# COMMUNITY HEALTH WORKERS: MAPPING OF KNOWLEDGE BEFORE AND AFTERTRAINING WORKSHOPS

# Agentes comunitários de saúde: mapeamento de conhecimento antes e após oficinas de instrumentalização

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#### **ABSTRACT**

**Purpose:** to map the knowledge of community health workers before and after the participation in training workshops on phonoaudiological aspects and to verify changes in the perception according to the working time in the Family Health Strategy. **Methods:** the study was conducted in a municipality with 74,409 inhabitants, 170 km from Belo Horizonte, the capital of the State of Minas Gerais. Its Primary Health Care network is composed of 10 units of Family Health Strategy that allocate 60 health workers. The information was collected from all units and the process consisted of three stages: a) application of a questionnaire about phonoaudiological aspects; b) training process; c) reapplication of the questionnaire. **Results:** 51 health workers participated in the study. After the training, the number of health workers who started to give importance to factors that may indicate communication disorders in different age groups and that became aware of the four areas of the phonoaudiology became greater. There was no statistical relationship between the answers of the workers and the work unit. Regarding the working time in the Family Health Strategy, those who work for less than a year in the primary care gave the best answers before the training. **Conclusion:** the training favored the responses of the community health workers. There was a relationship between the training process and the working time in the Family Health Program.

**KEYWORDS**: Family Health Strategy; Unified Health System; Inservice Training; Primary Health Care; Speech, Language and Hearing Sciences; Community Health Workers

## ■ INTRODUCTION

The Primary Health Care is characterized as the foundation of the health care network and by the expanded and general assistance based on comprehensive care. The services based on this practice are configured in an integrated manner, so as to employ curative and rehabilitative actions, promote health and take preventive actions, based on teamwork, coordinated and articulated with public policies, aiming at the provision of comprehensive care to individuals and their families<sup>1</sup>.

Conflict of interest: non-existent

Through the implementation of the Family Health Strategy, the Brazilian government sought to carry out health activities in primary care and to realize the essence of the Single Health System: comprehensiveness, universality and equity<sup>2</sup>.

The Family Health Strategy seeks to expand coverage and access of the population to services and health actions, mainly due to active search, health care planning and logic related to the territory and its features. Among the consolidation factors of this health care mode, the proximity of the residence of the service users, the territorial coverage process and the interdisciplinary and interprofessional teamwork, through home visits in direct contact with families and comunities<sup>3</sup> are highlighted.

In a proposal of actuation focused on family and on its context, the health team inserts itself in the social environment, knows it and undertakes

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to change it4. It also searches to conduct health surveillance and to create a connection between the team and the population, fostering an organization of Primary Health Care<sup>3</sup> more suitable to the problems and health needs of the population and to the principles of the Single Health System.

Home visits allow a connection between the professionals and the population, including health practices in the daily life of the users in order to ensure the education process and health intervention<sup>5</sup>. This strategy favors the construction of a dialogue and therefore, a comprehensive care, which becomes more human, since the health professional becomes aware of the family situation of the individual6.

The Family Health Strategy has a comprehensive and multidisciplinary character, therefore the health workers, in a primary contact with the population, should be prepared to observe the individuals in their entirety, seeking to understand beyond the complaint and signs presented by the assisted population7. It is worth noting that like other professionals, community health workers should participate in activities that ensure the joint assessment of the situation of the territory, agreement on the development of the work process and goals, and construction of the interdisciplinary context of health care2.

Communication is among the attention or observation aspects of the family health team; this condition and human skill enable the individuals to place themselves as agents of transformation of the society and their reality8. Thus, to be aware of the process of communication development and other phonological aspects in all cycles of life should be the focus of the actions of the family health team and therefore be included in the training process of the staff, especially health workers.

When inserted in the training process of the health worker, the Speech Therapy seeks to offer a more qualified assistance to the target population of the Family Health Strategy. The discussion of the knowledge of health care, rehabilitation and impact of physical, hearing, mental and visual impairments and the provision of dietary and nutrition guidelines is an opportunity for the effective contribution to the improvement of the life conditions of the population9. The Speech Therapy in the APS (Primary Health Care), through care to individuals and social groups at risk and of social vulnerability, gives a chance to

people who previously had no access to this medical specialty9.

The Speech Therapy must be included in the Family Health Strategy in a general way, able to identify the most important issues in its community, to elaborate and to carry out actions aimed at a solution, adopting preventive measures whenever possible8. It is necessary to monitor and systematize the limits and potentials of this model, aiming at its development and appropriation as comprehensive care strategy, to include Speech Therapy in the Single Health System (SUS), creating interdisciplinary and interprofessional care networks9.

The purpose of this study was to map the knowledge of community health workers before and after the participation in training workshops on phonoaudiological aspects and to verify changes in the perception according to the working time in the Family Health Strategy.

