INTEGRATIVE REVIEW ARTICLE

INFORMATION SYSTEM OF PRIMARY CARE: AN INTEGRATIVE REVIEW ABOUT EMPLOYMENT IN FAMILY HEALTH

SISTEMA DE INFORMAÇÃO DA ATENÇÃO BÁSICA: REVISÃO INTEGRATIVA SOBRE O EMPREGO NA SAÚDE DA FAMÍLIA

SISTEMA DE INFORMACIÓN DE LA ATENCIÓN PRIMARIA: UMA REVISIÓN INTEGRADORA SOBRE EL EMPLEO EN LA SALUD DE LA FAMILIA

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ABSTRACT

Objectives: analyzing the scientific production about the Information System of the Primary Care turned to the Family Health Strategy and examining how the professionals use it. Method: an integrative review, with a view to answering the question << How do the professionals involved in the Family Health Strategy use the Information System of Primary Care? >> through bibliographical survey based on BDENF, LILACS and SciELO virtual library. For discussion, articles were selected in Portuguese, published between 2009 and 2013, represented in the flowchart. Results: Nine articles were selected for reading, book report and categorization. Conclusion: the Information System for Primary Care does not have the purpose it is intended for, by lack of knowledge of professionals involved in the Family Health Strategy on its use to guide actions based on local realities and the difficulty/disability of those professionals when perform in filling the forms.

Descriptors: Information Systems; Primary Health Care; Family Health.

RESUMO


RESUMEN

Objetivos: analizar la producción científica sobre el Sistema de Información de la Atención Primaria dirigida para la Estrategia de la Salud de la Familia y examinar cómo lo utilizan los profesionales. Método: una revisión integradora, con el fin de responder a la pregunta << ¿Cómo los profesionales que participan en la Estrategia de Salud de la Familia utilizan el Sistema de Información de Atención Primaria? >> por levantamiento bibliográfico basado en BDENF, LILACS y en la biblioteca virtual SciELO. Se seleccionaron los artículos para la discusión en portugués, publicados entre 2009 y 2013, representados en el diagrama de flujo. Resultados: nueve artículos fueron seleccionados para la lectura, libro de informes y la categorización. Conclusión: el Sistema de Información de Atención Primaria no tiene el propósito a que se destina por desconocimiento de los profesionales envueltos en la Estrategia de Salud de la Familia, sobre su uso para guiar las acciones basadas en las realidades locales, bien como en la dificultad/incapacidad de los profesionales en realizar la cumplimentación de los formularios. Descritores: Sistemas de Información; Atención Primaria de la Salud; Salud de la Familia.

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INTRODUCTION

The Family Health Strategy (FHS) was established in 1994 and shows inter and multidisciplinary characteristics. Its idealization aimed at bringing services closer to the population's health in order to enforce the constitution. This strategy is intended to further work aimed at monitoring the health of populations living in areas covered by their health units. Health care developed by the strategy occurs both in health facilities and in the households and aims at assisting children, adolescents, women, and elderly men.

The work of the FHS and its marked expansion promoted a significant generation of data that needed a better utilization which led the Coordination of Community Health (COSAC) of the Assistance Secretary of the Ministry of Health request the creation of a DATASUS system that would be able to manage obtained information. In 1998 comes the Information System for Primary Care (SIAB).

The implementation of SIAB promotes permutation Information System Program of Community Health Workers (SIPACS) by deepening and improvement of primary points of the old information system; thereby, providing better monitoring of activities carried out by teams of Strategy Family Health.

Thus, the development and implementation of SIAB aims to give operational and managerial support to the work of data collection conducted by teams of the Family Health Strategy, generate information to managers as well as assist and expedite the process of decision making, providing decision support priority actions to communities based on the real needs of the population being assisted.

Through the above, the following objectives were developed:

- Analyzing the scientific production on the Information System of the Primary Care turned to the Family Health Strategy.
- Analyzing how the professionals of the Family Health Strategy use the Information System of Primary Care.

METHOD

Article compiled from Monograph << System of primary care information: bibliographic study on employment in family health >> presented to the Postgraduate Program in Family Health, School of Nursing Aurora de Afonso Costa, Federal Fluminense University/UFF. Niterói - RJ. Brazil.

