

# THE POTENTIALITY OF THE BASIC HEALTH CARE INFORMATION SYSTEM FOR ACTIONS IN SPEECH-LANGUAGE PATHOLOGY

## *A potencialidade do sistema de informação de atenção básica para ações em fonoaudiologia*

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### ABSTRACT

**Purpose:** to analyze documents of System of Primary Health Care (SIAB) tool and verify its potential for speech-language's action planning. **Methods:** we analyzed the documents of Ministry of Health for the SIAB and accessed the records and reports of the SIAB's Family Health Strategy and Municipal Health Department. **Results:** the data from SIAB express the life / health conditions of diseases and disorders of the families as well as reveal the conditions of service and health production, however, there are limitations such as, external interference (incompleteness of teams and mismanagement of the data) that impair their use. **Conclusions:** the data available on the audiologist SIAB approaching the real needs of users, promoting the organization of activities, stimulating the role of professionals and individuals favoring the bond and the solvability of the shares, which does not mean that they are sufficient, it is always possible to prepare or improve tools to facilitate the deployment or implementation of speech-language's actions directed to the promotional activities in different levels of health care.

**KEYWORDS:** Speech, Language and Hearing Sciences; Primary Health Care; Information Systems; Health Management; Health Planning; Health Evaluation

### ■ INTRODUCTION

The many and rapid changes taking place in contemporary society require the expansion of knowledge on the foremost care about health. The more comprehensive the technical and scientific knowledge of a professional, the better his commitment and competence in caring, that is, the greater the involvement, the greater the potential resolution and welfare of the population. Speech Therapy has been increasingly committed to the

prevention, protection and recovery of people's health under the Unified Health Care System - SUS<sup>1</sup>. This commitment has been built, on the one hand, to the extent that professionals are inserted at different public sector services and secondly as the vocational training institutions have sought to respond to the National Curriculum Guidelines for Speech Therapy Graduation Courses, incorporating into their pedagogical projects the theoretical and methodological fundaments from SUS<sup>2,3</sup>.

It is known that the democratization of public policies has been happening since the implementation of the SUS, influencing new discussions and challenging for new paradigms in the health of Brazilians, therefore considering the relationship between health and living conditions of the society and within the society. Thus, the new public policies and models of health care have demanded the hiring of professionals to the public sector, including the speech therapist, who had not been prepared

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to handle the challenges in public health in his training since his historical practice had prioritized the individual and the pathology<sup>1,4</sup>. Given this field - Public Health - speech therapists have started to produce experiences in promoting, protecting and recovering health, and to reflect on them, including the social/collective aspects and taking part at the different levels of the system<sup>5</sup>. With the legal statement that speech therapists can act on the Basic Health Care, Speech Therapy has sought to ensure such participation and expand its operations<sup>6,7</sup> since the implementation of the SUS.

We know that health care in Brazil is structured by levels of caring – Basic/Primary, Medium and High Complexity – aiming to achieve comprehensive care to the population<sup>8</sup>. The Basic/Primary Care, as the first level of health care, is rather the user's gateway to health services; among its objectives it has the identification of health risks and problem solving through a set of actions that comprise health promotion, disease prevention, diagnosis, treatment and rehabilitation of individuals, being held by the basic health specialties - internal medicine practices, pediatrics, obstetrics and gynecology, and nursing. It is up to the Basic/Primary Care to perform necessary referrals for the other levels of health care<sup>8</sup>.

Note that, according to the official documents<sup>8</sup>, regulators of the organization of the health care levels, the Speech Therapy service is provided at the medium and high complexity levels. However, as indicated earlier, Speech Therapy has been seeking integration into SUS, discussing their insertion at Basic Care and implementing new opportunities for Speech Therapy at different levels of complexity<sup>6</sup>. Speech therapists need to become aware of the public policies from the Ministry of Health (MS), organizing their work so that it reaches the institution and the community in a positive way, always considering the collective over the individual, respecting the peculiarities of each community<sup>2</sup>.

Information on health plays a fundamental role for the improvement of the practices in Public Health. The Health Information Systems (SIS) are necessary elements for diagnosis and local situational analysis, providing the epidemiological study of the population, allowing more support in decision making<sup>7,9-12</sup>.

It is known that the construction of health information has as its starting point the knowledge about the collectivity of a given territory and must follow the steps of: i) generating/collecting data, ii) analyzing the data, iii) preparing information about health care demands, iv) organizing the team work management and v) intervening on the life/health needs of the population<sup>13</sup>. Thus, data is transformed

into information and, consequently, knowledge for the health teams, improving management and health care processes<sup>14,15</sup>.