#### METHODS

It is a pre-experimental exploratory study using non-probabilistic sample approved under Opinion No. 677/07 by the Research Ethics Committee of the Federal University of Minas Gerais and conducted in a municipality located in the central region of Minas Gerais, 170 km from the capital Belo Horizonte. The municipality has 74,219 inhabitants according to data estimated by IBGE<sup>10</sup>, and presents Human Development Index of 0.755 according to data released by the United Nations Development Program in 2.00011. The Primary Care network of the municipality was composed of 10 units of the Family Health Strategy that allocated 60 health workers. The Municipal Health Department and the Coordination of the Family Health Strategy of the municipality authorized the research by signing the letter of agreement.

For the study, a self-applicable form was used as instrument, which was elaborated by the researchers (Figure 1), containing closed questions that corresponded to areas of phonoaudiology, to actuation forms in different life cycles, communication disorders, assistance needs and guidance offered to the community. The purpose of these questions was to determine whether health workers had the ability to recognize complaints and demands for the speech therapy service.

	FORM
Code:	
Education level:	Age:PSF* unit where you work:
	Working time in this unit:
Profession before being health worker:	working time in this unit
Profession before being fleatin worker	
Important guidelines:in questions 1-4, you ca	n change more than one answer
	ention to the behavior of a baby when he/she:
( ) is not scared by loud noises such as shut	
( ) stops what is doing to pay attention to a s	
( ) cries and produces unrecognizable sound	
( ) does not react to mother's jokes, for exam	
( ) recognizes family sounds as the parents'	
2. Mark the behavior of a child that justify	referral to the speech therapist:
( ) nail biting	
( ) fall down with the head	
( ) thumb sucking	
( ) use bottle after two years old	
( ) constant itching eyes	
3. Require attention and referral to Speech	
( ) pain or noise in the face or near the ears	during chewing
( ) eats solid, liquid and pasty food easily	
( ) mouth breathing	
( ) speak words changing sounds	
( ) does not have a balanced diet	
4. You would refer to a Speech Therapy se	ervice:
( ) stuttering children	
( ) children who communicate well	
( ) children who communicate only through g	estures and screams
( ) children with good ability to understand	
	not concerned with the investigation of these questions
5 You consider important the complaints	from families about the difficulties of the children in learning to read and to
write:	nom laminos about the announces of the officient in learning to read and to
() yes () no	
6. If yes, to which professional you refer:	
( ) Physiotherapist ( ) Nurse ( ) Doctor ( ) P	teychologiet ( ) Speech Thorapiet
7. Do you worry about a child or teenager	
	who has a hoarse, weak or absent voice?
() yes () no	vaa vaa vau
8. If the answer to the previous question v	as yes, you:
( ) don't report the case in team meetings	d faire to mak managata any disayasian
( ) only report the case in team meetings and	
	worry about what you can do for the individual
` '	suggest or disagree with the referral to a specialist because you don't think it is
necessary	
( ) discuss the case in meetings and then su	ggests the referral of the individual to a speech therapist or otolaryngologist
Important guidelines:in questions 9-11, you c	
<ol><li>You believe that elderlies need a speech</li></ol>	ո therapist when they:
( ) have difficulty to chew or swallow food	
( ) are able to trek	
( ) present good logical thinking ability	
( ) complain of constant falls caused by dizzi	ness
( ) have speech difficult to understand	
10. It is important to indicate speech thera	upy service to the elderly that:
( ) always chokes before, during or after feed	
( ) has a weak and low voice	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
( ) reads before sleeping	
	erefore listens to TV or radio on high volume.
( ) likes to talk to people and tell the facts of	his/her life
11. Mark the areas you believe to be the w	
	rofacial motor function ( ) mind ( ) smell ( ) language ( ) locomotion
12. Do you know how the speech therapis	IS WORK?
( ) yes ( ) no	
13. If yes, do you know all their working a	reas ?
() yes () no	1-10
14. Have you worked with a speech therap	DIST!
( ) yes ( ) no	
15. How many families do you visit on ave	rage per day?
	for speech therapy service in the area where you are working?
()yes ()no	

<sup>\*</sup>PSF=Family Health Program

The following inclusion criteria were established to define the sample: be a health worker of a Family Health Strategy unit of the municipality and have agreed to participate by signing the Free and Cleared Term of Consent. The exclusion criteria were: to leave the training workshop; be unable to perform the duties for any reason during the study period, for example, be on leave at the time of data collection; and fill less than 80% of the survey form in the initial or final data collection.

