

## Revision articles

# Knowledge production on community education and audiology in primary health care

## *Produção do conhecimento sobre educação popular e audiologia na atenção primária*

Marcelo Luiz Medeiros Soares<sup>(1)</sup>

<sup>(1)</sup> Universidade Federal do Rio Grande do Norte, UFRN. Natal, RN – Brasil.

Conflict of interest: non-existent

Received on: December 03, 2015  
Accepted on: April 20, 2016

### Mailing address:

Marcelo Luiz Medeiros Soares  
Rua Doutor Viriato Correia – 138  
Natal – RN - Brasil  
CEP: 59131-060  
E-mail: marcelloluyz2@hotmail.com

### ABSTRACT

Many public policies involving primary care have been regulated in response to the desire of the population for a public health more just and equal. This process was followed by Hearing health and came quickly the National Policy of Hearing Health Care. One of his goals is to structure a network of care health promotion actions that ensure social participation and popular education using health education. Integrative review of literature that sought to analyze the educational processes in hearing care that have been developed in Brazil and published in the scientific literature. The analysis material consisted of 22 publications in the period from 2005 to 2015. Therefore, we consulted scientific journals, books, conference proceedings of the Brazilian Society of Speech Pathology, and virtual databases. It was observed that 59% of the analyzed educational interventions have been developed in isolation this means conducted in up to two meetings and that 63.6 % had educational dynamics unidirectional understood as a vertical and authoritarian relationship. Community Health Agents and children were the most frequent audience both with 27.2% of representations. The main contents discussed were General Audiology and Occupational Audiology also with 27.2 % of the thematic universe. It is essential to the structuring and review of forms of development, dynamics and strategies used as well as building control mechanisms for the observation of parameters such as efficiency, effectiveness, responsiveness, coverage, access and affordability in order to guarantee the quality of service in perspective of health promotion.

**Keywords:** Audiology; Primary Health Care; Health Education; Speech-language Pathology; Public Health

### RESUMO

Diversas políticas públicas envolvendo a atenção básica vêm sendo regulamentadas em respostas ao anseio da população brasileira por uma saúde pública mais justa, integral e equânime. A saúde auditiva acompanhou esse processo e logo surgiu a Política Nacional de Atenção à Saúde Auditiva, cujo um de seus objetivos é a estruturação de uma rede de cuidados, com ações de promoção da saúde capazes de assegurar a participação social e educação popular, utilizando, dentre outras ferramentas, a educação em saúde. Estudo de revisão integrativa da literatura que buscou analisar os processos educativos em saúde auditiva de caráter coletivo que vêm sendo desenvolvidos no Brasil e publicados na literatura científica. O material de análise foi constituído por 22 publicações, no período entre 2005 a 2015. Para tanto foram consultados periódicos científicos, livros, anais de congressos da Sociedade Brasileira de Fonoaudiologia, além de bases de dados virtuais. Percebeu-se que 59% das intervenções educativas analisadas foram desenvolvidas de maneira pontual, ou seja, conduzidos em até dois encontros e que 63,6% possuíam dinâmica educativa unidirecional, entendido como uma relação verticalizada e autoritária. Quanto ao público-alvo, prevaleceram os agentes comunitários de saúde e escolares, ambos com 27,2% da representação. Os principais conteúdos abordados foram Audiologia Geral e Audiologia Ocupacional, também com 27,2% do universo temático. É imprescindível a estruturação e revisão das formas de desenvolvimento, dinâmicas e estratégias utilizadas, além da construção de mecanismos de controle que permitam a observação de parâmetros como eficiência, eficácia, efetividade, abrangência, acesso e acessibilidade como forma de garantir a qualidade do serviço na perspectiva da promoção da saúde.

**Descritores:** Audiologia; Atenção Primária; Educação em Saúde; Fonoaudiologia; Saúde Pública

## INTRODUCTION

The implementation of an equitable, integral and universal health care is social and political processes that can be made through the creation of public policies for health. It is also essential that these policies are present in the actions of daily life and health services, it means, know and do, taking into account the current legislation and sensitive experiential pedagogy. The prospect that public health policies are practiced in community territory and contribute to the qualification in various aspects of the SUS, has been important to the critical analysis of health work processes to the production of new knowledge in a consolidated field and development new health practices in line with the principles proposed guidelines and standards<sup>1</sup>.

