

THE IMPORTANCE OF INFORMATION MANAGEMENT AS A PROFESSIONAL ACTIVITY OF INFORMATION IN THE HEALTH AREA: BIBLIOGRAPHIC PANORAMAS


A IMPORTÂNCIA DA GESTÃO DA INFORMAÇÃO COMO UMA ATIVIDADE DO
PROFISSIONAL DA INFORMAÇÃO NA ÁREA DA SAÚDE: PANORAMAS BIBLIOGRÁFICOS

¹Beatriz Rosa Pinheiro dos Santos

²Camila de Biaggi

³Ieda Pelógia Martins Damian
Universidade Estadual Paulista^{1,2}
Universidade de São Paulo³

Correspondence

Beatriz Rosa Pinheiro dos Santos 
Universidade Estadual Paulista
São Paulo, SP – Brasil.
E-mail: beatriz.pinheiro@marilia.unesp.br

Submitted: 06/09/2018

Accepted: 26/01/2019

Published: 12/02/2019

Anti-plagiarism Check



JITA: HC. Archival Materials

e-Location ID: 019009

ABSTRACT

The changes and transformations in the different areas of knowledge have been happening in an evident way, demanding from the information professional new functions and professional activities in the labor market. Among the fields of action, the health area is highlighted as a scientific field that requires informational subsidies for health care and for directing the clinical team in the diagnosis of patients and in decision-making. Therefore, the objective of the research is to address how information management, considered an essential activity of the information professional, can contribute to the activities and decision processes in the context of the health area. For this, a review of the literature on the topics addressed was carried out in order to draw up bibliographical discussions of the study. The discussions demonstrate that once contemporary organizations recognize the value of information within the organizational context, move away from theory and actually accept and apply these scenarios, the so-called information and knowledge society can develop and give a further step towards its evolution. As final considerations, it is justified that the information professional becomes a fundamental element in the health area, capable of causing, through the insertion and maintenance of Information Management, internal improvements in the activities and decision-making of health organizations, which also reflect in the increase of the quality of the services provided to the community.

KEYWORDS

Information Management. Professional performance. Decision making. Informational professional. Health organizations.

RESUMO

As mudanças e transformações nas diversas áreas do conhecimento vêm acontecendo de maneira evidente, exigindo do profissional da informação novas funções e atividades profissionais perante o mercado de trabalho. Dentre os campos de atuação, destaca-se a área da saúde como campo científico que necessita de subsídios informacionais para assistência em saúde e para o direcionamento da equipe clínica no diagnóstico dos pacientes e na tomada de decisões. Diante disso, o objetivo da pesquisa é abordar como a gestão da informação, considerada uma atividade essencial do profissional da informação, pode contribuir para as atividades e processos decisórios no contexto da área da saúde. Para isso, realizou-se uma revisão de literatura sobre os temas abordados, a fim de traçar discussões bibliográficas ao estudo. As discussões demonstram que, a partir do momento em que as organizações contemporâneas reconhecerem o valor da informação dentro do contexto organizacional, saírem da teoria e realmente aceitarem e aplicarem esses panoramas, a chamada sociedade da informação e do conhecimento poderá se desenvolver e dar mais um passo para sua evolução. Como considerações finais, justifica-se que o profissional da informação torna-se elemento fundamental na área da saúde, capaz de causar, por meio da inserção e manutenção da Gestão da Informação, melhorias internas nas atividades e tomadas de decisão das organizações de saúde, que também refletem no aumento da qualidade dos serviços prestados a comunidade.

PALAVRAS-CHAVE

Descrição arquivística. Automação de arquivo. Arquivologia. Documento arquivístico. Normas de descrição arquivística.

1 Introduction

The information and knowledge society provides a number of professional activities and functions, and some changes in the social, economic and cultural spheres, which, with the support of the new Information and Communication Technologies (ICTs), contribute towards the establishment of an increasingly competitive higher in all sectors of society, demanding in this way, more qualified professionals, with a differentiated, innovative, entrepreneurial, critical, reflective, creative, capable of organizing, mediating and disseminating information efficiently.