The data collection was performed in all basic health units in the municipality and consisted of three stages, namely:

- a) Stage I: Characterization of the knowledge of the health workers. A questionnaire was applied to each team of health workers in their unit of origin. All health workers filled individually and simultaneously the data collection form in a closed and silent room. Also in this stage the workshop schedule was presented and the doubts of the health workers about the activities to be performed were clarified.
- b) Stage II: Training workshops. Each team of health workers participated in two workshops lasting four hours each. Group activities, situational games, analysis of problem situations and dialogue based presentation were used as a methodology of training, with the main themes: Role of the Speech Therapist in the Single Health System; Acquisition and development of human communication and its disorders; Guidance and referral to a speech therapy service. Each workshop lasted an hour and the health workers received a workbook containing theoretical bases about the covered subjects and clarification about the purposes, duration and description of the activities.
- c) Stage III: Reapplication of the questionnaire. A questionnaire was applied again to each team of health workers in their unit of origin. All health workers filled individually and simultaneously the data collection form in a closed and silent room.

A descriptive analysis of their answers to the closed questions of the form was performed, considering, in a distinct way, the questions with only one answer option and those with more possibilities. For questions that presented only one answer option, a statistical analysis using Fisher's exact test was performed. For questions that presented more answer options, a statistical analysis using the paired t-test was performed. Frequency tables were used for categorical variables and graphical visualization of the main findings. The data analysis related to the variables "health unit of origin" and "working time as a family health worker" took place in a qualitative way. The significance level of 5% (0.05) was considered in all analyses.

The statistical program SPSS version 18 was used for processing and statistical analysis of the data

#### RESULTS

Fifty one health workers with a mean age of 32.71 years participated in the study, 86.3% have completed Secondary School. Regarding the working time in the Family Health Strategy, the average was 3.45 years, between six months and 10 years, 25.5% less than one year and 21.6% five years of work. Regarding the work routine, each health worker of the municipality visited in average 15.53 families per day at the time of data collection.

Another important fact to be considered for the characterization of the participants is that 98% of the health workers who participated in the study reported to have never worked with a speech therapist and 2% reported not to know if they have worked with this kind of professional.

Table 1 shows the data related to the questions with more than one answer option. It is worth clarifying that only the correct answers that were marked were considered correct.

Table 2 describes the results of the questions with only one correct answer possible.

Tables 3 and 4 describe the results of the questions regarding the referral of children and adolescents with complaints of reading and writing and voice alteration, respectively. It is noteworthy that only professionals available in the municipality were listed in the question concerning reading and writing.

Phase	Before	training	After	After training	
Question	N	%	N	%	- P-value
Infant behavior that requires greater attention					
Incorrect	2	3.9	1	2.0	
Partially correct	11	21.6	5	9.8	0.103
Correct	38	74.5	45	88.2	000
Total	51	100.0	51	100.0	
Phase		training		training	
Question	N	%	N	%	- P-value
Child behavior that justifies referral to speech therapists				,,,	
Incorrect	8	15.7	1	2.0	
Partially correct		13.7		2.0	
One hit	29	56.9	5	9.8	
Partially correct					0.001*
Two hits	14	27.5	21	41.2	
Correct	0	0	24	47.0	
Total	51	100.0	51	100.0	
Phase		training		training	
Question	N	%	N	%	- P-value
Alterations that require referral to speech therapists					
Incorrect	2	3.9	0	_	
Partially correct					
One hit	22	43.1	1	2.0	
Partially correct					0.001*
Two hits	20	39.2	10	19.6	
Correct	7	13.7	40	78.4	
Total	51	100.0	51	100.0	
Phase	Before	training	After	training	
Question	N	%	N	%	- P-value
Suggestive conditions for referral to the speech therapy service					
Incorrect	0	-	0	-	
Partially correct	12	23.5	2	3.9	0.030
Correct	39	76.5	49	96.1	
Total	51	100.0	51	100.0	
Phase	Before	training	After training		
Question	N	%	N	%	- P-value
Health conditions of the elderly that require follow-up by speech therapists					
Incorrect	0	-	0	-	
Partially correct		45.4		F 0	
One hit	23	45.1	3	5.9	0.004*
Partially correct	28	54.9	19	37.3	0.001*
Two hits		J- <b>1</b> .3			
Correct	0	-	29	56.9	
Total	51	100.0	51	100.0	
Phase		training		training	- P-value
Question	N	%	N	%	i -vaiut
Time to indicate speech therapy to elderlies		-	-	-	
Time to indicate speech therapy to elderlies  Incorrect	-				
• • • • • • • • • • • • • • • • • • • •		27.2	E	0.0	
Incorrect	- 19	37.3	5	9.8	0.004*
Partially correct One hit Partially correct	19				0.001*
Incorrect Partially correct One hit Partially correct Two hits	19 25	49.0	17	33.3	0.001*
Incorrect Partially correct One hit Partially correct	19				0.001*

Legend:Paired t-test N - Number\* value with statistical significance.

