

# Permanent education as a tool for information management in primary health care

## *A educação permanente como instrumento para a gestão da informação em atenção básica de saúde*

Dorquelina Augusta Maia Rodrigues de Oliveira<sup>1</sup> • Geilsa Soraia Cavalcanti Valente<sup>2</sup> • Vangelina Lins Melo<sup>3</sup> • Selma Petra Chaves Sá<sup>4</sup> • Josélia Braz dos Santos Ferreira<sup>5</sup> • Thais Mara da Silva<sup>6</sup>

### ABSTRACT

The aim of this study is to describe the work process of Primary Health Care professionals regarding the production and health records use and to discuss the importance of health information management and its relevance to the quality of nursing records. This is a descriptive-exploratory study, with a qualitative approach, field research with documentary analysis, which had as scenario, three Municipal Health Centers located in the city of Rio de Janeiro, RJ, Brazil. Participants were twelve nursing professionals working in these units. The theoretical framework is based on the concept of a reflexive practice defended by Donald Schön, which emphasizes instruction and learning through doing, being the data analyzed from the dimensions for analysis and attributes for information quality management proposed by De Sordi. Three categories emerged from the study, which were analytically named: The practice of registration in the nursing "doing", The quality of registration in nursing thinking and Nursing records in the context of health information management. It is concluded that there is a need to invest in strategies of permanent education, aiming to promote the development of intellectual responsibility and, consequently, the nursing practice improvement.

**Keywords:** Continuing Education; Information Management in Health; Nursing Records; Primary Health Care.

### RESUMO

Objetiva-se descrever o processo de trabalho dos profissionais da Atenção Básica, no que se refere à produção e utilização dos registros em saúde, e discutir a importância da gestão da informação em saúde e sua relevância para a qualidade dos registros de enfermagem. Trata-se de um estudo descritivo-exploratório, com abordagem qualitativa, pesquisa de campo com análise documental, que teve como cenário, três Centros Municipais de saúde localizados no município do Rio de Janeiro, RJ, Brasil. Os participantes foram doze profissionais de enfermagem em atividade nestas unidades. O referencial teórico está baseado no conceito de uma prática reflexiva defendido por Donald Schön, que enfatiza a instrução e a aprendizagem, através do fazer, sendo os dados analisados a partir das dimensões para análise e atributos para gestão da qualidade da informação propostos por De Sordi. Três categorias emergiram do estudo, as quais foram analiticamente denominadas de: A prática do registro no "fazer" da enfermagem, A qualidade do registro no pensar da enfermagem e Os registros de enfermagem no contexto da gestão da informação em saúde. Conclui-se a necessidade de investir em estratégias de educação permanente, visando promover o desenvolvimento da responsabilidade intelectual e, conseqüentemente, o aprimoramento da prática de registrar em enfermagem.

**Palavras-chave:** Educação Permanente; Gestão da Informação em Saúde; Registros de Enfermagem; Atenção Primária à Saúde.

### NOTA

<sup>1</sup>Nurse, Master of Science in Health Care, Aurora School of Nursing Afonso Costa / Fluminense Federal University / EEAAC / UFF, Niterói (RJ), Pedagogical Training for Teachers from Cândido Mendes University (RJ) / Specialization in Public Health from Estácio de Sá University (RJ). E-mail: dorquelinamaia@gmail.com.

<sup>2</sup>Nurse, Professor of Nursing, Department of Fundamentals of Nursing and Administration / Professional Master of Health Teaching, Aurora School of Nursing Afonso Costa, Fluminense Federal University / EEAAC / UFF, Niterói (RJ), Brazil. E-mail: geilsavalente@yahoo.com.br.

<sup>3</sup>Nutritionist, Doctorate in Health Care Sciences, Aurora de Afonso Costa School of Nursing / EEAAC-UFF, Master's Degree in Health Care Sciences, Aurora School of Nursing / EEAAC-UFF, Nutritionist at Fluminense Federal University / UFF, Niterói (RJ), Brazil. E-mail: vanjalins@yahoo.com.br. Corresponding author.