The Basic Health Care Information System (SIAB) was introduced to replace the Community Health Workers Program Information System (SIPACS), by the Coordination of Community Health/Department of Health Care then, today known as Department of Basic Care/Department of Health Care<sup>16</sup>. It aims at monitoring the actions and results of the activities carried out by the teams on the Family Health Strategy (ESF) and Community Health Agents Program (PACS); therefore, having as a reference a given population<sup>15</sup> and as result the aid in planning and evaluating these teams. It was developed with the intention of being a managing instrument of the local/municipal health systems; it incorporates in its formulation concepts such as territory, problem and health responsibility. It describes the social economic reality, indicates health, disease and death conditions, evaluates the conditions of services and health care and assists in monitoring the health status in a territorial area<sup>15,17</sup>.

The SIAB has characteristics taken as concrete advances in the field of health information, among which are: i) the micro-spatial distribution of health problems and evaluation of interventions, ii) the use of more agile and timely information; iii) the production of indicators that are able to cover the entire lifecycle of the organization of health actions from the identification of problems and iv) the progressive consolidation of information, starting from less aggregated to more aggregated levels<sup>16</sup>. The SIAB is a computer program (software) powered by some forms (A, B, C, D) from which reports are generated - Health Situation and Monitoring of Families in the Area (SSA-2), Health Situation and Monitoring of Families in the Municipality (SSA-4), Production and Markers for Evaluation by area (PMA-2), Production and Markers for Evaluation by Municipality (PMA-4) –and the consolidated A1, A2, A3 and A4<sup>18</sup>. If well used, the information pieces from the SIAB allow perceiving inequalities, finding health problems in micro-regions, providing interventions and optimizing the use of the health system<sup>15</sup>.

Based on these facts, this study aims at analyzing the documents that feed the SIAB and checking its potential for action planning in Speech Therapy.

## ■ METHODS

This article stems from a research approved by the Ethics Committee in Research, under the protocol CAAE 0348.0.243.000-09. It is a cross-sectional, exploratory and documentary piece of

research, done from November 2009 to January 2010.

Such research was conducted within a PET-Health, working on the approaching of Speech Therapy to the Basic/Primary Health Care. The exploratory nature<sup>19</sup> of this research is justified by the need of knowing, developing and clarifying concepts and possibilities of Speech Therapy action that is, searching to point problems and thus allowing future studies on this research topic.

Data collection was performed by analyzing documents from MS regarding the SIAB as well as accessing the consolidated on the SIAB from an ESF unit and the Department of Health from a medium-sized municipality in the gaucho (Extreme Southern Brazil) countryside. It is worth mentioning that at the beginning of the survey, we explored forms A, B, C and D and then accessed the report/annual consolidated (2009) that studied the families from the researched ESF since, as shown in the introduction, it has portrayed the social and health conditions of the population that has been served in each ESF, besides the production practiced in that

health unit. The following reports have been also accessed: Health Situation and Family Monitoring in the Area/ESF (SSA-2) and Health Situation and Family Monitoring in the City (SSA-4). In this article we present the systematization and analysis of the items that make up the A Form descriptively.

## ■ RESULTS

In the analysis of the records and reports of the SIAB we have found issues of interest to Speech Therapy, that is, data on socio-economic conditions, lifestyle/health habits as well as the presence of diseases and/or health problems are fundamental for the definition of actions in the area. The SIAB enables then conducting a situational analysis representative of the reality of a given population and therefore favors the planning of Speech Therapy preventive actions and/or rehabilitation. See Figure 1 on the information provided by the SIAB.

Besides health conditions and diseases, the SIAB reveals health production, as shown in Figure 2.

Social data	Number of residents and families, gender identification, age, education level, occupation of the subjects and participation in community groups.
Economic data	Housing, electricity, water supply and water treatment, destination and treatment of sewage and garbage, presence of health insurance, health equipment, means of communication and transportation.
Lifestyle/health habits	Physical exercises, type of diet, smoking, consultations, medications.
Women's health conditions	During pregnancy, risk factors such as gestational diabetes, pregnant women age, cases of stillbirths/miscarriages, hypertension, hypertensive disorders of pregnancy (severe form), bleeding and edema; monitoring for prenatal care, number of prenatal visits and postpartum and gestational duration.
Children's health conditions	Number of live births and birth conditions such as length, weight, head circumference, Apgar score, mode of delivery, monitoring vaccination, presence of complications, breastfeeding and introduction of other foods, nutritional status, hospitalizations and deaths.
Diseases and affecting disorders/conditions	<ul style="list-style-type: none"> <li>- Children under two years old: diarrhea and acute respiratory infections;</li> <li>- Children under five years old: pneumonia and tuberculous meningitis;</li> <li>- Children from five to 14 years old: rheumatic valve disease;</li> <li>- Adults: alcoholism, wounds, disabilities, diabetes, epilepsy, hypertension, tuberculosis, leprosy, malaria, stroke, myocardial infarction, hemolytic diseases, leprosy grade II and III;</li> <li>- Over 50 years old: femoral fracture; cytology NIC III/carcinoma <i>in situ</i>.</li> </ul>