Table 2 - Distribution of answers to questions with two possible answers (yes or no)

	Application	Before training		After training			
Question		N	%	N	%	P-value	
Knowledge of the role of the speech t	herapist.						
	Yes	25.5	45	88.2	88.2	1.00	
	No	74.5	6	11.8	11.8		
Total		51	100.0	51	100.0		
	Application	Before	training	After training			
Question		N	%	N	%	- P-value	
Is there need of speech therapy servi	ce in the area?						
	Yes	40	78.4	42	82.4	0.385	
	No	11	21.6	9	17.6		
Total		51	100.0	51	100.0		
	Application	Before training		After training		D l	
Question		N	%	N	%	– P-value	
Do you worry about a child who has a "absent" voice?	hoarse, "weak" or						
	Yes	50	98.0	51	100.0	-	
	No	1	2.0	0	-		
Total		51	100.0	51	100.0		

Legend:N - Number Fisher Exact Test

Table 3 - Distribution of answers about the professional to be sought in cases of difficulties in reading and writing

	Phase	Before	training	After training		
Answers		N	%	N	%	
Physiotherapist		-	-	-	-	
Nurse		-	-	1	2.0	
Doctor		9	17.6	1	2.0	
Psychologist		20	39.2	6	11.8	
Speech therapist		21	41.2	43	84.3	
Not answered		1	2.0	-	-	
Total		51	100	51	100	

p = 0.443; Paired t-test Legend= N – Number

Table 4 - Distribution of answers about how to proceed before a patient with voice alteration

Phase	Phase Before training		After training		
Correct Answers	N	%	N	%	
Only report the case in team meetings and try to not generate any discussion	-	-	-	-	
Discuss the case in meetings and not worry about what to do for the individual	25	50.0	7	13.7	
Discuss the case in meetings but not suggest or disagree with the referral to a specialist because do not think it is necessary.	1	2.0	-	-	
Discuss the case in meetings and then suggest the referral of the individual to a speech therapist or otolaryngologist	23	46.0	44	86.3	
Not applied	1				
Total	51	100.0	51	100.0	

p = 0.436; Paired t-test Legend= N – Number

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Table 5 shows the distribution of answers concerning the working areas of the speech therapist. It is noteworthy that four areas of actuation (hearing, language, voice and speech) and other areas that could be mentioned as correspondents were listed in the questionnaire (Figure 1). Only the marks in the areas of speech therapy were considered for analysis.

Table 6 presents the data related to the distribution of the correct answers according to the working time in the Family Health Program in stages I and II of the study. It should be considered that only the forms with correct answers were considered in the analysis of each question.

Table 5-Distribution of answers about the knowledge of the working areas of the speech therapist

	Phase	Before	training	After t	raining
Correct Answers		N	%	N	%
None		1	2.0	0	-
One of the four		1	2.0	0	-
Two of the four		10	19.6	1	2.0
Three of the four		15	29.4	6	11.8
Four		24	47.1	44	86.3
Total		51	100	51	100

p = 0.001: \*Paired t-test Legend= N - Number

Table 6 - Distribution of frequency of correct answers according to the stage of collection and working time in the Family Health Program

Stage	Before training			After training			
Working Time	Less than 5 years in the PSF %	5 years or more in the PSF %	Total of the sample that answered correctly	Less than 5 years in the PSF %	5 years or more in the PSF %	Total of the sample that answered correctly	
1	63.2	36.8	38	57.9	42.1	45	
2	0.0	0.0	0	79.1	20.9	24	
3	71.4	28.6	7	62.5	37.5	40	
4	64.0	36.0	39	59.3	40.7	49	
5	58.8	41.2	51	58.8	41.2	51	
6	61.8	38.2	21	57.8	42.2	43	
7	58.0	42.0	50	58.8	41.2	51	
8	52.2	47.8	23	59.1	40.9	44	
9	0.0	0.0	0	65.6	34.4	29	
10	57.1	42.9	7	58.8	41.2	29	
11	62.5	37.5	24	61.4	38.6	44	

Legend; N= number; PSF=Family Health Program

#### DISCUSSION

The analysis of the data revealed changes in the answers of the community health workers in stages I and III (Tables 1 to 6). However, it is necessary to check the detailed analysis of each question to understand the dimension and more relevant aspects. An important fact was that the instrument used to collect the data made it possible to raise fundamental issues in the discussion on the communicative development in the different life cycles<sup>12</sup> and the role of the speech therapist in the care network<sup>13-18</sup>.