<sup>4</sup>Nurse, PhD, Full Professor, Aurora School of Nursing Afonso Costa / EEAAC-UFF, Coordinator of the Nursing Extension Program at the Interdisciplinary Geriatrics and Gerontology Program / UFF, Niterói (RJ), Brazil. E-mail: selmapetrasa@gmail.com.

<sup>5</sup>Nurse, Doctorate in Health Care Sciences, Aurora de Afonso Costa School of Nursing / EEAAC-UFF, Master of Science in Health Care, Aurora School of Nursing Afonso Costa / EEAAC-UFF, Nurse at University Hospital Antônio Pedro da Universidade Federal Fluminense / UFF, Niterói (RJ), Brazil. E-mail: joseliabraz42@yahoo.com.br.

<sup>6</sup>Graduated in Nursing from Universidade Estácio de Sá / UESA (beginning 2015 / in progress). E-mail: marathais.89@gmail.com.

## INTRODUCTION

The Basic Health Unit (UBS) is the gateway to the Brazilian health system and the integral care organizing strategy. It is understood, therefore, that the precision and the systematic registration of the data, as well as the transformation of the data into information, are fundamental to guide processes intrinsic to the area<sup>(1)</sup>. In this sense, the perception of “information” as a complex structure and element that, in any scope, precedes communication, technology, knowledge and action is evident, that is, it is input to any “doing”<sup>(2)</sup>.

Therefore, it is sought to highlight the need for management, aiming to broaden the understanding and commitment of professionals about their relevance and purpose. In this logic, it is added that organizations need to resize the role of information and knowledge, re-signifying their value to the individuals who work in it and to the organization itself. The level of complexity requires attention to the accuracy, relevance and purpose of the information. There is a need to work on the culture and behavior of people in relation to the generation, sharing and appropriation of information and knowledge<sup>(3)</sup>.

In this context, nursing records should express the reflection of the professional’s assessment of the client, and are the only means of demonstrating the efficiency of the care offered, as well as the conformity of the work performed<sup>(4)</sup>.

On the other hand, it is understood given as a basis for generating information<sup>(5)</sup>. Thus, data are like raw material on which we work, bringing them together, correlating them, opposing them, to produce information that translates a knowledge, an interpretation and a judgment about a given situation. But, they do not speak for themselves.

In this respect, it is emphasized that technology alone is not capable of transforming data into information, it is necessary for man to create meaning. Therefore, the absence of human intervention makes most of what we experience is only given, and most of what is called Information Technology (IT) is just data technology, because it is not about understanding, construction or communication of information<sup>(6)</sup>.

In this sense, discussing the importance of the instruments, seeking the relationship between the information generated, the influence that actions can have on this process and the importance of these instruments for the continuity of work are important conditions for breaking with simple data collection and the referral to the other levels<sup>(7)</sup>.

It is noticed that professionals of higher level, when in activity in the Basic Attention in Health, show little compromise when registering their activities or performed procedures. However, since the early days of nursing, accurately and correctly noted the problems observed during patient care was a concern and guidance on the

part of Florence Nightingale. However, still today, it is verified that a great part of the research on the nursing records has as focus the assistance, and little is discussed about the relevance of the records, in the context of the management and use of health information.

Among the professionals in the area of Basic Health Care, nursing practice occurs more closely to the client, but despite this proximity, analyzing their notes, little is known about what was done during the care provided. In this regard, it is stated that a competent professional is always concerned with instrumental problems and seeks the most appropriate means to develop actions that produce the intended effects, conscious of their objectives. Thus, it is believed that the personal commitment of the professional is what leads to the development of the referred competence<sup>(7)</sup>.

Considering the above, it is understood that the nursing actions are evident from the notes made by the team, therefore, these notes consist of the most important instrument among their activities, since it allows evaluation of care, strategic interventions, legal support, and still serve as the basis for various studies. Thus, this study may be a proposal of integration between teaching and service, with reflection on possible implications arising from the quality of health records, providing self-questioning, intellectual growth, changes in practices, greater professional autonomy, and validate and promote visibility to health care actions.