In this scenario, we find the information specialist, who has been feeling the effects of these innovations with respect to his various performances and functions before the diverse informational environments. Among the several areas that this professional operates, health is highlighted, where it will act in several specialties, performing activities focused on information and knowledge, not restricted to performing only technical processing activities, but that are related to the Information Management (GI), where the information specialist will collect, select, evaluate, process, store information, and organize the information flows of the institution, providing strategic information to the team, as well as technological innovations with relevant information to support the professionals of the area of health to make the best decisions regarding treatments, therapies and the diagnosis of the patient. This information needs to be managed properly, as it involves patients directly, misinformation or poorly structured information can result in inappropriate and harmful behavior.

Therefore, it is necessary that the training of this professional contemplates these new actions, reaching a non-traditional professional environment, enabling fundamental conditions for medical teams to act more efficiently, providing greater consistency for the resolution of the various diagnoses. In this perspective, GI covers the concept of translation of critical knowledge and the evaluation of scientific information that surrounds the various health professionals, including the information specialist who works in this area, since it integrates the team and helps them in the activities.

Thus, it is evident the importance of this professional to the society, from the activities performed for the efficiency of health organizations, since information is essential to provide contributions to medical teams. The information specialist who works with information directed to a specialized institution in the health area, needs to adapt to his work environment, seeking to understand beyond the organizational structure of the institution, the organization of the information of this area and the demands of its users, to able to meet their needs.

Thus, the study is justified by enriching the discussions about GI as a fundamental activity that the information specialist performs to make assertive decisions in the health area, as well as to consolidate their social function in that context, providing information and knowledge environments in health, so that it efficiently meets the different publics of this environment, be they doctors, nurses, social workers and specialists in general, who need these elements for their effective action with the patient. In addition, it also contributes to the paradigm shift related to the traditional field of activity of the information professional, which still faces some shortcomings in what concerns to the act of acting in other organizational contexts.

Thus, the objective of the research is to approach GI as an essential activity of the information specialist, who can contribute to the activities and decision making in the context of the health area. For this, a bibliographic review was carried out to construct the theoretical body that bases the discussions on the importance of the information management in the health area as an activity of the information specialist, especially the librarian, on the topics addressed.

2 Information Management in the Health Area

Inserted in service delivery environments focused on the health of the human being, the professionals, fundamental subjects in these environments, are charged daily by a series of factors that add commitment and skills to the work processes that they develop in the day to day.

These factors are related to interpersonal communication, the use of ICTs and, in general, direct and daily contact with information. Therefore, it can be said that these professionals need efficient and adequate information for the different nuances and situations pertinent to these organizational environments and that the way to access this information is in the process of its management, that is, without performing the steps related to information management, these professionals will hardly have valuable information for their activities and decision-making.

Traditionally, information management is considered as a set of activities aimed at obtaining informational needs, mapping formal information flows, prospecting, collecting, filtering, monitoring and disseminating information, in order to be able to use it in daily tasks and decision-making processes of the organizational environments. (VALENTIM, 2008).

According to Chaves (2013), information management is divided among the components of organization, storage and retrieval of information, where the organizing stage

is responsible for gathering information and ordering it in order to make it more easily available, while that the storage stage corresponds to the act of putting the information in safe places, where it will not be lost, and finally, in the recovery stage, the necessary information is accessed and used for decision making.

While, for Ponjuán Dante (2007), GI is considered a process in which the basic resources of an organization are used, for the management and manipulation of information within the organizational environment. Oliveira and Bertucci (2003) point out that GI has the objectives of promoting organizational efficiency, supplying demands for information needs, planning policies aimed at information processing, developing and working on information systems and services on a daily basis, optimizing information flows and controlling the ICTs present in the organizational environment.