By comparing the answers of the stages I and III of the form regarding the behavior of an infant that needs care (Table 1), it was observed that, after the training, the number of health workers that noted that a baby was not scared by loud noises such as shutting of doors became greater. Although there were no statistically significant differences, a

greater number of community health workers began to consider the relevance of the observation of the hearing of infants or consider the complaints from parents about hearing issues. It is worth noting that it is essential to think about the relevance of this concept in the performance of the health workers, once hearing is essential for the acquisition and overall development of children, mainly of language<sup>19</sup>.

Regarding the behavior of children and adolescents, when comparing the performance of health workers after the workshops, a statistical significance was observed related to myofunctional disorders such as the presence of deleterious oral habits - nail biting, thumb sucking, mouth breathing - complaints about articulation disorders and alterations of the temporomandibular joint; and issues related to language delay, as children that communicate only by gestures and screams (Table 1). It is noteworthy that normally patients with such alterations are referred to speech therapy services in all cycles of life, therefore, they must be recognized in the primary care. These data corroborate the literature<sup>20</sup> by stating that training provides the recognition of the population needs by health workers. The findings also corroborate with previous study, which highlights that the majority of the guidelines and advices offered by health workers needs theoretical basis<sup>21</sup>.

When considering the questions related to language delay concerning the occurrence of reading and writing disorders, all workers in both stages (I and III), answered that this is a worrying condition (Table 1 and 3).

Regarding the presence of dysphonia in children and adolescents, no statistically significant difference between the answers of the health workers was observed before and after the training, since it was already a constant concern of the teams (Tables 2 and 4). There were also no statistically significant differences in the questions concerning the behavior in such cases relative to the search for an evaluation by otolaryngologist and speech therapist. These data do not corroborate the literature<sup>22</sup> according to which training allows people to identify the determinants of the health-disease process and favors the modification of how they act in the reality of the population. However, it must be highlighted that in this study only two training workshops, which addressed the entire scope of the communication development in all cycles of life and the role of speech therapist in the health care network, were performed. In addition, the community health workers that participated of the study had no previous contact with the speech therapist.

Also in relation to matters concerning the health of children and adolescents, the literature has demonstrated the importance of qualification actions of the assistance in this life cycle and the high prevalence of alterations raised by studies in the area demonstrate the importance of planning and implementation of promotional activities of healthy communication<sup>23,24</sup>. Thus, to talk to health workers about such elements may have been essential to awaken in them the condition for further observations of health demands and needs of the population.

The analysis of the questions related to the need for follow up of the elderly by speech therapists has demonstrated the association, with statistical significance, between the number of health workers that began to consider characteristic clinical signs of alterations of the vestibular system, aphasia, occurrence of dysphagia, dysphonia and hearing impairments. The literature<sup>7</sup> shows that health workers must be able to observe the individuals in their entirety. It is also worth remembering the importance of the investment in human resources to ensure the effectiveness of the current health care model<sup>25</sup>.

In the questions related to knowledge and access of workers to Speech Therapy, over 90% of the participants answered that they have never worked with a speech therapist. Considering the working areas of the speech therapist in the stages of the study, the health workers first associated phonoaudiology to speech. After the training process, a difference with statistical significance was observed in the number of health workers that marked the four areas included by phonoaudiology, and hearing became the most frequent response.

It is noteworthy that health workers related hearing only to otolaryngologists and during the training process they revealed to be surprised to know the role of the speech therapist in this field. No statistical significance was observed in the increasing number of health workers who reported to know the way of working of a speech therapist after the training, and there was no changes in the answers of the participants regarding knowledge of all areas of activity of this professional. It can be explained by the fact that the workers report that even with training they did not feel safe in saying that they quite knew the way of working and the scope of work of the speech therapist. These findings corroborate the literature<sup>26</sup> which showed that health workers did not always present technical training in health, and their knowledge was acquired through practice and discussion with other professionals. Studies show the positive relationship between community health workers and speech therapists, whether in research<sup>27</sup>, training<sup>25</sup> and health planning<sup>18</sup>.

The health workers believe that there is a demand for speech therapy services in the areas covered by the Family Health Strategy in the municipality, since during the training workshops many reported clinical cases that demanded attention. The analyses of the statistical data of the stages I and III have enabled to verify that the training process contributed to the perception and ability of health workers to recognize communication disorders. These data corroborate the literature<sup>5</sup> that states that health professionals involved in primary care, must be submitted to a continuous education process.

The analysis related to the "working time in the Family Health Strategy" has demonstrated that, in the step I, the performance of health workers who work for less than a year in the Family Health Program (PSF) was better as compared to workers with longer working time (Table 6), which may suggest that the professionals that were recently included in the program were more up to date. After the training process, there is a deconcentration of health workers who answered correctly to the questions of this group, indicating that the training consisted of an update strategy of the professionals that integrated the Family Health Program for longer. These data corroborate the literature<sup>28,29</sup> that emphasizes the importance of continuous education in the field of health<sup>29</sup> and reports that for a good performance of the Family Health teams it is necessary to promote training and upgrading of the profissionals<sup>28</sup>. This factor also corroborates previous studies<sup>18,30</sup> that state that experienced health community workers can make a deeper reflection of the issues addressed in the education processes<sup>18</sup>. They also report that the working time in the Family Health Strategy does not influence the knowledge of the community health workers<sup>30</sup>, since only the practice is not enough, being necessary to offer training for these professionals.