In the last two decades, various policies were instituted and regulated in response to the desire of the population for a more just public health, equitable, humane and integral for all. In the area of communications Sciences, hearing health achieved great representativeness. In 2000, the Ministry of Health made public the ordinance MS/SAS 434. This was the first step towards the emergence of the National Attention to Hearing Health Policy, because this legal provision has determined some considerable advances, such as the formation of a multidisciplinary team, the service organization designed specifically for patients of hearing health and speech therapy associated to hearing aid gran<sup>2</sup>.

The policy was definitely established with the publication of legal provision 2.073/GM in September 2004, which had as one of the key points the consolidation, organization and operation of speech therapy practice within the public health system in the field of Social Audiology. The audiologist was directed as responsible for the diagnosis, selection and individual hearing aid adaptation and monitoring of patients with hearing loss. The legal provision established the organization of the implementation of the new network in coordination among the three spheres of power and met the demands of promotion, prevention and rehabilitation<sup>2</sup>.

Even in the middle of 2004, in October, they became public two other ordinances, MS/SAS 587 and MS/SAS 589, which established the registration of Hearing Health Care Services and the duties of the three different levels of complexity of the system. From this perspective, primary care is responsible for collective actions aimed at promoting hearing health, prevention and early identification of hearing disability, in addition to holding activities and informational and educational

processes. Past few years since the implementation of this policy, there are few studies objectified to evaluate, monitor and critically analyze the processes that involve health education and health hearing held within the primary care<sup>3</sup>.

In the health education practice, it is understood by this term any learning experiences arrangements outlined in order to facilitate voluntary actions conducive to health. Combining behavioral plurality with the experience of educational interventions, in order to enable constructive moments, without coercion and with full harmony and acceptance of implicit and explicit objectives proposed in the development of individuals capable of self-care<sup>4</sup>.

As for the relationship between education and health, the global media and the daily coexistence eventually become the two main poles of diffusion of knowledge. The latter creates a bond based on trust among the various actors, providing a rich learning the ways of a health education to consider the autonomy and highlight the culture of the population<sup>5</sup>.

In the territories, health education is not the only educational architecture that values aspects such as social plurality, dynamic interaction, deal with the most vulnerable classes, social participation and dialogue between popular knowledge and scientific knowledge. However, just being in the public health setting, a milestone in the development of a new professional culture that seeks to break old paradigms and authoritarian traditions that permeated the relationships in the health system<sup>5</sup>.

Studies seeking to observe certain experiences in health education in the SUS concluded that this practice is considered a fundamental methodological tool for a deeper reorganization of systems and need to be increasingly encouraged, as they allow increasingly building a more attention integral, in which people and groups can take greater control over their health and their lives<sup>6</sup>.

It should be noted that although, as are observed reasonable actions to encourage health education, this strategy is still considered a major challenge for the multidisciplinary teams that work in primary care, has no standard model, monitoring, specific monitoring or advice regarding the educational practices to be developed<sup>5</sup>.

In face of, note the need to check what is being done about the theme addressed by exposing the methods and practices used in informative interventions in hearing health and confronting them with what

is considered ideal by the scientific literature. Therefore, this study aimed to analyze in the art published on the educational processes of collective actions of hearing health in Brazil. The following analytical perspective guides the study: the distribution of publications over time; the identification and characterization of the educational process; the categorization of the focuses and themes / content and its relation to the publication period.

## METHODS

This is an integrative literature review. As a fundamental principle of evidence-based research, the research question of this study was: "What has been

published on educational processes in hearing health in the Brazilian scientific literature?"

Therefore, they were consulted national scientific journals, books, conference proceedings of the Brazilian Society of Speech Pathology, and virtual databases (MedLine, LILACS, Cochrane Library, SciELO, OneFile ((GALE)), ERIC, SciVerse ScienceDirect e Biblioteca Digital Brasileira de Teses e Dissertações).

Search strategy used in the literature review was guided by combining ten descriptors indexed in MeSH *Database* da MedLine, in Portuguese and English language, in seven search keys. For the realization of screenings, the descriptors were used as shown in Table 1.