Thus, in order to achieve these objectives and put into practice the GI processes, it is extremely necessary to foster the development of an organizational culture that encourages the performance of these practices by professionals working in these organizational environments, especially by information professionals. These organizational environments, expressed in the text, are related to the context of health, which should be made up of professionals who carry out activities related to information management, considering the innumerable informational variables that are connected to the patient and their life context.

In addition, for Borges (2014), information management will only be effective if the organization establishes policies that provide effective information that can be accessed in an appropriate way. And for this policy to be put into practice, the manager of the organization must include in his culture the valuation of an information professional, in order to insert him in this organizational context, as an important member of the work team.

In the information society, the main objective is to provide information to all people in any place and in any format, providing access to all, reducing the social and informational exclusion of society. (BARRETO, 2002). This is because, according to Tabosa et al (2013), information is present in the lives of many people, because it is able to provide means of interpretation and understanding of everything that happens in the world.

Moreover, for Barreto (2002) and Tabosa *et al.* (2013), it is difficult to speak of information without addressing the role of communication as a fundamental process in the creation of interpersonal relationships, which in health is very important to be developed, the order to encourage cooperation between professionals and patients. In this area, information is used to reduce uncertainties in the planning and execution of actions and care that enable patients to improve their quality of life. (TABOSA *et al.*, 2013).

However, Marchiori (2002) and Carvalho (2009) corroborate that, although health organizations produce a large amount of information, their use in improving management processes is still inefficient. Therefore, Borges (2014) emphasizes the relevance of information management in these organizations, as an instrument for decision-making, elaboration of measures for the provision of services, creation of strategies and new activities in the organizational environment that allow access and construction of the knowledge.

The management of information in the health area, that is, in hospitals and clinics, seeks to continuously improve access, sharing and use of information. The information relates to diagnostic exams, medical consultations, prescriptions prescribed, financial information regarding hospitalizations, and finally a range of information that has different objectives and, therefore, different types of uses.

According to Simeão and Mendonça (2007), the management of health information is essential for the improvement of the services offered to patients, since it is a process that includes the interaction between several individuals, internal or external, in order to to organize and use information for different activities and situations involving the human being.

Carvalho (2004) and Moraes and Gómez (2007) affirm that health information arises within the practices related to the process, treatment and supply of health services, and that the information resulting from these situations gains visibility in social contexts. At the same time, in addressing this issue, it is important not to forget to address ICTs present in contemporary organizational environments and tools important to the GI process. Serafim (2005) states that the use of TICS in the hospital context is important for the use and access of information and indicators of the hospital, which helps in the creation of strategic plans that subsidize decision-making processes. Thus, Pinochet, Lopes and Silva (2014) affirm that in a hospital environment, ICTs can enable improvements in the management of the organization such as cost reduction and increased control of critical situations in the treatment of the patient. For the authors, the implantation of these technologies can propitiate the development of a more qualitative service to the patient.

In this way, the role of GI is in the creation of conditions for the interaction of professionals present in the organizational environment, enabling direct relationships that result in a synergistic and efficient environment in their functions. From this, the importance of a partnership and a relationship between information professionals and health professionals happens, which, when dealing with a particular case and using certain information that is consistent with this case, achieving effectiveness in its results, can communicate to the professional of the information the whole context and the evolutionary events of his case, so that this professional can systematize them, and thus, make this

information available and disseminate it to other professionals. In addition, this process can be a powerful factor for the construction of knowledge among all the professionals of the organizational environment.

Finally, considering the fact that Information Science (CI) is an interdisciplinary science, involving several professionals from different areas of knowledge, in favor of the study of information that is found in the different environments of society (FREIRE, 2001; CAPURRO, 2003), it is possible to say that it becomes very important that this science also works, especially information in health contexts, building effective interdisciplinary links with this area of knowledge. Therefore, it is relevant to know the subjects that are inserted in the IC, in order to discuss the importance of its characteristics and to insert themselves in the context of this area.