In this study the mapping of the knowledge about the working areas of speech therapists by health workers and their training are relevant points and show the possibility of realization of a joint work between speech therapists and health workers contributing to the concretion of the Speech Therapy as health promoter. During the primary contact with the community, the health worker, aware of the work of speech therapy in the primary care, can correctly assess the needs of the assisted population, and support the prevention process and treatment of communication disorders. For that, it is necessary to

increase the contact of these workers with speech therapists and to carry out a continuous process of guidance and training of these workers, which are the main connection between the community and the health care network.

It is noteworthy that the overall analysis of the form revealed changes in the profile of correct answers in all questions when comparing the answers of the first (stage I) with the answers of the second form (stage III). In all cases there was an increase in the number of correct answers after the training. This data may indicate that the training workshops provided perception changes in the short term. However, it is not possible to assert that these changes will persist or become behavioral or attitudinal changes.

This study also presented some limitations that should be considered. The form used in the research is an instrument developed by the researchers, therefore without validation in the national literature. The fact that it is a self-applicable form may have generated differences or even confusion in the interpretation of the questions by the participants of the study. Furthermore, it is noteworthy that the training of the health workers was performed in only two meetings lasting four hours each.

In the present study, the pre-experimental exploratory design was adequate to characterize the data presented here, because the workshops were an educational action for community health workers and as such it carries all the difficulty of control of the variables and biases that must be ensured in experimental studies. However, the results of this study should be viewed with caution as the social, health, human, territorial and economic reality of the municipality that hosted the study is unique and therefore unrepeatable.

## CONCLUSION

Before the analyzed results it can be concluded demonstrated participants knowledge of communication aspects and of the demand for speech therapy. In addition, the training workshops produced changes in the perception of the community health workers about demands and phonoaudiologic alterations related to the cycles of life of children and elderlies. It was also observed an association between the participation in the training workshops and working time in the Family Health Strategy.

#### **RESUMO**

Objetivos: mapear o conhecimento de agentes comunitários de saúde antes e após participação em oficinas de instrumentalização sobre aspectos fonoaudiológicos e verificar as mudanças de percepção segundo o tempo de trabalho na Estratégia de Saúde da Família. Métodos: o estudo foi realizado em um município a 170 km da capital de Minas Geraise com 74.409 habitantes. A rede de Atenção Primária a Saúde do município é composta por 10 unidades de Estratégia de Saúde da Família que alocam 60 agentes de saúde. Os dados foram coletados em todas as unidades e consistiu em três etapas: a) aplicação de questionário auto-aplicável acerca de aspectos fonoaudiológicos; b) processo de instrumentalização; c) reaplicação do questionário. Resultados: participaram do estudo 51 agentes de saúde. Após a instrumentalização, tornou-se maior o número de agentes de saúde que deram relevância a fatores que sugerem a ocorrência de distúrbio da comunicação nas diferentes faixas etárias e que passaram a conhecer as quatro áreas que englobam a atuação fonoaudiológica. Não houve relação estatística entre o desempenho dos agentes nas respostas e a unidade de trabalho. Quanto ao tempo de trabalho Estratégia de Saúde da Família, na pré-instrumentalização, o melhor desempenho nas respostas foi dos agentes que trabalham há menos de um ano na atenção primária. Conclusão: ainstrumentalização favoreceu as respostas dos agentes comunitários de saúde. Houve relação entre o processo de instrumentalização e o tempo de atuação no Programa de Saúde da Família.

**DESCRITORES:** Estratégia de Saúde da Família; Sistema Único de Saúde; Capacitação em Serviço; Atenção Primária à Saúde; Fonoaudiologia; Agentes Comunitários de Saúde