It is worth highlighting the multidimensional character inferred to Health Information, which as an integral part of a National Information and Information Technology in Health - PNIIS<sup>(8)</sup> social control and ethical and reliable use of data produced with quality, whether in relation to the citizen or other areas of health. In this sense, it gives the possibility of observing Health Information as a subsidy for the health sector itself, such as: administration, assistance, control and evaluation, budget and finance, planning, human resources, regulation, supplementary health, health geoprocessing, and in epidemiological, health and environmental surveillance<sup>(9)</sup>.

Thus, Health Information should be understood as a decision support instrument for the knowledge of the socioeconomic, demographic and epidemiological reality for planning, management, organization and evaluation at the various levels that make up the Unified Health System - SUS<sup>(10)</sup>.

It is also important to note the implications of failing to correctly fill in nursing notes, considering the importance and contribution of these records in the process of decreasing hospital glosses, showing how the nursing professional is a fundamental tool in this context<sup>(11)</sup>. These variables allow us to approach, articulate and contextualize dimensions and implications of themes such

as: education, legislation, human resources, ethics and norms in the universe of nursing practice.

It is a fact that records made by health professionals constitute an important vehicle for communication and lead to the knowledge of the results obtained with the care provided by the health team involved with the activity, and facilitates decision making, as well as providing better coordination and continuity health actions. Thus, the objective is to discuss the importance of health information management and its relevance to the quality of nursing records.

## METHOD

This research is a cross - section of a dissertation of the Professional Master 's Degree in Health Teaching, carried out at the Aurora Afonso Costa Nursing School, Fluminense Federal University (EAAAC / UFF), Niterói, Rio de Janeiro, Brazil. This is a multicenter methodological study, which is a controlled and executed study in several cooperating institutions to evaluate the magnitude of certain variables and results in a specific population. Based on a qualitative approach, based on transcription of interviews and later analysis of content, in thematic modality<sup>(12)</sup>.

Qualitative research works with the universe of meanings, motives, aspirations, beliefs, values and attitudes, corresponding to a deeper space of relationships, processes and phenomena. It is emphasized that the instruments of field work in qualitative research aim to mediate between the theoretical-methodological framework and the empirical reality<sup>(13)</sup>.

Field research was carried out at one of the Program Area Coordinations (CAP) of the city of Rio de Janeiro, Brazil. The coordination in question is CAP 5.1, which covers ten neighborhoods and currently offers 25 Health Units. The scenario was composed of three Municipal Health Centers<sup>(14)</sup>.

The research participants were two assistants, three technicians and seven nurses active in the scenario study units, in a total of twelve interviews. It was chosen as inclusion criteria: the one accepted to participate in the research, a minimum of one year in professional activity in the scenario institution and presence in the period of application of the research instruments. Exclusion criteria were: professionals, who were unavailable due to the demand for services and those absent due to holidays and/or licenses at the time of data collection. Seven nurses between the ages of 34 and 64 were approached. The youngest in the institution had three years of work and the oldest, thirty years. Family Health Strategy (ESF) is the specialty of three of these nurses, and among the others, two were qualified in Public Health, one of which also made a Full Degree. Another nurse has completed training for higher education, and one has no specialization.

Among the mid-level professionals interviewed, three were technicians and two nursing assistants, male. The age between them varied in 51 and 64 years, which refers to the working time in the institution varied between fourteen and twenty-eight years of services provided. Four reported having a higher education, one in Social Work, two in Nursing and another one graduated in Bachelor of Portuguese Language.

To collect data, a semi-structured interview technique, recorded on an MP4 device and as an instrument, was used to draw up the participants 'training profile, a semi-structured questionnaire, addressing subjects' daily lives about health records, with base on the attributes on information management proposed by De Sordi<sup>(12)</sup> and in the concepts of knowing-in-action and reflection-in-action of Schön<sup>(7)</sup>. The declarations of the deponents were compiled from the similarities and contradictions, by the technique of content analysis, in the thematic modality.

In compliance with Resolution No. 466/2012 of the National Health Council (CNS), institutions and participants received alphanumeric codes guaranteeing anonymity. The research was approved by the Ethics and Research Committee (CEP) of the Faculty of Medicine of the Federal University of Fluminense (UFF), considered the 1st Research Center, under No. 924.336/14.