3 Performance of the Information Specialist in the Health Area

For the context of this work, questions about the possibilities of the information specialist in the health area, specifically the librarian, were addressed, emphasizing the information management as a fundamental activity to subsidize the decision making of the clinical professionals, consequently attending to their information needs.

The professional librarian needs to constantly seek improvement and updating, developing fundamental skills and abilities that the market and society demand, being aware of their role as a professional and their informational activities aimed at a greater participation in the so-called information society. For this, it is important to emphasize that the librarian's performance has undergone several transformations in what concerns its fields of action, since it subsidizes all the practices of health professionals, because it allows that the relevant information and necessary to the medical daily to be accessed, shared and appropriate at different times, improving clinical performance.

Banks *et al.* (2005) points out that the librarian who works in the field of health can minimize the difficulty that users have in identifying and finding the correct information, evaluating and correctly using information sources. The librarian is responsible for developing a set of informational strategies that enable the clinical staff to appropriate, build and share information and knowledge, as well as establish formal and informal flows that ensure that 'right' information is accessed on 'time' and 'format', helping to generate ideas, problem solving and decision making, planning and establishing an efficient information flow, ranging from the management of information related to hospital administration to the areas of diagnosis, treatment and rehabilitation.

The librarian's performance space is recognized mainly by public institutions, mainly universities, schools, cultural centers and archives. Within health-related environments, the librarian's performance realized for educational institutions or in hospitals becomes very important, since it presupposes activities in search of information systems, analysis and negotiation of questions and formulation of strategies that indicate the success of the search, as well as the help to find relevant study and research materials for clinical professionals, students and teachers, making hospital libraries an active place to provide services.

Acting outside of medical libraries, the role of the librarian can be extended beyond the search for information, making possible its involvement with the selection and critical evaluation of the literature, acting in the mold of 'Clinical Librarianship', in which the librarian is considered part of the multidisciplinary health teams. Authors such as Coutinho (2004) and Marasciulo and Nassar (2004) warn that the exponential increase in the volume and complexity of the medical literature imposes the need to improve the analysis and synthesis of information, as regards its quality [reliability, consistency, relevance and timeliness], as information and communication technologies make more and more scientific research accessible.

In this way, the health area constitutes a conglomerate of information, where there is a collaboration between the functions performed by the librarian and the activities developed by the health professionals, in search of the best attendance to the demands of the patients. The clinical librarian is known in the United States and in some European countries as the professional operating outside the library space as an integral part of the multi professional health teams of hospitals and clinics. This professional's job is to provide physicians and other team members with information that will enable them to make the best decision related to the patient's health problem, based on the best scientific evidence available, contributing to the best service to society.

The activities of the librarian are focused on the retrieval of information, according to the users' needs, playing a role of mediator of information, not just disseminator. In the hospital or clinic, the clinical librarian is the professional who mediates the information to the user, anticipates their questions and seeks to provide the health professional with adequate information, which according to Lipscomb (2000) confirms the objective of Clinical Librarianship, to strengthen the mission of the Library itself, is to make information relevant and available at the time it is requested.

In addition to working in hospital libraries and as a clinical librarian, this professional can be an informationist, working among medical teams and specialized, selected, prospective, organized, updated information, seeking the best scientific evidence to be treated by the clinical staff, analyzing the data and applying according to the cases.

For Davidoff and Florance (2000) as well as for Plutchak (2000), within the United States, the term 'informationist' can be used for the clinical librarian, because he is exposed to clinical situations and has knowledge of statistics and epidemiology.

The informationist, different from the clinical librarian, performs analyses of the information, an activity of the specialists in their respective specialties. The clinical librarian focuses on prospecting information about a particular case as it optimizes the sharing of information appropriate to the informational needs of the medical staff. However, as Andalia (2002) affirms, the analysis of information is a constituent part of the Information Sciences, but in the field of Medical Sciences the figure of this professional, whose main task is to determine the validity of the knowledge that subsidizes the clinical practice, the from studies conducted in a specific area.