#### REFERENCES

- 1. Brasil, Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Política Nacional de Atenção Básica. Brasília, DF; 2006.
- 2.Freeda LCL. O núcleo de apoio à saúde da família e alguns dos seus desafios. Revista Saúde e Desenvolvimento. 2013 [acesso em out 2013] 3(2): 118-33. Disponível em: http://www. grupouninter.com.br/revistasaude/index.php/ saudeDesenvolvimento/article/view/144/0
- 3. Gomes KDO, Cotta RMM, Araújo RMA, Cherchiglia MI, Martins TDCP. Atenção Primária à Saúde – a "menina dos olhos" do SUS: sobre as representações sociais dos protagonistas do Sistema Único de Saúde. Ciência & Saúde Coletiva. 2011;16(1):881-8.
- 4. Ferreira VM, RUIZ T. Atitudes e conhecimentos de agentes comunitários de saúde e suas relações com idosos. Rev. Saúde Pública [online]. 2012, [acesso em out 2013] 46(5):843-9. Disponível em: http:// www.scielo.br/pdf/rsp/v46n5/11.pdf
- 5. Brasil, Ministério da Saúde. Política de educação e desenvolvimento para o SUS: caminhos para a educação permanente em saúde. Brasília, DF, 2004. Disponível em: http://bvsms.saude.gov.br/ bvs/publicacoes/educacao permanente tripartite. pdf
- 6. Sakata KN, Almeida MCP, Alvarenga AM, Craco PF, Pereira MJB. Concepções da equipe de saúde da família sobre as visitas domiciliares. Revista

- Brasileira de Enfermagem [periódico na internet]. 2007[acesso em outde2013]: 60(6):659-64. Disponível em: http://www.scielo.br/pdf/reben/ v60n6/07.pdf
- 7. Alves, VS. Um modelo de educação em saúde para o Programa Saúde da Família: pela integralidade da atenção e reorientação do modelo assistencial. Interface - Comunicação, Saúde, Educação [periódico na internet]. 2005 [acesso em out 2013]; 9(16):39-52. Disponível em: http://www. scielo.br/pdf/icse/v9n16/v9n16a04.pdf.
- 8. Moreira MD, Mota HB. Os caminhos da Fonoaudiologia no Sistema Único de Saúde. Rev CEFAC [periódico na internet]. 2009 [ acesso em mar 2013]; 11(3):516-21. Disponível em: http:// www.scielo.br/scielo.php?script=sci arttext& pid=S1516-18462009000300021
- 9. Molini-Alvejonas DR, Mendes, VLF, Amato CAH. Fonoaudiologia e Núcleos de Apoio à Saúde da Família: Conceitos e referências Rev. Soc Brás Fonoaudiologia. 2010 [acesso em out 2013];15(3):465-74.Disponível em: http://www. scielo.br/pdf/rsbf/v15n3/24.pdf
- 10. IBGE. Censo 2010. [acessado em out de 2013] Disponível em: http://www.ibge.gov.br/cidadesat/ topwindow.htm
- 11. Organização das Nações Unidas. Programa das Nações Unidas para o Desenvolvimento no Brasil. Disponível em: http://www.pnud.org.br (acessado em out de 2013)

- 12. Goulart BNG, Henckel C, Klering CE, Martini M. Fonoaudiologia e promoção da saúde: relato de experiência baseado em visitas domiciliares. Rev. CEFAC [periódico na internet]. 2010 [acesso em out 2008]; 12(5):842-9. Disponível em: http://www. scielo.br/pdf/rcefac/2010nahead/164-09.pdf
- 13. Costa HO, Chagas MIO, Correia RBF, Araújo-Dias MS, Souza FL, Queiroz, AHAB. Conhecimentos e práticas dos agentes comunitários de saúde frente aos problemas fonoaudiológicos da população na atenção básica. SANARE-Revista de Políticas Públicas. 2013 [acesso em out 2013];11(2):32-43. Disponível em: http://sanare.emnuvens.com.br/ sanare/article/view/274
- 14. Silva ATC, Aguiar ME, Winck K, Rodrigues KGW, Sato ME, Grisi SJFE, Rios IC. Núcleos de Apoio à Saúde da Família: desafios e potencialidades na visão dos profissionais da Atenção Primária do Município de São Paulo, Brasil . Cad. Saúde Pública. [periódico na internet]. 2012 [acesso em out 2013] 28(11):2076-84. Disponível em: http:// www.scielo.br/pdf/csp/v28n11/07.pdf
- 15. Fernandes TDL, Nascimento CMBD, Sousa FDOS. Análise das atribuições dos fonoaudiólogos do NASF em municípios da região metropolitana do Recife. Rev CEFAC. 2013[ acesso em out 2013]; 15(1):153-9. Disponível em: http://www.scielo.br/ pdf/rcefac/v15n1/15-11.pdf
- 16. Marcus VS, Peixoto CGA, Sigueira AF, Silva CM, Pedruzzi AA. Caracterização da população assistida por um serviço de Fonoaudiologia em uma Unidade de Saúde. Distúrb Comun. 2010;22(2):107-15.
- 17. Costa JC, Giustti AS, Murofuse IS, Gumz AL. Acesso ao serviço de fonoaudiologia: a implantação do acolhimento no município de Toledo - PR. Rev. CEFAC [periódico na internet]. 2012 [acesso em set 2013]; 14(5):977-83. Disponível http://www.scielo.br/scielo.php?script=sci\_ arttext&pid=S1516-18462012000500025&Ing=pt&n rm=iso
- 18. Brites LS, Souza APR, Lessa AH. Fonoaudiólogo e agente comunitário de saúde: uma experiência Rev. Soc Bras educativa. Fonoaudiologia. [periódico na internet]. 2008 [acesso em set 2013];13(3):258-66. Disponível em: http://www. scielo.br/pdf/rsbf/v13n3/a10v13n3.pdf
- 19. Alvarenga KF ,Gadret JM, Araújo ES, BevilacquaMC.Triagem auditiva neonatal: motivos da evasão das famílias no processo de detecção precoce. Rev Soc Bras Fonoaudiol. [periódico na internet]. 2012 [acesso em out 2013];17(3):241-7. Disponível http://www.scielo.br/pdf/rsbf/ em: v17n3/02.pdf
- 20. Nunes MO, Trad LB, Almeida BA, Homem CR, Melo MCIC. O agente comunitário de saúde: construção da identidade desse personagem