## RESULTS AND DISCUSSION

Regarding the links between nursing records and the complexity of the information treatment in the universe of health actions, correlating to the practice of registering in nursing, contextualization is understood as a device for motivation and commitment of the professionals, considering that by giving meaning to a certain "event", the contextualization propitiates the problematization of the practices, provoking the acquisition of new knowledge. In this logic, the following question was applied: How do you correlate the records produced by professionals with the process of health information construction?

*"What I have here, for example, I make a type of information that goes to production that is this newsletter of individualized outpatient production, amount of dressings that I produce, every action is performed here, everything is filled by me and taken in days when I'm here, which is Monday and Wednesday for the SIAB sector (Ambulatory Information System)."* [Ent. 1]

*"That question is kind of complicated. I think everything really is a process of building this information. If all the professionals of the team make a good record, we can build a process to rescue this patient. There is a community agent who registers in one way and there is another professional who registers in another way."* [Ent. 7]

The statements indicate that, even in services that have standardized forms for generating records, such as

the ESF, it is perceived that the reliability dimension of the information/data is compromised due to different postures in the registration form, which induces questions regarding the credibility or cognitive authority of the source, as well as the content of the information.

An important aspect to be considered is the limited view of immediate care issues, without showing an understanding of the role that these notes take in the context of formulating other health interventions that respond to the demands of the clientele, in which the unit and the health professionals. This fact indicates the need for strategies that generate knowledge and provide an understanding of the records produced, as an intervention tool in the formulation of health planning, actions and policies.

Therefore, interpretations about the stages involving the information context require professionals to have a more complex intellectual involvement than is required for data production, so that there are coherent conceptual interpretations. Therefore, more important than producing the data, would be the managerial understanding of these.

Next, the deponents point out, albeit timidly, the importance of nursing records for health vigilance investigations and actions. It is worth emphasizing that in basic care, the implementation of actions and/or epidemiological surveys is based on the records produced by the professionals in activity in the Health Units. Considering that in any Health Unit the nursing team configures the highest percentage of human resources, which usually act closer to users. It is understood that the records produced by them have a great impact and permeate the entire process of epidemiological surveillance.

*“Initially, here on the customer service desk is everything recorded in books and we have the chips. Now with the innovation, the Prefecture has implemented the computerization system and has a specific person who registers in the database”.* [Ent. 2]

*“Register the vaccines that have been applied and make the vaccination appointment. It is noted on the statistics sheet. Now we have a book for adults, we have another book that is for children who do not usually do the vaccines here, who for some reason comes to make only a specific vaccine. We also have the archive against all children, even those outside the area.”* [Ent. 12]

*“I think it’s important, because the mother comes here, brings the card that we evaluated to apply the vaccine and make the appointment. And he always has a story behind him, he comes with another son who has chicken pox and that’s all we’re observing. I think that when we send this data to the Secretariat, they form information databases. They serve as information for them to act in orientation and even revaccination campaigns”.* [Ent. 2]

This testimony reminds us that each local action contributes to a global experiment to reconstruct a given

problem<sup>(7)</sup>. In other words, the records or data collected by nursing in the Basic Health Units, in addition to expressing and enabling the follow-up of the care, mean an important constituent element for the work process in other health instances. Next, another testimony:

*“In fact, when we legally endorse ourselves, doing all kinds of registration, it becomes easier to build our work, sometimes to do an analysis or to do some study, everything becomes easier”.* [Ent. 3]

In this speech, the professional’s notion of the legal relevance of his records becomes evident. Nursing, as well as other professions, is regulated by laws or legal norms, therefore, it is understood that their records, legally, represent an important device for legal support of the professional exercise, allowing the defense or punishment of the professional.

Another approach perceived in this testimony signals the possibility of working with the collections of information. In this field, the documentation of care practices and the results obtained from these practices, documented in written records, constitute an important communication tool for assessment and continuity of care, and may also promote research and teaching<sup>(15)</sup>.

The purely quantitative view demonstrated in the following speech suggests that the nonobservance of the correlation of actions developed by nursing with other contexts may be the source for generating poor information<sup>(12)</sup>.