Beraquet *et al.* (2005) carried out a study with information professionals who work in the health area and identified that, in addition to being able to work in multidisciplinary teams, where the professional librarian, based on his specialized and qualified training, has a set of knowledge domains focused on : computer science, networks, databases and other sources of health information; notions of public health, they should have the competence to establish good interpersonal relationships with different professionals and project management skills in which they are fundamental so that the health librarian can exercise his function with dexterity and efficiency. From the above, the librarian who works in the health area over the years may be called a hospital librarian, medical librarian, biomedical librarian, clinical librarian or informationist. Thus, regardless of the denomination received, the most important is to perceive the evolution in relation to the various professional practices that the librarian can come to act, being an important partner for the medical teams, in search of the best health care of the population. The quality of the librarian's work will focus directly on the clinical team's performance, as well as providing greater integration to the multi-professional team, guaranteeing the right of access and providing quality data and information for research and teaching in health. Therefore, this professional in traditional libraries of university hospitals, as well as in the hierarchical structure of a hospital, within a specialized sector and focused on information management.

In this way, the activities of the librarian have undergone several transformations, both in terms of their professional position as well as changes in the fields of action, currently possessing great potential and diversity to carry out their professional functions and responsibilities, using their knowledge to access, prospect, select, analyze, systematize, organize and disseminate information to meet the information needs of the multiprofessional team. The shortage of time of these professionals, and low familiarity with the databases are aspects indicated in the literature as reasons for the action of the librarian next to the health teams, contributing with their functions and informational activities for the assertive decision

making, based on the best scientific evidence.

4 Use of Health Information for Decision-Making

Currently, the correct use of health information has become an indispensable input for any activity, considered as a viable resource for assertive decisions. However, it is necessary to emphasize a problematic aspect related to the large amount of information, since they are often not correctly identified, processed and retrieved to solve a certain problem in the clinical context. Thus, one of the best ways to solve these problems is to extract from the immense mass of information, those that are consistent, intact, accurate, up-to-date, value-added and that are essential for decision making and for solving some informational need.

In this sense, the role of the librarian is essential, since from an adequate and specialized training, becomes capable of filtering information, organizing, analyzing and disseminating it to health professionals, to later make the best decisions and to subsidize the teams clinics in diagnostics, treatments, therapies, the best scientific evidence, working in favor of the multi-professional team, sharing and mediating information and actively contributing to increase the flow and dissemination of information. (DE BIAGGI, 2017).

As the librarian's spaces of action are expanded, the requirements for a professional with new skills, new functions and activities are also broadened, and he is aware of his role in society. The organization of information in the new economy requires a new professional profile that requires qualification and greater emotional and social involvement among the work team in order to perform well. Thus, for Arruda *et al.* (2000, p. 17), "[...] the professional who enhances communication, data interpretation, flexibilization, functional integration and generation, absorption and exchange of knowledge, is chosen as ideal".

In this way, health information management helps the librarian add value to information in order to transform it into knowledge, thus supporting the institution's strategic planning. Davenport (1998, p.173) understands information management as a "[...] structured set of activities that includes how institutions obtain, distribute, and use information and knowledge."

However, the GI process in organizations, according to the aforementioned author, must go through constant improvements, that is, continuous improvements aimed at quality use of activities, with a total approach to the information that is being managed and also related to the people who are involved in this institution performing their functions, managing the information in the best possible way, consequently producing knowledge for the professionals who work in that environment.

Thus, GI has relevant aspects that include: quality search, efficient production and management of information, instigating creativity and due competences, so as to satisfy the organizational subjects of a healthcare institution, providing the best patient care. One of the main tasks of health management is to enable and guarantee access to people and health services (health care coverage), with greater attention to population and priority groups.