**Figure 1 - Data revealed by the SIAB which are considered important for planning actions in Speech Therapy in Basic/Primary Care.**

Number of consultations of doctors and nurses	Classified by age group and type of care - child care, prenatal care, prevention of cervical cancer (Pap smear collection), STD/AIDS, diabetes, hypertension, leprosy and tuberculosis.
Number of medical referrals	Specialized care, hospitalization, emergency-rescue and home care.
Other procedures performed	Specific procedure for occupational accident; sanitary inspection visit; individual service performed by graduated professional (individual consultation or service performed by a nurse, psychologist, occupational therapist, physical therapist, social worker, nutritionist, speech therapist, midwife and educator in health education) except for the procedures performed by physicians and dentists <sup>11</sup> ; dressings; inhalations, injections, removal of stitches, oral rehydration therapy; suture; group sessions: health education, collective procedures, meetings and home visits.

**Figure 2 - Data revealed by the SIAB regarding health production**

It should be said that at the time of the data collection, the ESF unit investigated presented a decrease in the number of ACS (there were four out of six provided ACS) and other professionals from the minor ESF team (the nurse and the dentist were missing), therefore compromising the knowledge of life/health conditions of the community in its full coverage area. We have also found differences between the data collected in the unit and reports accessed from the Municipal Department of Health, that is, a discrepancy between the data produced at the local level (ESF) and the presented municipal consolidated (SMS).

Such problems did not hamper the understanding of the authors that the information gathered by the SIAB instruments allows the speech therapist to take decisions about the type of action to be taken within an ESF. Failing to find reports/consolidated referring to the Basic/Primary Care developed in a city (SSA4), those data regarding the micro-area and/or specific area may be analyzed at the health unities, i.e., the A1, SSA2 and A2reports.

With regards to these reports, it is understood that the A1 report corresponds to consolidated data collected by the ACS through forms A. The consolidated refers to the situation of the operation area of each ACS. Yet, the A2 report represents the sum of the information on the A1 reports from all the members in an area. It allows a supervisor to detect vulnerabilities in their area and justify their actions. This report can be considered an action tool of the supervisors, being useful for the decision making regarding preventive measures that relevant in their area.

As for the SSA2report, it consolidates information about the health status of families that are monitored in each area. The data are collected at the beginning of each month and filled out by a graduate professional who is part of the team. This report focuses on the health situation in the area and health care services provided by practitioners. Finally, the SSA4

report consolidates information about the health status collected from all SSA2reports. While the SSA2 report gathers data from an area, the SSA4 report gathers information from all the ESF in the city.

These reports thus enable the speech therapist who works with ACS to understand the housing situation and the profile of the served community, which facilitates the planning of actions. For example, in regions where there is a large number of adult women, one can think of actions to pregnancy and breastfeeding, while there is the possibility of designing and implementing cohabitation groups in the areas identified as having a large number of elderly people.

■ **DISCUSSION**

The Family Health Strategy provides the bond construction due to the proximity to its users. Bond “is a therapeutic resource and indicates interdependence between people, and is an appropriate means for the construction of a quality clinic”<sup>20</sup>.

The proximity to the users of a particular territory and the reference staff of these permits increased bonding and also knowledge of the socio-economic realities of the served population. The speech therapist working in Basic/Primary Care, who is inserted either in the Reference Team or in the Matrix Team, must take on the construction of the bond between health workers and users of the system, havingthe information gathered and available on the SIAB as a support for strengthening and qualifying his speech therapy practicing.

The SIAB, in its electronic or documented version (forms and reports), as well as data available on DATASUS, is a tool that subsidizes health professionals, among them the speech therapist, to survey the indicators in a given territory, expressing the health conditions of a certain population (social,

cultural, economic and epidemiological aspects on health), as well as revealing the production on health in that place.