*“This question is complicated, but for example, we have patients with hepatitis C in the host and we do this control with epidemiology. Statistically important for epidemiology”.* [Ent. 6]

Especially in the area of basic care, the nursing team’s actions constitute a set of actions that are articulated and complemented in the achievement of health work, and also that nursing annotations when associated with the population assisted by a given service and analyzed epidemiologically, allow to identify or clarify several health problems. Thus, the quality of these records validates the quantity of them.

Therefore, the non-conformities identified from the statements of the deponents, as well as their limited view on the theme, point out issues that should be considered as opportunities, which can and should be used to include educational processes to develop both the quality of the services offered to the population.

There is a need for educational actions to be a daily reality, with the aim of provoking a critical reflection on the problem situation, that is, the little knowledge regarding the value of the records. In general, the processing and transformation of data into information are usually performed outside the local level, so professionals who are directly in touch with the assistance and producing the records are not involved with actual use or analysis

perhaps for this reason demonstrate little knowledge of the subject of information management.

In this context, permanent education seeks an institutionalized practice, aims at the transformation of technical and social practices, periodicity is continuous, is based on pedagogy focused on problem solving, in which the result is institutional change, active appropriation of scientific knowledge, strengthening the work team<sup>(16)</sup>. Following this idea, it can be inferred that educational activities with a focus on information management from its most basic stage are necessary in order to ascertain the professionals' understanding of the relevance and purpose of data collection and recording.

The realization of this study has made it clear that the process of producing records and data that will be transformed into information involves technical and organizational work processes, among others. It was noticed that the collection of data, as well as the nursing records, takes the form of printed/electronic medical records, or in the form of standard forms and serves as a basis for generating knowledge. Among other aspects, they reflect the quality of the assistance, guarantee the continuity of activities, as well as represent an important tool for decision-making processes, provide data for scientific investigations and, possibly, constitute subsidies for ethical-legal demands.

It was possible to identify that the production of the records can occur in a manual or computerized way, depending on the modality of the professional link. Teams that do not work in the ESF register their activities only in a manual way, in standardized forms or in printed forms organized by the team itself. These non-standard forms are elaborated from the initiative of the teams in some specific rooms (ex: immunization and curative room), however, it was verified that, although they serve the same purpose, considering the deponents' speech, differentiate between Health Units.

Regarding the annotations of the activities of the teams that work in the ESF, the availability of standardized and/or computerized forms is identified. However, although they were better structured regarding the production of records, the need to transcribe manual annotations to the electronic medium was identified as a problem. It is understood that the diversity of ways of recording activities, the transcription of records, as well as improvisations performed by professionals, corroborates the occurrence of nonconformities in the records, and hinder bureaucratic nursing actions.

The greatest challenge is to overcome misconceptions about the historical technical rationality observed in nursing practice. This finding is based on the limited view of several deponents, who relate the records only to the continuity/follow up of the assistance and the production of data to achieve goals. It is understood that the

precision and systematic recording of data, as well as the understanding of the usefulness and complexity involved in their transformation into information, are fundamental to improve the quality of data/records and to guarantee credibility of nursing actions.

Thus, Nursing Care Systematization (SAE) should be used as a tool in the work process, using care plans, protocols and standardization of nursing procedures related to this care, assisting the nurses in the notifications<sup>(17)</sup>. Therefore, the point that stands out is the need to seek strategies that collaborate in overcoming this demand.

Hence the importance of Health Information Management that aims to manage the acquisition, organization, recovery and dissemination of Health Information. Within this perspective, it is possible to visualize possibilities of educational activities to address, articulate and contextualize dimensions and implications on the such as: ethics, legislation, construction of health indicators, planning and formulation of health policies, as well as a resource for effective visibility and validation of nursing activities. Privileging the concept of contextualization and having as substrate the considerations of the deponents, we perceive the need for resources that lead to a broader and systemic view regarding the practical utility of the records in the context of information construction.

It was observed in the statements of the deponents a distancing regarding the contribution of these records to processes and actions other than assistance, but that are based on the record of the same. This finding suggests that it is necessary to reflect on the critical analysis of the mission and objectives that involve the various segments of its activities, that is, perceive its records and notes as a reference to guide other processes intrinsic to the health area, such as: strategies policies for prevention, control, planning and development of health actions.