In summary, health management is the intelligence that constitutes a health system through the definition of criteria for allocation of resources, the role of public and private agencies, the provision of technical cooperation to decentralized agencies, the redistribution of current expenditures and investments and establishment mechanisms of management contracts. Therefore, health management fully absorbs the activities of health planning and aggregates the political articulations and the actions of implementation of plans.

In this context, the role of the librarian in health organizations is focused on the generation, mediation, processing and use of data, information and knowledge, aiming at the treatment to interact and add value to the decision-making process (VALENTIM, 2004).

In the process of information management, decision-making requires great responsibility and has high social relevance, as it involves the quality of life and the well-being of people. In this context, the correct use of information functions as tools or tools to reduce the degree of uncertainty about a given health situation, supporting the decision-making process.

Candid; Valentim and Contani (2005, p.2) state that

[...] organizations should manage information in an integrated way, in order to use it at the moment of decision making; in order ensure its survival, growth and evolution, an organization cannot neglect the synergy between different sectors as well as the sharing of the information generated internally, aiming at dynamic and accessible flows; that it is indispensable to use tools to support the strategic management of information, so that they can contribute to the selection and filtering of the information most appropriate for decision making.

In this way, the concept presented above demonstrates the importance of effective information management to improve the decisions that organizations make. According to Guimarães and Évora (2004: 72), "the way information is obtained, organized, recorded, retrieved and later used allows the manager to act more safely, increasing the possibility of correct decision making ". The authors, on the other hand, do not emphasize or use the terms management and information flow, however it is perceived that they are intrinsic to its explanation.

Decision making, according to Oliveira (2004), is the conversion of the analyzed information into action. The librarian seeks information that meets the needs of its public user, mirroring the actual situation of the institution, so that the decision-making process is carried out effectively, to achieve the desired results. In this sense, it is understood that decisions need to be taken in an agile and correct manner, because the performance of organizations depends on the quality of their management.

For Drucker (1998 *apud* DAVENPORT; PRUSAK, 1998, p.19), information is defined as "[...] data endowed with meaning and purpose." In this way, information becomes relevant when it becomes value-added, confirming the importance of the information, making it an essential subsidy for decision-making. Therefore, the information becomes a qualified product, needing to be managed, that is, prospected, selected, analyzed, treated, organized and disseminated, so that the clinical team can enjoy and, from the appropriation, build knowledge.

Thus, at all times, both medical and clinical professionals play the role of making a number of decisions, since this field involves different types of information, such as those stored in medical files, technical-scientific information, reference databases (bibliographies, articles, complete texts), information of an administrative nature, as well as helping the team with regard to the patient, supporting the solution of some problem or from a need to manage questions related to information and knowledge, where a greater recognition is offered to the information specialist who is seen as an information manager (BARRETO, 2005), where quick and efficient responses are obtained, if this does not happen, the entire organizational process is compromised.

5 Final Considerations

This paper aimed to discuss the importance of the information management process as an activity of the information specialist, especially the librarian, in the area of health, as well as to address aspects that encourage the insertion of these professionals in this area, which may be a potential incentive for students of the librarianship course to seek other fields of the traditional ones, and as a consequence, collaborate with medical teams, providing quality and managed information for effective decision making in patient care.

Many current researchers claim that information is too present in the most different contexts and environments of society. And, moreover, how this information has become an essential and strategic input for the execution of activities and decision-making processes of organizations, whether public or private.

As librarians are increasingly specialized and prepared to deal with this whole volume of information, it is evident that they need to be inserted in the most varied organizational environments in order to plan, manage and make available accurate information to the other members of the team in which they will be inserted. It is like creating a new production department, where information is the main raw material, and information professionals are the organizational subjects that come to integrate and join forces with others.

