two years) of RBSO in SciELO was zero in 2009 and gradually increased, reaching 0.27 in 2013 and 0.50 in 2014.

The Journal's metrics in Google Scholar have also been improving: from 2008 to 2012, RBSO's h5-index and h5-median were, respectively, 8 and 11. In the period 2009 to 2013, these indexes rose to 11 and 12, respectively (the indexes of this five-year period mean that the Journal has 11 articles published in the period that received at least 11 citations each and that the median of the citations of these articles is 12).

Table 4 shows the amount of manuscripts submitted and published in recent years.

Based on the data on Table 4, two aspects stand out. The first is the high rate of refusal of manuscripts in the Journal, which has remained above 85% in recent years. The second is the relative stability of the low number of submitted and published articles.

Although a short period of time has elapsed since the Journal was indexed in SciELO in 2012, we expected to have a higher increase in the number of submissions and published articles. We also expected to have an improvement in the quality of the submitted manuscripts, which would open the possibility of raising the number of issues per year. However, this growth may be limited by the relatively low scientific production in the area of Workers' Health. According to Santana²⁷, the production of theses and dissertations in the area increased exponentially from the

Table 3. Citations of RBSO articles in the main Public Health journals and classification of RBSO among the cited journals.

Journal	N° of citations of RBSO articles	RBSO classification in relation to the total number of cited journals	RBSO classification among the journals cited in the SciELO Collection
Cadernos de Saúde Pública	124	93 / 8,491	25
Revista de Saúde Pública	103	63 / 7,491	16
Ciência & Saúde Coletiva	57	101 / 9,978	39

^{*}Refers to the total number of citations of the Journal in the SciELO database – Data processed on April 6, 2015. "Total number of journals in the collection: 1,239.

Table 4. Number of manuscripts submitted and published in RBSO, 2008-2014.

Year	Submitted articles	Published articles
2008	62	12
2009	166	18
2010	134	30
2011	136	25
2012*	182	23
2013	167	21
2014	182	23

^{*} inclusion of RBSO in SciELO's website.

1970s onwards but, in spite of this growth, the survey conducted identified only 333 studies carried out between 2000 and 2004, the last period evaluated in the article – an average of 67 studies per year. That is, although the production in Workers' Health has been growing, the amount of studies produced in the area is relatively small. This limitation may be one of the factors that explain RBSO's difficulty in complying with SciE-LO's requirement concerning number of articles and issues published per year.

Challenges and future perspectives

The relations among field of action, professional background and a scientific journal are intricate. In Brazil, the education of professionals in Workers' Health meets the needs of a broad job market, dictated by a specific legislation that requires the training of engineers, doctors and technicians. To comply with the needs imposed by the legislation, many professionals attended specialization courses (in the postgraduate level) and filled a niche to which the universities were incapable of offering programs like, for example, specialized medical residency. The few existing medical residency programs in Workers' Health have severe flaws due to the incapacity for providing participants with the necessary integration of contents that comply effectively with the classical levels of Leavell and Clark34. In addition, the legislation that regulates health and safety at work allows that the logic of the market that absorbs these professionals is nefarious to an independent and ethical practice of Workers' Health. This reality clearly hinders the writing of articles destined to scientific journals coming from

the private sector, where the largest part of the practical actions in Workers' Health take place. Gravitating towards the area, health sciences and social sciences groups, entrenched in universities and research institutions, create bridges between the area's technical aspects and public policies, the social and economic impact of the care models that are in force, and the inclusion of social determinants in the analysis of the work-health relations. Despite the limited interface between practice in the field of Workers' Health and the academia, the influence of teaching and research institutions tends to direct, in an explicit, slowpaced and constant way, the action in Workers' Health towards prevention approaches at all its levels and towards the adequate application of the scientific method.

RBSO is the mirror of a complex interdisciplinary area that co-exists with remarkable contrasts among types of scientific approach, which leads to the need of an adequate organization of its editorial body. Moreover, it portrays the scientific background of the professionals who work in the area, presenting high rates of rejection of manuscripts submitted to evaluation³⁵.

In addition, because it belongs to the broader field of Public Health, the Journal is in a paradoxical situation that the editors detected long ago³⁶: the articles that have higher scientific quality and that were written by renowned authors are sent to better-qualified journals, which is also reflected on the high level of rejection.

How can the Journal survive in this scenario of "academic exclusion"? The strategies that have been used up to now, such as the publication of thematic issues and the close contact with researchers in the field, have ensured its survival, but have not been able to lever the number of articles, as SciELO prescribes for health journals. If we add to this the operational and economic sustainability implications brought by the need of internationalizing and professionalizing the editorial work, among other trends, to maintain the Journal's inclusion in bibliographic databases, Workers' Health runs the risk of losing its "main locus"31. This would dilute the Journal's scientific production and praxis in the other journals of the Public Health field.

Who will be benefited by this? Certainly, not the workers who strive for their health, nor the field of Workers' Health, which is legitimated by the need of acting technically, politically and legally⁴ to reverse the perverse and unfair scenario in the relations that involve health and work in Brazil³⁷.

Collaborations

JM Jackson Filho, E Algranti, CA Saito and EG Garcia participated equally in all stages of preparation of the article.

