Promotion of Worker’s Health in Qualitative Research Approaches: A Scoping Review

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Abstract

Background

It is known that the investment in promoting health, both at the individual level and at the organizational level can bring benefits to all individuals included in this process. This Scoping Review compares the main results addressed in Brazilian qualitative researches and in other countries that addressed the topic of workers’ health promotion.

Methods

Thirty-three articles were selected for analysis from the SciELO, BVS - BDENF/Index, PubMed, and LILACS databases. Scientific articles that used a qualitative or quantitative-qualitative approach in Portuguese, English or Spanish, during the period from 2009 to the present moment of our Review (October 2019) were included. This Scoping Review was guided by Arksey and O’Malley’s framework.

Results

The literature review allowed the discussion on the following related topics: worker’s social participation in health decisions, perceptions/meanings about health promotion, working conditions and worker’s suffering, working conditions and the risk of illness, worker’s awareness, and changes in lifestyles, employers’ stereotypes about their workers and health promotion, the use of technology in health promotion interventions, the importance of communication in promoting workers’ health and social support at work for carrying out health promotion actions.

Conclusion

This study showed differences in the research analyzed and provided the mapping of the main results that may support future research and changes in worker’s health policies in general. While in Brazil, studies are still focused on workers’ perceptions about health promotion and the assessment of working conditions risks to their health, in other
countries, most qualitative research has been used to assess workers’ perceptions after a given workplace health promotion intervention.

Background

The 1986 Ottawa Charter represents one of the main documents establishing the conceptual and political foundations for health promotion in the world. This document highlights the multiplicity of factors related to the health-disease process and highlights how health promotion practices deal with this multiplicity by combining the various actors (the State, the community, individuals, the health system, among other sectors of society) and strategies, making it a process based on completeness and equity.¹

In Brazil, the idea of health promotion came through the Federal Constitution of 1988². By ensuring that health was considered a right of all and a duty of the state, the promotion of this right would occur through accessible actions and services, in a universal manner, and through both social and economic policies².

An analysis by Buss and Carvalho³ on the development of health promotion in Brazil from 1988 to 2008 showed that many advances were made, both in the area of health care services (highlighting the Family Health Program), as well as public policies (such as the Family Grant Program⁴). However, the authors point out that the promotional strategies, during the period analyzed, faced bureaucratic issues of the State, in a competitive sectoral culture and the biomedical culture, still guiding the health services. Health Promotion has been discussed in several countries, both as an intervention for changing lifestyles of communities and as a necessary health policy, given the increase in the aging population and the prevalence of chronic noncommunicable diseases⁵. It is known that the investment in promoting health, both at the individual level and at the organizational level can bring benefits to all individuals included in this process because,
in addition to causing an improvement, in terms of quality of life for the worker, there is a reduction in work absenteeism\(^6\). With this, the workplace has become a key player in health policies\(^7,8\).

The trend is that more workplace health promotion strategies will be planned, as workers have remained in their jobs beyond the age of 60. A study carried out to assess barriers to the implementation of occupational health promotion actions targeting an audience of age higher than 65 in European countries has already pointed to a range of obstacles, such as: lack of flexibility at work, lack of commitment of workers and employers, and absence of worker participation in the preparation of health interventions.\(^9\)

As the discussion on worker health promotion in Brazil is still very recent, it is worth questioning which results have been elucidated in the researches carried out here and what differences they present when compared with researches from other countries. Considering that the identification and understanding of the facilitators and barriers present in the process of consolidating a worker health promotion policy also require in-depth analysis, qualitative researches can provide valuable information. In this type of study, the researcher, in general, assumes a critical and implicated position in the process, highlighting the subjectivity and meanings recognized in the researched subjects. Interpretation by the researcher occurs in a contextualized manner with social, political, economic, cultural and historical issues\(^10\).