Integrative review for allowing the meeting and summarizing the results of research already completed, as well as draw conclusions and insights from a topic of interest in a systematic and orderly manner, in order to answer the research question << How do professionals involved in the Family Health Strategy use SIAB? >>.

This type of method is prepared by following six steps. These steps are made up: selection of thematic issues, establishment of criteria for sample selection, definition of the information to be extracted from selected through categorization, data analysis, interpretation and presentation of the results of the review studies. According to the technic/instrument procedure, the type of study used was the literature survey, or literature research, because it covers all scientific production elaborated about the subject of study to the present day.

In order to select the articles that answer the research question and the inclusion criteria we constructed a structured questionnaire with open questions. Initially there was performed the bibliographic survey without time frame of the articles published in databases: BDENF (Database of Nursing), LilACS (Latin American and Caribbean Literature on Health Sciences) and SciELO Virtual Library (Scientific Electronic Library online) for the period from 01/07/13 to 04/24/13, but for the discussion of the data items just the last five years were selected.

The search was performed through the descriptors in Portuguese: information systems, primary health care and family health, as well as refining the relevant criteria have been done, by reading the abstracts of articles are available in full on the bases selected data and SCIELO virtual library, aiming to verify the contents of the works. This potential conduit selected bibliographies and these inclusion criteria.

The selection of potential bibliographies is based on the fundamental articles to answer the prerequisites of research, performing the analysis of the levels of evidence; then conducted to print and read the articles in their entirety for the purpose of establishing textual relationships, contextual and intertextual, aiming at the emergence of categories for discussion of the objectives proposed in the study. At this time, there was the exclusion of repeated items present in the same category.
RESULTS

To describe the methodological way to the results it is presented the flowchart, see figure 1.

When performing the selection of references there was found 09 articles, being 03 of the database BDENF and 06 of LILACS. For analysis, the content has been organized in terms of year, type of publication, the essence of the content and strength of evidence. Of the 09 articles selected publications of the highest occurred in 2010 (05), followed by 2012 (02), 2009 (01) and 2013 (01). Regarding the type of publication all are articles. Regarding the essence of content, 03 articles emphasize the use of SIAB as a tool in the planning of health initiatives in primary care, 04 discuss how the professionals involved in the Family Health Strategy use the Information System for Primary Care (SIAB) and 06 discuss the difficulties encountered by health professionals in filling in the forms SIAB.

As for the strength of the evidences it was found an article of evidence level 3, four articles of evidence level 4 and four articles of evidence level 5.

DISCUSSION

When carrying out the selection of potential bibliographies from reading full articles, categories emerged that allowed the discussion of goals. These categories are discussed below and relate to the use of the SIAB as a tool in the planning of health initiatives in primary care, as professionals involved in the Family Health Strategy use the Information System for Primary Care (SIAB) and the difficulties encountered by health professionals in filling in the forms SIAB.

In the category “Using SIAB as a tool in the planning of health initiatives in primary care” there are inserted three scientific productions; see figure 2.
The first study, an integrative literature review, aims to perform the analysis of scientific literature on the Information System for Primary Care (SIAB) and its use by the Family Health Teams. This study demonstrated that professionals involved with the SIAB recognize their potential, but even with this evidence the system has little use or is not used by most teams by resistance model of the system and the absence of discussion of the data collected in routine team.

The investigation revealed that the weaknesses of the use of the SIAB lie in lack of continuing education and standardization of the system that is vertically resulting in unmet local specificities and causes underutilization of it.

The second research, epidemiologic, is part of a research being carried out with funding from FAPEMAT and aimed to analyze the Family Health Strategy in a city in the State of Mato Grosso. The study highlights the SIAB as essential for planning, monitoring and evaluation of actions employed by the Family Health Strategy, if used to its fullest.

The third study, a literature review, presented in order to analyze the role of the Primary Care Information System as a tool of Basic Health Unit to produce data used in planning and directing actions in health programs in the Family Health Program and program of Community Health with a view to promoting and health education, aiming to analyze the need for restructuring of a range of information.