**Table 1.** Key words indexed in MeSH used in the search strategy

Keywords in Brazilian Portuguese	Keywords in English
Educação em Saúde x Fonoaudiologia ou Audiologia x Atenção Básica	Health education x Speech-language Pathology or Audiology x Primary Health Care
Oficinas x Fonoaudiologia ou Audiologia x Atenção Básica	Workshops x Speech-language Pathology or Audiology x Primary Health Care
Atividades Educativas x Fonoaudiologia ou Audiologia x Atenção Básica	Educational Activity x Speech-language Pathology or Audiology x Primary Health Care
Atividades Educacionais x Fonoaudiologia ou Audiologia x Atenção Básica	Educational Activities x Speech-language Pathology or Audiology x Primary Health Care
Promoção em Saúde x Fonoaudiologia ou Audiologia x Atenção Básica	Health Promotion x Speech-language Pathology or Audiology x Primary Health Care
Educação em Saúde x Perda Auditiva x Atenção Básica	Health education x Hearing Loss x Primary Health Care
Educação em Saúde x Perda Auditiva x Saúde Pública	Health education x Hearing Loss x Public Health

Source: MeSH/MEDLINE (2015)

The collection of studies following inclusion criteria based on the proposed theme and objectives of this work. The adopted criteria for the inclusion of studies in this systematic review were studies involving educational processes applied to hearing health; performed the last fifteen years (2000-2015); conducted in the Brazilian public health scene; published in Portuguese and English and; original articles, theses and dissertations related to the topic.

Was excluded the works of purely theoretical and bibliographic; epidemiological surveys, the directed to the audiological evaluation, relating to individual and / or collective interventions of clinical character, as well as those limited to the purpose of surveys of the prevalence of disorders, changes, complaints and symptoms

hearing and did not incorporate the experiences of educational interventions.

The selection of studies was done in three steps after the initial search based on pre-established keywords. Following, we analyzed all studies found by combining the descriptors in data bases. This first selection was the study under analysis, and selected items that had predetermined eligibility criteria and above, at this stage, were found 39 items (step 1).

Then there was the reading of abstracts of articles if they addressed in their methodologies some educational mechanism that regardless of the professionals involved, explicitly addressed the hearing health. At this stage, 17 articles were excluded because they are limited to the purpose of surveys of the prevalence of

disorders, changes, complaints and auditory symptoms (step 2).

After all selected studies, 22 articles were read and analyzed in full (Step 3).

We used the PEDro scale for the analysis of the methodological quality of the selected studies, specifically for evaluating aspects of internal validity and performed careful analysis by the researchers to ensure that the selected studies were in accordance with the criteria initially established.

## LITERATURE REVIEW

The Audiology was structured in the mid-1940s, after World War II, in the United States and after the 1960s, he arrived in Brazil. his area of knowledge is understood as a part of Human Communication Sciences dedicated to the study of hearing, and the means to prevent, identify, evaluate, diagnose and intervene in the hearing and balance disorders in children, adults and elderly, promoting hearing health of the individual and the collectivity<sup>7,8</sup>.

Research published in the last decade have elected the hearing as among all human shortcomings, one of the most devastating in relation to communication, interaction and social life, because it interferes directly in the development and maintenance of language, speech, interpersonal and learning relations and could harm school, professional and social performance<sup>8</sup>.

The development of audiology and auditory health care has benefited through various legal provisions approved by the Ministries of Health, Labor and scientific production of speech therapists that are dedicated to this area of knowledge. However, historically, the vast majority of studies carried out in this field of knowledge has clinical and therapeutic-rehabilitative character and prioritizes prevalence surveys and incidence. In Brazil, few studies refer to the analysis of project promotion, prevention and early identification of hearing problems in the community, as well as informative and educational proposals aimed at primary care<sup>9</sup>.

Thus, they were found and analyzed 22 publications between 2005 and 2015, duly organized in Table 2.

A comprehensive analysis of quantitative character, sought the distribution of publications over time. The results are organized by periods of three years, except for the year 2015, which was incorporated into the final set of years, adding a compound four years. Observable in Table 3.

It can be seen the lack of studies published in the area today. From 2006 we can see the emergence of

publications related to the topic, and most of the halves were linked to scientific media in recent years, between 2009 and 2015.

These data reinforce the findings of a study that aimed to analyze the incidence of publications made in Audiology. It was recorded the progressive increase in the number of publications in 2006 and considerable multiplication of studies from 2009. The author adds that work on hearing health associated with primary care appear fewer<sup>10</sup>.