Due to the importance of research with this approach and the lack of research comparing the main results of qualitative studies conducted in Brazil and abroad, on the topic of occupational health promotion, this research aims to make such a comparison. These results may highlight knowledge gaps that deserve further studies, as well as may provide useful results that underpin health policies in the area.
Methods

For the conduction of this study, the Scoping Review methodology was used. This method is used when it aims to: a) identify available evidence types from a given field of study; b) clarify concepts in the literature; c) examine how research has been conducted in a particular field of study; d) identify key features of a concept; e) initiate a precursor study of a systematic review; and f) identify knowledge gaps\(^\text{11}\). Thus, this methodology meets the established objective, since it will allow us to know what has already been produced in the field of worker health promotion, and the results raised here may support future systematic reviews or other studies.

The Scoping Review methodology used was that outlined by Arksey and O’Malley of the University of York, United Kingdom\(^\text{12}\). This methodology consists of five stages:

- Stage 1: Identify a survey question
- Stage 2: Identify relevant studies
- Stage 3: Select studies
- Stage 4: Map the data
- Stage 5: Classify, summarize, and report results found

The research question that guided this study was: what are the similarities and differences presented in Brazilian studies and studies from other countries, which used a qualitative approach, to study about the promotion of workers’ health?

The inclusion criteria used to select the studies were: scientific articles that used a qualitative or quantitative-qualitative approach in Portuguese, English or Spanish; articles published in the period from 2009 to the present moment of our Review (October 2019). And editorial studies (letters, comments, brief notes), experience reports, review articles, theses, dissertations and article reflections were excluded from our sample.
Initially, the search for articles was performed in the following databases: Scientific Electronic Library Online (SciELO); Virtual Health Library (BVS), with access to the Nursing Specific Database (BDENF) and the Psychology Index; and Latin American and Caribbean Health Sciences Literature (LILACS). As a strategy for localization of articles we combine the following Health Sciences Descriptors (DeCS) with their Boolean operators: (“Health Promotion”, OR “Promoción de la Salud”, OR “Health Promotion”) AND (workers, OR trabajadores, OR trabajadores) AND (“pesquisa qualitativa” OR “qualitative research” OR “investigación cualitativa”). Next, a search was performed through the MEDLINE (Medical Literature Analysis and Retrieval System Online) database using the MeSH (Medical Subject Headings) terms: “Qualitative Research” AND “Health Promotion” AND Workplace. When locating the articles, we initially read the titles and abstracts, excluding those that did not meet the established criteria. Then, the pre-selected papers were read in full and, based on this broader evaluation, they made up or not the final sample. In Figure 1, we describe this process objectively.

The articles that made up this final analysis were thoroughly read by the authors, seeking to adjust the main results brought, as well as meeting the established objective of comparing these results, evaluating possible similarities/differences. To assist in this analysis, two tables were created to facilitate the visualization of characteristics of these studies.

Results

**Brief description of selected studies**

**Studies conducted in Brazil**

Considering the guiding question, the objective and the inclusion and exclusion criteria, 16 research articles conducted in Brazil were selected and analyzed. The main characteristics of these studies can be better seen in Table 1 (authors/year, audience
investigated, objective and categories that emerged from the analysis).

Regarding the investigated audience, the majority (nine studies) addressed health professionals (doctors, nurses and community health agents). Others studied workers from different areas, such as: collectors of recyclable materials, penitentiary agents, Landless Rural Workers, musicians, market vendors and workers from port communities (Table 1).