- híbrido e polifônico. Caderno Saúde Pública [periódico na internet]. 2002 [acesso em mar 2008];18(6):1639-46. Disponível em: http://www. scielo.br/pdf/csp/v18n6/13260.pdf.
- 21. Ávila MMM. Azevedo DV. Galvão MM. Moraes ML. Nutrição e saúde: o agente comunitário de saúde e as ações realizadas com crianças de 0-12 meses em Uruburetama (CE) Cad. Saúde Colet. 2011;19(3):341-7.
- 22. Leonelli BS, Fedosse E, Silva RC, Chun RYS, Marin CR. Fonoaudiologia Comunitária da Unimep: ações fonoaudiológicas em serviços de saúde/ educação. Rev Saúde. 2003;5(11):57-63.
- 23. Goulart BNG, Chiari BM. Comunicação humana e saúde da crianca: reflexão sobre promoção da saúde na infância e prevenção de distúrbios fonoaudiológicos. Rev CEFAC. [periódico na internet]. 2012 [acesso em set 2013];14(4):691-6. Disponível em: http://www.scielo.br/pdf/rcefac/ v14n4/197-10.pdf
- 24. Rabelo ATV, Alves CRL, Goulart LM, Friche AAL, Lemos SMA, Campos FRHTHT . Alterações de fala em escolares na cidade de Belo Horizonte. J. Soc. Bras. Fonoaudiol. [periódico na internet]. 2011[acesso em set 2013]; 23(4): 344-50.Disponível em: http://www.scielo.br/pdf/jsbf/v23n4/v23n4a09. pdf
- 25. Melo TM, Alvarenga KF, Blasca WQ, Taga MFL. Opinião dos agentes comunitários de saúde sobre o uso da videoconferência na capacitação em saúde auditiva infantil. Rev CEFAC [periódico na internet]. 2011[acesso em set 2013];13(4):692-7.Disponível em: http://www.scielo.br/pdf/rcefac/v13n4/70-10.pdf 26. Bachilli RG, Scavassa AJ, Spiri WC. A identidade do agente comunitário de saúde: uma abordagem fenomenológica. Ciência e Saúde Coletiva [periódico na internet]. 2008 [acesso em set 2013];13(1):51-60. Disponível em: http://www. scielosp.org/scielo.php?pid=S14138123200800010 0010&script=sci artte xt&tlng=
- 27. Barros PMF, Cavalcante TCF, Andrade AF. Audiologia em comunidade: relato de experiência. Rev CEFAC [periódico na internet]. 2010 [acesso em set 2013];12(4):626-32. Disponível em: http:// www.scielo.br/pdf/rcefac/v12n4/84-08.pdf
- 28. Bourget MMM (org). Programa Saúde da Família: manual para o curso introdutório. São Paulo: Martinari; 2005.
- 29. Stahlschmidt, APM. Integralidade, construção e socialização de conhecimentos no contexto da educação permanente e atuação de profissionais da área da saúde. Interface [periódico na internet]. 2012 ſacesso em out 2013];16(42):819-27. Disponível em ww.scielo.br/scielo.php?script=sci\_ pdf&pid=S1414-32832012000300018&Ing=en&nrm =HTT&tlng=HT

30. Ciconi RCV, Venâncio SI, Escuder MML. Avaliação dos conhecimentos de equipes do Programa de Saúde da Família sobre o manejo do aleitamento materno em um município da região

metropolitana de São Paulo. Rev Bras. Saúde Mater. Infant. [periódico na internet]. 2004 [acesso em set 2008]; 4(2):193-202. Disponível em: http://www.scielo.br/pdf/rbsmi/v4n2/21006.pdf

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