Around the year 2005 began a process of feedback between the published art and the political and social developments within the hearing health, and thus the literature that its foundations projects of public policies in favor of welfare hearing has to be stimulated and increasingly developed. The increase in articles published in that period can be understood as a response to theoretical and practical information provided by the approval of the National Attention to Hearing Health Policy, by Ordinance GM in 2073, in 2004, which had the main objective to protect, restore health and guarantee the quality of life and autonomy of people with hearing impairment<sup>10,11</sup>.

In the list of guidelines proposed by the Hearing Health Care National Policy for the actions at the national level, it is possible to observe the structure of a network of care, health promotion, prevention, treatment and rehabilitation in low, medium and high complexity. In addition to the importance of identifying the determinants and conditions of the main disease processes and vulnerabilities that lead to hearing loss; the definition of minimum standards for the operation and evaluation of services that perform hearing rehabilitation. In line with the guidelines of the Unified Health System and the National Health Policy of People with Disabilities, the policy emphasizes the importance of access, accessibility, equity, comprehensiveness and social control in the actions of hearing health. It also shows the importance of continuing education of the professionals, the indispensability of dissemination of information luggage on hearing health, and popular education as a way to ensure social participation and self-care<sup>11,12</sup>.

After that marked the presence of speech in the teams of the Family Health Program and Family Health Support Center was increasingly common. With its empirical heritage and different look, these professionals have contributed significantly to the structuring of practices in primary care settings and developing actions and health education about research within the

**Table 2.** Organization of selected studies

Title	Authors	Year
Promoção da Saúde Auditiva Baseada na Dinâmica do Projeto Jovem Doutor	Corrêa CC, Silva RA, Barros GT, et al.	2015
Efeito de Intervenção Educativa no Conhecimento de Gestantes Sobre Triagem Auditiva Neonatal	Oliveira CL.	2015
Capacitação em Saúde Auditiva: Avaliação da Ferramenta no Programa de Telessaúde Brasil	Conceição HV, Barreira-Nielsen C.	2014
Promoção da Saúde Auditiva: Estratégias Educativas Desenvolvidas por Estudantes do Ensino Médio	França AG, Lacerda ABM.	2014
A Eficiência de Oficinas em Ações Educativas na Saúde Auditiva Realizadas com Trabalhadores Expostos ao Ruído	Moreira AC, Gonçalves CGO.	2014
Educação em Saúde Na Sala de Espera – Relato de Experiência	Reis FV, Brito JR, Santos JN, et al.	2014
Avaliação de Um Programa de Capacitação em Fonoaudiologia Para Agentes Comunitários de Saúde na Amazônia Brasileira	Arakawa AM, Sitta EI, Maia Junior A, et al.	2013
Projeto Jovem Doutor Bauru: Capacitação de Estudantes do Ensino Médio em Saúde Auditiva	Blasca WQ, Picolini MM, Silva ASC, et al.	2013
Oficina Educativa: Estratégia de Promoção da Saúde Auditiva do Escolar	Lobato DCB, Lacerda ABM, et al.	2013
A Teleducação Interativa na Capacitação de Profissionais em Saúde Auditiva	Ascencio ASC.	2012
Ensino a Distância na Capacitação de Agentes Comunitários de Saúde na Área de Saúde Auditiva Infantil: Análise da Eficácia do CD-ROM	Araújo ES.	2012
Ações em Saúde Auditiva Escolar no Município de Sobral-Ce: Percepção de Fonoaudiólogos	Correi FBF, Coelho JMS.	2012
Promoção da Saúde e Ações Fonoaudiológicas em Educação Infantil	Mendonça JE, Lemos SMA.	2011
Programa de Prevenção de Perdas Auditivas em Pescadores: Perfil Auditivo e Ações Educativas	Heupa AB, Gonçalves CGO, Albizu EJ, et al.	2011
Verificação da Efetividade de Uma Ação Educativa Sobre Proteção Auditiva Para Trabalhadores Expostos a Ruído	Rocha CH, Santos LHD, Moreira RR, et al.	2011
Capacitação de Agentes Comunitários de Saúde em Saúde Auditiva Infantil: Efetividade da Videoconferência	Melo TM, Alvarenga KF, Blasca WQ.	2010
Ações Educativas em Fonoaudiologia: Promovendo a Comunicação Saudável no Ambiente Escolar	Batista LM.	2010
Educação a Distância na Capacitação de Agentes Comunitários de Saúde na Área de Saúde Auditiva Infantil	Melo TM.	2009
Fonoaudiólogo e Agente Comunitário de Saúde: Uma Experiência Educativa	Brites LS, Souza APR, Hundertmarck AL.	2008
Ações Educativas com Enfoque Positivo em Programa de Conservação Auditiva e sua Avaliação	Bramatti L, Morata TC, Marques JM.	2008
Ações Educativas em Promoção da Saúde no Envelhecimento: A Experiência do Núcleo de Atenção ao Idoso da UNATI/UERJ	Assis M, Alvarez de Steenhagen CHV, Pacheco LC, et al.	2007
Programa de Orientação Não Presencial de Pais de Crianças com Deficiência Auditiva	Motti TFG.	2005