Table 1. Summary of selected Brazilian studies

| Audience investigated                                      | Objective                                                                                                    | Category                              |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Trade union representatives and various workers            | Evaluate the Worker’s Health Reference Center of Ceará (CEREST-CE) based on the beliefs of union representatives and users. | Social participation                  |
| Health workers                                             | Describe the participation of the health workers segment in the Guarulhos Municipal Health Council, identifying the factors that may constitute obstacles to their effective participation. | Social participation                  |
| Health workers                                             | Understand the daily limits pointed out by Primary Care workers to promote their health.                      | Perceptions/meanings on health promotion |
| Health workers                                             | Identify the perception of nursing workers about the working conditions in which they are inserted and propose measures to minimize their negative impacts on the health-disease process of these workers. | Working conditions and workers suffering |
| Recyclable material pickers                                 | Understand the risk of work-related illness and defensive strategies in female recyclable material pickers. | Working conditions and workers suffering |
| Correctional officers                                      | Know the working conditions of correctional officers and the impacts of labor activity exercise in their health. | Working conditions                    |
| Health workers                                             | Identify the perception of nursing workers about self-care; describe the actions that workers perform to take care of themselves; and discuss the repercussions of self-care on the health of these workers. | Perceptions/meanings on health promotion |
| Port community workers                                     | This study discusses aspects of economic development and implications for work, environment and health in communities surrounding the Pecém Industrial and Port Complex in Ceará. | Working conditions                    |
| Musicians                                                  | Investigate the risk factors present in work activity and their impact on the health of instrumental musicians of the Paraná Symphony Orchestra. | Working conditions                    |
| Landless Rural Workers                                      | Analyze the lifestyles and meanings attributed by settlers of the Landless Rural Workers Movement (MST) to health and their relationships with work, and identify strategies developed by workers to maintain and/or promote health. | Perceptions/meanings on health promotion |
| Health workers | Understand how conflicts with the institution and disagreements regarding the attributions of team members are captured and reconstructed by Family Health doctors, from the perspective of “burnout.” | Working conditions |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Health workers | Analyze meanings attributed by the ACS to the types, forms of reference and naming of violence experienced in daily work in the neighborhood of Candeal, Sanitary District of Brotas in the city of Salvador. | Working conditions |
| Market vendors | Get to know the perceptions of market vendors with high blood pressure about chronic illness. | Working conditions |
| Health workers | Describe the perception of community health agents about risks and injuries related to their occupational activities; | Working conditions |
| Health workers | Get to know the perception of family health professionals about health promotion; identify the practices adopted to promote health and the easiness and difficulties in performing such practices. | Perceptions/measurements |
| Health workers | Evaluate and discuss the strategies proposed by nurses of a Teaching Hospital in the city of Rio de Janeiro for health promotion at work. | Perceptions/measurements |

Regarding the methodological aspects, it was observed that only two studies described, in the methodology, what would be the theoretical framework used to base and compare the results. The references used were: Comprehensive Sociology and Daily Life, such as postmodernity, tribe, ethics of aesthetics, powers, limits and, especially, Theoretical Assumptions and Sensitivity; and the ergological approach to understanding “human activity”. Regarding the methodological framework of analysis of the collected data, it is observed that most used content analysis; one study used speech analysis; another study used Ergonomic Analysis of Work; one study used the hermeneutic-dialectical approach; another used only the hermeneutic approach; other authors used the analysis of the Collective Subject Discourse; and, finally, two studies did not use a specific analysis reference.

**Studies conducted in other countries**
Table 2 summarizes the research conducted in other countries, according to the objective, interviewed audience, and the categories that emerged from the analysis.