The study demonstrates that there are weaknesses in data collection SIAB tool and as a result has the ability to perform the upgrading of the tool in order to become agile decision-making processes relating to the promotion/health education and care in regionalized care.

The recognition of the potential SIAB from professionals involved in their use is paramount. This is being touted as a restlessness in the academic and professional circles, but the limited use of the system, makes it brittle, where the data provided by this tool become unviable assertive decision making, not agreeing with the processes of promotion/education health care and attention, guided the real needs of subject/area.

In category "How do professionals involved in the Family Health Strategy use the Information System for Primary Care (SIAB)" are inserted four (4) scientific productions, see Figure 3.
The first reference of this category appears as a descriptive, exploratory study of a qualitative approach that was aimed to identify the knowledge of Community Health Workers about instruments/records of the Information System of Primary Care.10 This study shows that this professional class uses SIAB for collecting data, but has difficulty in identifying and naming the chips, describe them or understand variables, terms and conditions. Thus, the weakness shown by the present study is the lack of professional continuing education for this class.

The second study presents exploratory-descriptive, qualitative approach, aiming to analyze the nurses’ perception on the use of the Information System of Primary Care in the Family Health Strategy, in five municipalities in the south of the country.11

The research showed that nurses use SIAB as a tool for data collection, control, basic care information and local diagnosis, which results in qualification of care in view of the fact that professionals know better the location where they operate. However, the above mentioned study shows how fragile the need for professional training and discussion on the system so that it is used properly. The study also points out the importance of training, discussions and municipal advises about SIAB have its organization developed by the Regional Coordination of Health.

The third research appropriated the integrative review to analyze the scientific production on the Information System of Primary Care and its use by the Family Health Teams.7 The authors demonstrated that the use of SIAB occurs differently among professional teams.

This research shows that community health workers recognize the SIAB as a tool in the identification and assessment of families, as well as construction of health indicators and setting priorities to be met. Thus, the SIAB tend to organize work to be developed, the schedule to be held and direction of home visits to be developed. However, this professional class tries to point out the large number of tokens as difficulty using the system.

Nurses tend to use SIAB to assess the actions taken at the end of each month7. This review tends to guide the actions to be undertaken. Despite this use by nurses, studies indicate that some7 professional still unaware of the SIAB as a tool to guide the actions based on the reality of the location.

Studies show that doctors, nursing staff and dentists have difficulties related to knowledge and filling in the forms SIAB. According to these professionals, technical manual SIAB not clear existing doubts about its use.7

The fourth study investigated the use of SIAB by professionals of Family Health Teams.
and to achieve the goal we applied a questionnaire to 75 of 10 professional teams who were observed for a week from March to June 2008.12

The study corroborated the findings for the third research demonstrating the SIAB is used differently among professional team. The study shows that most professionals who use SIAB are community health workers and medical professional who uses the least system. Despite community agents are professionals who often use the SIAB, the system is used only to complete the registration of households and issue reports, ie, they do not release new data collected in the monitoring reports of the risk groups.

Community workers justify the non-release of new data in the monitoring reports due to lack of appreciation of this information by other professional staff members.

The study shows how weaknesses with regard to the use of SIAB lack of professional training; restraint system and the registry of families reporting; differentiation system use by professionals; informal records by professionals so to meet their own needs; lack of appreciation of this information by other professional staff members.

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Difficulty/ disability of professionals due to the lack of professionals about their use: guide the actions based on local reality. The difficulty/ disability of professionals realize the fullness of each record and the large quantity of these are also obstacles, which sometimes results in many cases the omission of data collected. This approach leads to non-reliability of data in the system, making it difficult or unfeasible making decisions for the population assisted by family health teams.

In the category “The difficulties encountered by health professionals in filling in the forms of SIAB” are inserted six scientific productions, see figure 4.
The first reference of this category is presented as a case study of qualitative approach, where we interviewed 26 individuals in municipal, state and federal levels of the Health System in order to analyze how the Information System of Care Basic has been used as an instrument of power.13

Related to the difficulties encountered by health professionals in filling in the forms SIAB, the study authors say it may be related to data analysis, contextualization and production information.