Source: Collection of research (2015)

**Table 3.** Disposition of publications considering publication period

Publication Period	N	%
2000-2002	0	0%
2003-2005	1	4,5%
2006-2008	3	13,6%
2009-2011	6	27,2%
2012-2015	12	54,5%
<b>Total</b>	<b>22</b>	<b>100%</b>

Source: Collection of research (2015)

N: Number of publications

Science of Human Communication, covering, among other things, Audiology<sup>13</sup>.

The other variables analyzed in this study, qualitative research sought to examine the educational processes developed in the primary care setting, ie, identify and characterize the forms of development of the actions,

the type of process and the main topics focus and themes, relating with the time.

As regards the constancy of meetings, we sought to identify the educational intervention was performed in a timely manner, in only one or two episodes or sequentially, adding three or more episodes. Observable in Table 4.

**Table 4.** Constancy of educational processes conducted

Constancy	N	%
Sequential	9	41%
Punctual	13	59%
<b>Total</b>	<b>22</b>	<b>100%</b>

Source: Collection of research (2015)

N: Number of publications

It is noticed that the actions have been carried out predominantly in a timely manner, composed of two meetings characterized by constituent groups under a proposal courses and workshops. The occasionally actions taken generally do not promote the consolidation of knowledge and build weak ties between teachers and students. Thus, most studies did not meet the parameters suggested by the literature that consider interventions developed sequentially more relevant to health promotion proposals.

The pedagogical processes are still predominantly associated with the perspective of transmission of knowledge and not of sociocultural transformation. The pedagogy of transformation assumes a crucial role of importance in relation to the educational process and in building a collective consciousness that is able to shape the different realities from the knowledge<sup>14</sup>.

It is important to highlight the need for professional pay attention to aspects that provide the development of not only disassociated and moments, but procedural

and articulated. This approach is understood as the best method when it comes to informative interventions and is linked to the pedagogical paradigms of reforms, since it provides the audience through reinforcement and frequent monitoring, awareness about the path of learning - Level absorption issues addressed, any questions and objectives to be achieved<sup>15</sup>.

In the dynamic context of actions, we sought to identify the unidirectional or multidirectional characterization, the latter can be cross, interactive, constructive, dynamic and participatory. Observable in Table 5.

In this study there was a higher prevalence of educational activities that prioritized one-way learning dynamics.

This dynamic has its foundations in traditional educational models, which establishes a vertical relationship and the role of active agent / owner of knowledge is unique technical professional. The isolated and authoritarian diffusion of knowledge ends up being the highest priority - exhibitions, speeches and explanations from

**Table 5.** Classification of publications according to the dynamics of the processes

Dinamic of the Process	N	%
Unidirectional	14	63,6%
Multidirectional	8	36,4%
<b>Total</b>	<b>22</b>	<b>100%</b>

Source: Collection of research (2015)

N: Number of publications

specific knowledge and scientific hegemonic without context and divorced from the local reality, distant from the population of the objectives outlined. Usually have cognitive and behavioral focus and has received no positive reviews in the specialized literature<sup>16</sup>.

In contrast, according to the art advocated by Paulo Freire, when the action is multidirectional and has dialogical slope, democratic, participatory and interactive, all the actors relate to associated and coordinated manner. Professional ceases to be the only active subject and integrates the group, sharing experiences reflected, discussed and built on the junction of scientific knowledge and popular. Thus, subjectivity, life stories, knowledge, beliefs and cultural experiences are as important as the formal theoretical concepts; while the different ways of perceiving the world, the various forms and types of expressions, opinions, feelings and ideas fortify the commitment of the subject as “being social”<sup>17</sup>.