### Table 2. Characteristics of qualitative research conducted in other countries

| Authors/year | Country          | Audience investigated                                      | Objective                                                                                                                                                                                                 |
|--------------|------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agosti et al 29 2019 | Sweden | Nursing, social work, cooking and personal care workers | Explore the participation of women in the human services sector in the BELE Program in relation to the balance between work life and well-being |
| Allen et al 30 2015 | United States | Restaurant workers                                         | Identify barriers and easiness to promote smoking cessation, physical activity and influenza vaccination in restaurants                                                                                     |
| Smith et al 31 2017 | England | Workers who performed dietary interventions in the workplace | Explore the perceptions and experiences of workers who have implemented dietary interventions at the workplace                                                                                              |
| Liau et al 32 2014 | Malaysia | Workers of the engineering sector                          | Explore participants’ perceptions of the quality and effectiveness of the ‘Love Your Heart’ Program                                                                                                         |
| Hjarnoe and Leppin 33 2014 | Denmark | Chefs and kitchen assistants                               | The aim of this study was to examine whether a training intervention for ships cooks could improve the diet of seafarers on board and, in particular, identify possible practical challenges on board ships of two Danish shipping companies. |
| Audrey and Procter 34 2015 | England | Employers of various companies                             | Describe employers’ experiences about interventions that encourage workers to walk to work                                                                                                                  |
| Chau et al 35 2014 | Australia | Office workers                                             | Assess the acceptability, feasibility and perceptions of sit-stand workstation use in a group of office workers.                                                                                               |
| Narushima and Sanchez 36 2014 | Canada | Employers (farmers)                                        | Explore farmers’ perceptions of occupational safety and overall health of their workers and their attitudes related to health promotion at work                                                                |
| Study                                      | Country     | Study Group                          | Study Objective                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------|-------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pescud et al\(^{37}\) 2015               | Australia   | Employers (industrial sector)         | The aim of the study was to explore employers’ views about workplace health and well-being promotion and factors that affect these views.                                                                                                                                                                                                                                                                       |
| Strickland et al\(^{38}\) 2015           | United States | Trade union representatives, employers and workers | Examine workplace determinants of obesity and participation in employer-sponsored wellness programs                                                                                                                                                                                                                               |
| Lake et al\(^{39}\) 2016                 | England     | Office workers                        | Qualitatively determine the perceived behavior changes of participants in an intervention that offered free fruits at work                                                                                                                                                                                                 |
| Quintiliani et al\(^{40}\) 2012          | United States | Working students                     | Examine influences on healthy nutrition and physical activity behavior among students                                                                                                                                                                                                                                                                   |
| Hammerback et al\(^{41}\) 2015           | United States | Workers and partners of an industrial sector | Understand the attitudes of industry employees’ workplace health promotion, including views on the adequacy of employer involvement in employee health and the level of interest in workplace health promotion in general and specific programs; and determine the potential for extending workplace health promotion to the spouses and partners of these workers. |
| Seaton et al\(^{42}\) 2017               | Canada      | Diverse workers                       | Evaluate program acceptability reflected by employees’ engagement of and perceptions of POWERPLAY and its influence in the workplace; and gather recommendations for program refinement.                                                                                                                                                                                           |
| Bredahl et al\(^{43}\) 2015              | Denmark     | Office workers                        | Provide a comprehensive understanding of the motivational factors and barriers to high-intensity physical exercises in the workplace to prevent musculoskeletal disorders.                                                                                                                                                                                                                                           |
| Balk-Møller, Larsen and Holm\(^{44}\) 2017 | Denmark     | Health and social service workers     | Investigate the motivation behind participation and use of virtual tools (App and Web - SoSu-Life) for workplace health promotion and explore participants’ experiences.                                                                                                                                                                                                                                           |
Sendall et al.\textsuperscript{45} 2018 Australia Truck drivers Evaluate a health promotion intervention through social media (Facebook) in the Australian transport industry

Regarding the methodology of studies presented in this section, eleven were a post-intervention qualitative evaluation\textsuperscript{29,31,32,33,34,35,39,42,43,44,45}. Being that four used interviews and focus groups as the data collection method\textsuperscript{29,38,44,45}; three, focus groups only\textsuperscript{30,35,37}; eight, interviews only\textsuperscript{31,32,34,36,39,40,41,43}; and two conducted interviews and participant observation\textsuperscript{33,42}. Regarding the theoretical and/or methodological reference for data analysis, one study used the Socio-Ecological Model of Health Promotion\textsuperscript{31}; five used the Grounded Theory\textsuperscript{32,36,37,39,41}; one used Phenomenology\textsuperscript{37}; others, thematic analysis only\textsuperscript{34,38,40,42,43,44,45}. Some studies used software, such as Atlas.ti\textsuperscript{30,40,41}, or the N-Vivo\textsuperscript{33,35,37,38,39,42,43} to assist in the organization and analysis of data.

Discussion

\textbf{Studies conducted in Brazil}

Social participation: an essential principle in the field of Worker’s Health

One of the selected studies evaluated the Worker’s Health Reference Center of Ceará, Brazil (CEREST-CE) based on the beliefs of union representatives and users. The authors identified that there was a lack of dissemination of CEREST-CE activities, and thus, the
lack of knowledge of workers to occupy this space, which is an ally in the implementation of important policies in the area\textsuperscript{13}.

Another study\textsuperscript{14} showed another problem related to social participation. The authors described how the participation of the workers’ segments occurred in a Municipal Health Council, however, their results pointed out that besides not being clear among those who were part of the workers’ representatives, their performance was mostly technical and minimally politicized.