According to the authors, the weaknesses related to these problems are related to the training of health professionals.

The authors of the second study indicate that community health workers have difficulty identifying and naming the forms, as well as describing them or understand variables, terms and pathologies.10

The third study investigated the sources of information about a hypertensive Health Unit Family of Londrina, Paraná.14 of The Registration and Monitoring of Hypertensive Diabetics System (Hiperdia), the Primary Care Information System (SIAB) and scheduling chips sources were analyzed for the number of hypertensives, and identified the reasons for not registering in each source of information, addition to estimating the underreporting of cases of hypertension in the study area.

The research shows that weaknesses as the unregistered hypertensive simultaneously on the three sources of information (Hiperdia, SIAB and scheduling); the record of scheduling, designed to track visits and schedules of returns of all hypertensive be used only for record of using medications and downgrading of registrations.

These weaknesses can be linked the difficulties presented by professionals with regard to the poor quality of filling in forms SIAB, the high turnover of community health workers and lack of investment in continuing education.

The authors of the fourth research report that the difficulties encountered by health professionals in filling in the forms SIAB are due to lack of training.12 The authors also point out that the community health workers receive no systematic surveillance for completion of filling in the forms.

The subsequent study was treated as a cross-sectional study using secondary data collection for assessment of completeness of the information contained in the records Hiperdia of a Basic Health Unit with the Family Health Strategy in Pelotas, Rio Grande do Sul.15

The lack of training for professionals responsible for filling in the forms is also identified in this study as a difficulty.

In the fifth study, the authors point to difficulties in filling the SIAB by health professionals the interpretation and meaning of the fields to be filled in existing forms, as well as insufficient training.7

It is a fact that professionals show difficulties in completing the SIAB. The deficit of professionals and the lack of training represent the greatest barriers for the correct insertion of this system. It is essential that professionals involved in the use of SIAB be trained in order to make the reliable data available for the promotion of correct strategies.

### CONCLUSION

In the end of the survey, it was possible, through the selection of potential bibliographies and categorization of them, to perform the discussion of the proposed objectives.

It was evident that professionals involved with the SIAB recognize its potential, but the system is still not used or presents limitation for use by most teams. Studies also showed weaknesses in the tool of data collection of SIAB and place as a solution for this case the possibility of performing the upgrading tool.

As to how the professionals involved in the Family Health Strategy using the SIAB, it is evident that the system does not display the intended purpose for lack of professionals on their use to guide the actions based on the reality of the locality, well as the difficulty/disability of professionals in realizing the fullness of each record. The large quantity of these forms is also seen as a

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**Figure 4.** Distribution of potential bibliographies of category “the difficulties encountered by health professionals in the fulfillment of forms of SIAB.

| Radigonda B, Conchon MF, Carvalho WD, Nunes EFPA.1 | 2010 | Basic care | LILACS | Integrative review in the databases Lilacs, Medline, Scielo, and public health Virtual Library being used as criteria for inclusion, original articles, monographs, dissertations and doctoral theses to the analysis of the articles found. | Level 5 | Article/ Magazine Space for Health, Londrina, v.12, n.1, p.38-47, Dec. |
| Radigonda B, Conchon MF, Carvalho WD, Nunes EFPA.1 | 2010 | Basic care | LILACS | Integrative review in the databases Lilacs, Medline, Scielo, and public health Virtual Library being used as criteria for inclusion, original articles, monographs, dissertations and doctoral theses to the analysis of the articles found. | Level 5 | Article/ Magazine Space for Health, Londrina, v.12, n.1, p.38-47, Dec. |

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factor for not posting the data collected by the class of professional community workers. This approach leads to the non-reliability of the data present in the system which hinders or impedes decision making for the population assisted by family health teams.

The lack of professional training has been identified by several authors as responsible for the difficulties encountered by health professionals in filling in the forms of SIAB. This weakness pointed out in the studies leads us to think in continuing education as a solution for professional training and, therefore, the reliability of the data contained in the SIAB.

REFERENCES