References

- Machado JMH, Lacaz FAC. Respondendo a um chamamento! Rev Bras Saude Ocup 2010; 35(121):6.
- Garcia EG, Jackson Filho JM. Sobre o projeto de reestruturação da RBSO. Rev Bras Saude Ocup 2007; 32(116):4-5.
- Mendes R, Dias EC. Da medicina do trabalho à saúde do trabalhador. Rev Saude Publica 1991; 25(5):341-349.
- Minayo-Gomez C, Thedim-Costa SMF. A construção do campo da saúde do trabalhador: percurso e dilemas. Cad Saude Publica 1997; 13(Supl. 2):S21-S32.
- Sato L, Lacaz FAC, Bernardo MH. Psicologia e saúde do trabalhador: práticas e investigações na Saúde Pública de São Paulo. Estud Psicol (Natal) 2006; 11(3):281-288.
- Monteiro JS. Fundacentro: Função Social da Política sobre Acidentes de Trabalho no período ditatorial brasileiro (1966 a 1976) [dissertação]. São Paulo: Pontificia Universidade Católica de São Paulo; 2013.
- 7. Revista Brasileira de Saúde Ocupacional (RBSO). *Rev Bras Saude Ocup* 1973; 1(1).
- Paulino O. Nota editorial. Rev Bras Saude Ocup 1973; 1(2):4.
- Sussekind A. Da ideia à instalação do Centro Nacional de Segurança Higiene e Medicina do Trabalho. Rev Bras Saude Ocup 1973; 1(2):6-8.
- 10. Vianna GL. A meta é o homem. Rev Bras Saude Ocup 1973; 1(1):5.
- Revista Brasileira de Saúde Ocupacional (RBSO). Rev Bras Saude Ocup 1978; 6(23).
- Fundacentro. Avaliação do programa cumprido pela Fundação Jorge Duprat Figueiredo de Segurança e Medicina do Trabalho no ano de 1978. Rev Bras Saude Ocup 1979; 7(25):6-29.
- Saad EG. Informe da Fundacentro à OIT Estratégia brasileira na luta contra o infortúnio do trabalho. Rev Bras Saude Ocup 1981; 9(36):7-10.
- Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. Rev Bras Saude Ocup 1975; 3(9):5.
- Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. Rev Bras Saude Ocup 1975; 3(10):5.
- 16. Nogueira DP. Fadiga. *Rev Bras Saude Ocup* 1973; 1(1):18-28.
- 17. Bart P. Ergonomia e organização do trabalho. *Rev Bras Saude Ocup* 1978; 6(21):6-11.
- Santos LAS. O trabalhador imprevidente: estudo do discurso da Fundacentro sobre o acidente de trabalho [dissertação]. São Paulo: Pontifícia Universidade Católica de São Paulo; 1991.
- 19. Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. Rev Bras Saude Ocup 1986; 14(55):1.
- 20. Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. *Rev Bras Saude Ocup* 1993; 21(77):1.
- 21. Dejours C. Por um novo conceito de saúde. Rev Bras Saude Ocup 1986; 14(54):7-11.
- Daniellou F, Laville A, Teiger C. Ficção e realidade do trabalho operário. Rev Bras Saude Ocup 1989; 17(68):7-13.
- Le Guillant R, Begoin B, Hansen, Lebreton. A neurose das telefonistas. Rev Bras Saude Ocup 1984; 47(12):7-11.

- Minayo-Gomez C, Thedim-Costa SMF. Incorporação das ciências sociais na produção de conhecimentos sobre trabalho e saúde. Cien Saude Colet 2003; 8(1):125-136.
- 25. Alessi NP, da Silva GB, Pinheiro SA, Scopinho RA. Formação de recursos humanos para a área de saúde do trabalhador: o processo de implantação da ficha epidemiológica de Saúde e Trabalho na prática profissional de um centro escola. Rev Bras Saude Ocup 1991; 19(72):45-58.
- Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. Rev Bras Saude Ocup 1992; 20(76):5.
- Santana VS. Saúde do trabalhador no Brasil: pesquisa na pós-graduação. Rev Saude Publica 2006; 40(spe):101-111.
- Revista Brasileira de Saúde Ocupacional (RBSO). Editorial. Rev Bras Saude Ocup 2003; 28(107-108):5.
- Jackson Filho JM, Barreiros D. Editorial. Rev Bras Saude Ocup 2005; 30(111):4.
- Lacaz FAC, Jackson Filho JM, Costa DF, Vilela RAG. Resultado da parceria entre a RBSO e o GT saúde do trabalhador da Abrasco. Rev Bras Saude Ocup 2013; 38(127):9-10.
- 31. Wünsch Filho V. A RBSO em perspectiva. Rev Bras Saude Ocup 2011; 36(123):6-7.
- 32. Assunção AA. Revista Brasileira de Saúde Ocupacional 40 anos. *Rev Bras Saude Ocup* 2013; 38(128):173-176.
- Oliveira VGA. O trabalho penoso sob a ótica do Judiciário Trabalhista de São Paulo, no âmbito do Tribunal regional do Trabalho da 15ª Região, no período de 2011 a 2013 [dissertação]. São Paulo: Fundacentro; 2015.
- Leavell HR, Clark EG. Medicina Preventiva. São Paulo: McGraw-Hill do Brasil; 1978.
- Algranti E, Jackson Filho JM. Estudos de prevalência na RBSO: como separar o joio do trigo? Rev Bras Saude Ocup 2014; 39(130):125-126.
- Jackson Filho JM. Editorial. Rev Bras Saude Ocup 2005; 30(112):2.
- Vasconcellos LCF, Oliveira MHB. Saúde, trabalho e direito: uma trajetória crítica e a crítica de uma trajetória. Rio de Janeiro: Educam; 2011.