It can be observed the relative diversity of developments in educational activities. The lack of a national system to regulate and guide the actions of hearing health in the area, combined with a poor literature aimed at the general research of educational processes in this area and associated with the plurality of conditions at the local level for the development of actions can partly explain such diferenças<sup>18</sup>. This confirms the need for research to organization and orientation of educational activities.

The work of many professionals grounded in the concepts established by the health education of the study has evolved considerably in the feeling of fighting old model of social medicalization, indifference to popular wisdom, the imposition of solutions and lack of space for patient autonomy. But not enough to just a portion of health workers do so, it is essential that knowledge is diffused and widespread across care network<sup>19</sup>.

The mechanistic and individualized way to see the processes of health and, consequently, the ways in which knowledge is transmitted in the context of

health education also has relative influence of the biomedical and hospital-centered model based on Flexner formation process. Understanding this, professional efforts and institutions committed to the quality of public health have been joining efforts and have achieved in the last decade change, hard, this critical panorama. Undoubtedly, it becomes ever more urgent the need to overcome the outdated models of health care, in which practices integrated into the reality and needs of the population took place only experimentally as point and temporary alternatives<sup>20</sup>.

This study also sought to categorize and rank the audience who attended with greater frequency of training activities. Observable in Table 6.

In this way, you can see that most educational activities was directed to technical and scientific training of community health workers and guidance of school, both with 27.2% of representations. These data are in line with the findings in a work which cites the increasing number of publications on hearing health involving aspects such as assessment of health service user satisfaction and training of professionals<sup>21</sup>. Another study reports that issues addressed in interventions in primary care are diversified, however, the professional training is most of these<sup>22</sup>.

Looking at the historical moment that accompanied the early 2000s, it is inevitable not associate such results to stimuli directed to the National Policy on Training and Development for the Health System and, specifically, the Community Agents of Health Program. These political devices and organizational seeking to enter the work management concepts and health education from the SUS principles and guidelines, and seek to promote the qualification and humanization in the services provided by the State<sup>23</sup>.

Concomitantly incentives to the relationship between personal and collective development, services, tactical management and social control, these processes are on the transfiguration of labor organization, instructional processes, experiences in health and pedagogical practices in dynamic relationships

**Table 6.** Target Audience

Target Audience	N	%
Community health workers	6	27,2%
Students	6	27,2%
Family with member hearing impaired	1	4,5%
Speech therapists	1	4,5%
Pregnant women	1	4,5%
Elderly	1	4,5%
Fishermen	2	9%
Teachers	1	4,5%
Population in general	1	4,5%
Workers in general	2	9%
<b>Total</b>	<b>22</b>	<b>100%</b>

**Source:** Collection of research (2015)

**N:** Number of publications

and permanent between training institutions and the health system in its various spheres of government for technical and pedagogical training of professionals<sup>23</sup>.

But when it comes to a public composed of schools, educational institutions emerge as a social space with one of the most significant potential health promoters, covering not only the students, but also the general school community. For the establishment of a health care system that is concatenated to the real needs of transformation of our society are needed policies that work across the board, integrated and articulated roping hand intersectionality. Health education in schools can be understood as any intervention that aims to protect, improve or restore the health of people who are there<sup>24</sup>.

Emerges in Brazil in 2007, the School Health Program articulated to primary care, which calls for effective partnership between the actions of public basic education and primary health care in order to increase the impact of its interventions in the lives of students, family and the community. Although well designed, there are many obstacles to realization of a network of inter-sector care that is effective, resolute and affordable, thus the fighting to the disengagement of workers health and education and the lack of government investment, including better conditions work are constant<sup>25</sup>.

Nevertheless, among the objectives of the PSE, are the actions directed to oral health, eye and hearing. In that sense, interventions aimed at school Audition monitoring gained most representative among the actions taken by health teams<sup>25</sup>.

As to the main themes and content covered, table seven sets which were more frequent and seeks to relate them to the period of their respective publications. Observable in Table 7.

It can be argued that the General Audiology and Occupational Audiology were the most discussed topics, both having 27.2% of representations. It was from 2006 that noted the most representative of these themes in the scientific knowledge, then the Childhood Audiology with 13.6%.

At this point of the study, there is the theme health worker as the main specific focus addressed in the analyzed publications.