It is known that social participation is crucial to bring about changes in public policies. Surveillance, protection, and health promotion practices should occur in a dialogic and participatory manner and should provide the inclusion of workers and their representatives in this process, which requires much more than the mere creation of legal provisions\textsuperscript{46}.

**Working conditions and workers’ suffering**

Studies covered by this topic show a diversity of factors, related to working conditions, that cause suffering to the worker. Respondents reported:

Lack of identification with the task\textsuperscript{23};
Difficulty in interpersonal relationship with the work team\textsuperscript{16,17,23,24};
Exposure to workplace violence\textsuperscript{18,23,24,26};
Devaluation of the worker\textsuperscript{18,23};
Feeling helpless, given the non-resolution of problems, which require greater State participation\textsuperscript{18,24};
Uninterrupted work\textsuperscript{24,26};
Lack of materials and adequate infrastructure to perform their work \textsuperscript{16,17,18,21,24,26};
Unavailability of adequate food in the workplace\textsuperscript{25};
Exposure to unhealthy conditions\textsuperscript{26};
Alteration of family dynamics by the imposition of new production processes\textsuperscript{20};
Non-participation in decision making processes\textsuperscript{20,21};
Misalignment between new productive activities and ecological characteristics of the territory\textsuperscript{20};
Repetitive work\textsuperscript{21};
And unpredictability of the task\textsuperscript{21}.

The relationship between work and mental health has been increasingly studied, given the
consequences to the worker and the economic sphere of a country, which loses in terms of workforce. Although only one of the selected studies addresses this topic specifically, the impact that working conditions have on their mental health is implicit in the interviewees’ speech.

**Perceptions/meanings on health promotion**

Understanding the workers’ meanings and perceptions about health promotion can bring elements that help in the preparation of health policies in this area, as well as evidence that its concept is not yet clear for this population. In this case, the lack of knowledge can be problematic because it becomes an obstacle to the workers’ struggle for a right already provided for in the constitution: health.

In one of the selected studies, the main thematic category of their results concerns the time available to perform health promotion activities. Workers reported that it was necessary to know how to manage time for physical exercises and leisure. Work enters this scenario as a restrictor to health promotion, as it is reported that there is an excessive workload, in addition to the time taken to get to the workplace.

In addition, it is observed that the perception of workers about health promotion is very focused on the individual character of actions, thus disregarding the responsibility of the State in the implementation of this public policy. This more individualistic view of health promotion also appears in other studies.

The study by Santos and Hennington shows as one of the important elements for health promotion, the meaning that the worker attributes to his work. This perspective allows the worker to avail himself as a subject endowed with desires and needs. In addition, the authors report how the difficulty of access to primary care health services in Brazil has been an obstacle for these workers to participate in health promotion actions. This result
shows a failure in the health system, as health promotion and its protection must be made possible through programs and services, at different levels of care, for the entire population\textsuperscript{3,48}.

**Studies conducted in other countries**

**Raise awareness to change lifestyles**

Some selected studies allowed to identify that workers’ awareness of aspects of their life and health can motivate them to bring about changes in their lifestyles. This awareness occurred in more personal aspects of women’s lives (the double workday - in and out of the house)\textsuperscript{29} but was also related to the physical health of workers\textsuperscript{32,39,44}.

**Employers’ stereotypes**

An important piece of data identified in this study concerns employers’ stereotypes. It was elucidated that the understanding of many about health promotion through incentives for lifestyle changes was considered very personal, and sometimes intrusive\textsuperscript{30,34,37}. In addition, for some employers, workers would not be interested in programs that promote health, given the individual characteristics of workers (for example, age)\textsuperscript{34}, work intensity\textsuperscript{36}, or that their interest would be directed to the purchase of health insurance\textsuperscript{30}, or interested in just making money\textsuperscript{36,37}.

**Working conditions and the risk of illness**

Many workers reported difficulties, present or related to work, to effect change in their lifestyle. An intense or irregular workday has been reported as barriers to physical activity\textsuperscript{30,33,38,43}. Another very common issue in this category concerns the unavailability of healthy food in the workplace\textsuperscript{31,39,40,41}. Considering that the worker spends a third or more of his day at the workplace, it is essential to have options for a balanced diet.