## CONCLUSION

The contribution of nursing through the registration of its actions and procedures is notorious, especially in the area of basic care, which is characterized by epidemiological surveillance, being considered a gateway to SUS.

However, the statements analyzed indicate that this topic deserves greater attention on the part of the nursing team, since the category, despite being responsible for the production of a significant amount of data, seems to lack a better understanding of the potential of it's in the context of work in Primary Health Care.

In this regard, lifelong education constitutes the best and probably the only device capable of allowing professionals ample possibilities for reflection and promotion of the development of an intellectual responsibility and, consequently, the improvement of the practice of enrolling in nursing.

## REFERENCES

1. Silveira DS et al. Management of work, education, information and communication in basic health care for municipalities in the South and Northeast regions of Brazil. *Cad. Saúde Pública*. 2010; 26(9):1714-1726.
2. Valentim MLP. Preface of the book *Information management: fundamentals and practices for a new knowledge management*. João Pessoa: UFPB; 2007.
3. Valentim MLP. *Information in complex organizations – Colunas/Organizações do conhecimento*. Maio/2007.
4. Franco MTG, Akemi EN, D'Inocento M. Evaluation of the records of nurses in medical records of patients hospitalized in a medical clinic unit. *Acta Paul Enferm*. 2012; 25(2):163-170.
5. Lira WS et al. The search and use of information in organizations. *Perspect ciênc inf*. 2008; 13(1):166-83.
6. Fialho Junior RBF. Health information and epidemiology as coadjuvants of health practices, in the intimacy of the area and microarea - how to use it? [Dissertation]. Universidade Estadual de Campinas, São Paulo, 2004.
7. Schon DA. *Educating the Reflective Professional: A New Design for Teaching and Learning*. Porto Alegre: Artes Médicas; 2000.
8. Ministry of Health (BR). National Policy of Permanent Education in Health. Administrative Rule no. 198 / GM / MS of February 13, 2004. Annex Official Journal of the Union no. 32/2004, section I. Brasília, 2004.
9. Moreno AB, Coelli CM, Munck S. In: Pereira IB. *Dictionary of Professional Education in Health / Isabel Brasil Pereira e Júlio César França Lima*. 2.ed. rev. ampl. Rio de Janeiro: EPSJV; 2008.
10. Carvalho AO, Eduardo MBP. *Health Information Systems for Municipalities*. São Paulo: Série Saúde & Cidadania; 1998.
11. Ferreira T, Souza-Braga, A, Valente GSC, Ferreira de Souza, D, Carvalho-Alves, E. Nursing audit: the impact of nursing notes in the context of hospital glossaries. *Aquichan, Norte América*. 2009; 9(1).
12. De Sordi JO de. *Information management: fundamentals and practices for a new knowledge management*. São Paulo: Saraiva; 2008.
13. Minayo MC. *Qualitative analysis: theory, steps and reliability*. *Ciênc Saúde Coletiva*. 2012; 17(3):621-626.
14. Minayo M C. *The challenge of knowledge: qualitative research in health*. 11. ed. São Paulo: Hucitec. Rio de Janeiro (RJ): ABRASCO; 2008.
15. Ministry of Health (BR). Department of Primary Care. *Self - evaluation for Improvement of Access and Quality: material to support the self - evaluation of the Support Centers Family Health (Draft)* Ministry. Brasília Brazil. Ministry of Health. Secretariat of Health Care. Department of Basic Attention, 2013.
16. Ministry of Health (BR). Department of Primary Health Care. *Reception to the spontaneous demand/Ministry of Health*. Secretariat of Health Care. Department of Basic Attention. - 1. ed. 1. reimpr. - Brasília: Ministry of Health, 2013.
17. Fiorin JMA et al. Evaluation of the quality of nursing prescriptions in an intensive care unit. *Rev Enferm Atual [Internet]*. 2018 [access on 1 Aug 2018]; 85 (23):29-36. Available from: <https://revistaenfermagematual.com.br/uploads/revistas/23/revista.pdf#page=29>.