Much of the available data on these reports are critical to disease prevention and orientation of planning the actions of speech therapists in the Basic Care, highlighting the social and educational data, the identification of pregnant women who perform prenatal care, the types of labor performed, the conditions of children at birth, breastfeeding, presence of disabilities, episodes of illnesses that may cause communication difficulties such as hypertension, diabetes mellitus, stroke, meningitis, pneumonia and alcohol abuse, and health care available in the place. Currently, there are studies that relate these data with the speech therapy actions in public health, particularly in health education<sup>21-24</sup>.

As mentioned above, the data on the SIAB are essential for those speech therapists who work with the community, either in teams of Basic Health Unit or Family Health Strategy in NASF or even in clinics, for they allow the setting of the health care needs of the population assigned to the area, permitting the planning of health promotion and disease prevention actions related to communication. Being familiar with the territory in which one operates is crucial for the (re)organization of health care, identifying high-risk groups and the most vulnerable ones, for which they should direct the priorities of health care, and so making a care plan that respects the fundamental principles of the SUS, and at the same time is efficient and dynamic<sup>25</sup>. The professionals who work in Public Health are committed to developing actions that cover the greatest number of people, respecting the principles of comprehensiveness, universality and equity<sup>26</sup>.

Recognizing that the data released by DATASUL not always reflect the real situation of communities and health services for innumerable issues such as the lack of professionals in the minor staff of one health unit, technological difficulties (lack of equipment such as computers and printers), difficulties or ineffectiveness of workers and bad use of the data (mismanagement) by municipalities, it is understood that the SIAB analysis at the local level<sup>27</sup>, that is, directly in health unit(s) responsible for the area(s) of action of the speech therapist presents itself as a possibility of access to information for professionals interested in the recognition of the population situation, also allowing to

raise the potential flaws in data collection that may compromise the perception of the local reality.

However, despite the potential of the SIAB as a tool for diagnosis and planning of health care, it is noticed that the data found in the SIAB do not respond fully to what is known of the speech health conditions of the population. Thus, professionals must work close to the ACS and other professionals of the reference teams, collecting new information that correspond to the field of Speech Therapy as those related to hearing, feeding and communication in all life cycles. This approach favors the development of actions and recognition of Speech Therapy in public municipal utilities<sup>22</sup>.

Some studies corroborate the difficulties reported in the survey, indicating a high turnover of health professionals in teams and the low qualification of workers in relation to the SIAB, especially physicians and dentists, as hindering factors for the effective utilization of the system<sup>11,17,26,28-30</sup>. These studies indicate that despite the potential of the SIAB as a tool for health planning at the local level, few teams use it for this purpose, limiting it to the Numeric survey data raising, missing out on the opportunity to portray and act in the living/health conditions of the population.

## ■ CONCLUSIONS

The SIAB is a management tool, but it can be used by speech therapists who work in public health, as a basis for conducting situational analysis and action planning in Speech Therapy.

Data available on the SIAB enable the approach of speech therapists to the needs of users served in Basic/Primary Care; favor the setting of actions; stimulate the role of professionals and individuals favoring the bond and the solvability of the actions. However, it presents some limitations for speech therapists, due to lack of data related to communication and also by factors unrelated to the tool, especially the quality of data management at the local level.

It is believed that it is always possible to improve instruments to promote the setting, development and/or implementation of the health promotion, health protection and health recovery actions at different levels of taking care.

**RESUMO**

**Objetivo:** analisar os documentos da ferramenta - Sistema de Informação Básica (SIAB) - e verificar seu potencial para o planejamento de ações fonoaudiológicas. **Métodos:** foram analisados os documentos do Ministério da Saúde referentes ao SIAB e acessadas as fichas e relatórios do SIAB de uma Estratégia de Saúde da Família e de uma Secretaria Municipal de Saúde. **Resultados:** os dados do SIAB expressam as condições de vida/saúde e doenças e/ou agravos das famílias, bem como revelam as condições do serviço e produção em saúde, porém, há limitações como, por exemplo, interferências externas (incompletude das equipes e má gestão dos dados) que prejudicam o seu uso. **Conclusões:** os dados disponíveis no SIAB aproximam o fonoaudiólogo das necessidades reais dos usuários; favorecem a organização das ações; estimulam o protagonismo dos profissionais e sujeitos favorecendo o vínculo e a resolubilidade das ações; o que não quer dizer que sejam suficientes, sempre é possível elaborar ou aprimorar instrumentos para favorecer a implantação ou implementação de ações fonoaudiológicas voltadas à promoção da saúde nos diferentes níveis da atenção.

**DESCRITORES:** Fonoaudiologia; Atenção Primária à Saúde; Sistemas de Informação; Gestão em Saúde; Planejamento em Saúde; Avaliação em Saúde

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