**Social support at work**
An aspect also present in the selected studies concerns the importance of social support at work. This factor was seen as facilitating the adherence of workers to health promotion interventions. The favorable organizational climate for these activities promoted a greater sense of acceptability\textsuperscript{35,42,43}.

The importance of communication to promote occupational health

When it comes to health promotion, the role of communication in this process is evident. Information needs to be clear, objective and accessible to all\textsuperscript{42}. Therefore, some workers reported preferring to have the information shared personally\textsuperscript{32,41,43}.

Technology and its possibilities/difficulties

With the advancement of technology, interventions to promote workers’ health gained another ally. The use of applications and/or websites through smartphones, computers, or tablets can be useful tools in this area, especially when the target audience of interventions is not very available given the particularities of their work (transport sector)\textsuperscript{45}. Using these resources enables more objective and practical learning and can enable greater interaction between coworkers\textsuperscript{44}. A barrier to the use of these technologies in the workplace for health promotion concerns the cost of such equipment, but also the unfamiliarity that some workers may have with the platforms used\textsuperscript{45}.

Limitations

The present scoping review is one of the first that proposed to analyze studies with a qualitative approach with this subject, comparing results present in Brazilian research with those from other countries. Despite its specificity, there are limitations. Not all existing databases were consulted for this research. The articles selected were those that were fully available for reading. Therefore, articles that are not open to access were not analyzed. Finally, given the specificity of the objective of this research, only studies with
qualitative approach were analyzed.

**Recommendations for future work**

Considering that other research approaches may bring important results for the advancement of the worker health promotion policy, future researches should cover other methodologies. In addition, as noted in this review, many qualitative surveys have been conducted to evaluate workplace health promotion interventions, so further research could focus on participant adherence and the impact of these interventions. Finally, given the increased use of technology in health interventions, other reviews could focus on this specific tool to highlight the advantages and limitations in the various work scenarios.

**Conclusions**

This study identified a wide range of discussion categories based on the 33 selected articles. It was possible to realize that while in Brazil, studies are still focused on workers’ perceptions about health promotion and the assessment of working conditions risks to their health, in other countries, most qualitative research has been used to assess workers’ perceptions after a given workplace health promotion intervention. Moreover, in Brazil, qualitative research has pointed out the difficulties present in the participatory process of workers in health decisions and the characteristics of the work process potentially causing suffering. In other countries, the discussion has covered the use of technologies in the health promotion process and the employers’ perception in the implementation of these strategies, and the stereotypes present have been investigated. Thus, this Scoping Review allowed us to map the differences/similarities of these researches and it is hoped that the results presented here will serve as a basis for future studies and enable changes in policies to promote worker’s health. The success of interventions in the field of worker’s health depends on the particularities of each demand and, of course, on the particularities of the workers themselves.
List Of Abbreviations

**BDENF** Nursing Specific Database

**BVS** Virtual Health Library

**CEREST** Worker’s Health Reference Center

**CE** Ceará/Brazil

**DeCS** Health Sciences Descriptors

**LILACS** Latin American and Caribbean Health Sciences Literature

**MEDLINE** Medical Literature Analysis and Retrieval System Online

**MeSH** Medical Subject Headings

**SciELO** Scientific Eletronic Library Online

Declarations

**Ethics approval and consent to participate**

Not applicable

**Consent for publication**

Not applicable

**Availability of data and materials**

The datasets supporting the conclusions of this article are included within the article and its additional files.

**Competing interests**

The authors declare that they have no competing interests.

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**Authors’ contributions**
GASC conceived the study, developed and carried out the academic literature search, analyzed all selected articles, and wrote the manuscript. FGO analyzed the results and assisted in the revision of the manuscript. CMM conceived the study, analyzed the results, and assisted in the review of the manuscript. All authors read and approved the final manuscript.

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Figures

176 articles were initially identified in the databases using the terms DeCS and MeSH
- BVS (35)
- SciELO (14)
- LILACS (107)
- MEDLINE (20)

8 repeated articles were excluded
168 articles had their titles and abstracts analyzed
135 articles were excluded according to the exclusion criteria.
33 complete articles were included in the analysis:
- BVS (4)
- LILACS (12)
- MEDLINE (17)

Figure 1

Article selection process