It was also in the early 2000s that many rights aimed at worker health began to acquire greater magnificence, especially supported by the emergence of the National Health Care Workers Network. This device came to organize a more coordinated assistance with surveillance sectors, improving control and monitoring in the activities related to disease prevention and health promotion in the workplace, reaching in this way, all walks of life and contributing to the improving the quality of life and guarantee labor rights<sup>26</sup>.

In this context, there are movements, services and actions associated Occupational Audiology seeking to prevent hearing loss caused by noise. This disease has been taken into account because it has chronic and irreversible in the hair cells of the organ of Corti are damaged as a result of frequent exposure to noise whose sound pressure levels are high and for a longer period of time than allowed<sup>9</sup>.

When comparing these data with the scientific literature, it is clear that all the themes and content



**Tabela 7.** Principais temas e conteúdos abordados em relação ao período de publicação

Topics Addressed	N	%	Publication Period	
Hearing Anatomophysiology	1	4,5%	2000-2002	0
			2003-2005	0
			2006-2008	0
			2009-2011	0
			2012-2015	1
General Audiology	6	27,2%	2000-2002	0
			2003-2005	0
			2006-2008	1
			2009-2011	1
			2012-2015	4
Childhood Audiology	3	13,6%	2000-2002	0
			2003-2005	0
			2006-2008	0
			2009-2011	2
			2012-2015	1
Occupational Audiology	6	27,2%	2000-2002	0
			2003-2005	0
			2006-2008	1
			2009-2011	2
			2012-2015	3
Early identification of hearing loss	1	4,5%	2000-2002	0
			2003-2005	0
			2006-2008	0
			2009-2011	0
			2012-2015	1
Impact of hearing loss on family	1	4,5%	2000-2002	0
			2003-2005	1
			2006-2008	0
			2009-2011	0
			2012-2015	0
Auditory Processing	1	4,5%	2000-2002	0
			2003-2005	0
			2006-2008	0
			2009-2011	1
			2012-2015	0
Universal Newborn Hearing Screening	1	4,5%	2000-2002	0
			2003-2005	0
			2006-2008	0
			2009-2011	0
			2012-2014	1
			2015	0
Presbiacusy	2	9%	2000-2002	0
			2003-2005	0
			2006-2008	1
			2009-2011	0
			2012-2015	1
<b>Total</b>	<b>22</b>	<b>100%</b>		

Fonte: Acervo da Pesquisa (2015)

N: Número de publicações

are important for the development of an effective and coherent popular education with the weaknesses and current disruptions, however, there are aspects that are very important and have little explored in educational interventions, such approaches specifically designed to understand the risk factors and methods of prevention of hearing loss in the light of self-care, not only applied to acquired deficiencies in working practices, but also to congenital that are related to unhealthy habits<sup>27</sup> – This last point was not made according to merit in promoting the health scenario.

Broadly, it is essential to pay attention to the fact that the current trend is that health education goes beyond simply informing or trying to change harmful behavior. It is emphasized that an educational process in health includes training for the exercise of an active and conscious citizenship, development and improvement of skills and abilities so that people actively participate in defining work of their processing needs and actions of social reality they can negotiate and implement its proposals for the achievement of health goals, and pursue life quality improvements in the workplace and beyond<sup>28</sup>. And, of course, educational processes, as defined, hardly materialize satisfactorily in special educational activities, one-way, traditional, limiting and without planning and quality control, they demand a form of procedural development, comprehensive, innovative, participatory, democratic and always attentive the quality parameters.

## CONCLUSION

It was evident, in general, the greatest number of educational processes performed in the primary care setting has been developed in a timely manner and driven by a one-way educational dynamics, vertical and traditional. The community health workers and school have been the most frequent target audience, and in the meetings, the most discussed topics are General Audiology and Occupational.

There is need for improvement, review and reformulation of speech therapy actions of hearing health in order to provide basic standardizations that take into account the particular characteristics of each territory. It is also necessary to ensure that actions are continuous, multipliable and cross, so that meet the real needs of the population, covering as many people as possible and to reach its objectives.

Building control mechanisms to observe parameters such as efficiency, effectiveness, responsiveness, coverage, access and affordability combined with

monitoring, tracking and auditing of processes and outcomes are essential for building healthy public policies and contribution to improving SUS quality.

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