From the moment that contemporary organizations open their vision for the value of information within the organizational context, move away from theory and actually accept and apply these scenarios in practice, the so-called information and knowledge society can develop and take another step for its evolution. The contemporary librarian can act as part of multidisciplinary teams, formed by professionals from different areas of knowledge, getting involved with managerial and research tasks until then little explored. In addition, communication skills with other specialists are required to efficiently meet the informational demands.

Specifically, the health area consists of a universe that deals with an amount of information at all times, from the patients' register, their profiles, characteristics of the physical, psychological and social context in which they live, their complaints, information for treatment, etc. That is, in all the stages carried out in this environment, information is present and requires the professionals who work in it, the ability to relate to the functioning of the social system of a locality, region or country, that is, the health of the population, influencing how different disciplines of knowledge can contribute to achieving this goal.

The area of health as a scientific field would not exist without the subsidy of a quantity of information, covering the hospital administrative context, the context of health care, the clinical context directed to the team of medical professionals and the scientific evidence that the clinical team can access to diagnose and make decisions. From this perspective, the librarian can contribute, by subsidizing both physicians and patients, with regard to decision making on the patients' clinical situation, in order to provide an informational dynamic that meets the existing demands.

And so, this area is essential for the development of the society, the information specialist, that is, the librarian becomes a fundamental element of this environment, assuming a specific function, as well as the others (doctors, nurses, technicians and others), capable of managing all information that circulates in the environment, creating strategies and programs that can aid in the treatments and provide informational services that will directly contemplate all the medical staff. The use of relevant scientific information and quality in support of medical practices in a privileged information society is fundamental and of great importance to ensure the success of diagnosis, prognosis, therapy and prevention of diseases,

based on the joint practice of the librarian and clinical staff.

Finally, as support for the development of future research, an analysis is made, through field research, of the opinion of managers and team members about the importance of information management and information professionals if they enter into these contexts.

References

ANDALIA, Rubén Cañedo. Del bibliotecario clínico al informacionista: de la gerencia de la información a la gestión del conocimiento. **ACIMED**, Havana, v.10, n.3, p. 11-12, jun. 2002. Disponível em: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1024-94352002000300006&lng=es&nrm=iso. Acesso em: 05 ago. 2017.

ARRUDA, M. C. C.; MARTELETO, R. M.; SOUZA, D. B. Educação, trabalho e o delineamento de novos perfis profissionais: o bibliotecário em questão. **Ciência da Informação**, Brasília, v.29, n.3, p.14-24. 2000. Disponível em: <http://www.scielo.br/pdf/ci/v29n3/a02v29n3.pdf>. Acesso em: 10 jul. 2017.

BANKS, Marcus.; COGDILL, Keith.; SELDEN, Catherine.; CAHN, Marjorie. Complementary competencies: Public health and health sciences librarianship. **Journal of the American Medical Association (JAMA)**, v.93, n.3, p.338-347, Jul. 2005. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1175799/>. Acesso em: 02 ago. 2017.

BARRETO, Aldo de Albuquerque. A condição da informação. **Perspectivas em Ciência da Informação**, Belo Horizonte, v.16, n.3, p.67-74, jul./set 2002. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-88392002000300010. Acesso em: 4 ago. 2017.

BARRETO, Angela Maria. O fator humano e o desenvolvimento de competências nas unidades de informação. **Perspectiva em Ciência da Informação**, Belo Horizonte, v.10, n.2, p.132-139, jul./dez., 2005. Disponível em: <http://portaldeperiodicos.eci.ufmg.br/index.php/pci/article/view/342/149>. Acesso em: 6 ago. 2017.

BERAQUET, Vera Silvia Marião. *et al.* Delineando as competências do bibliotecário para atuar em saúde. In: ENCONTRO NACIONAL DE PESQUISA EM CIENCIA DA INFORMACAO, 6., 2005, Florianópolis. **Anais...** Florianópolis: UFSC, 2005. 8p. 1 CD-ROM

BORGES, Fabrício Quadros. Gestão da informação no sistema único de saúde. **Revista de Administração FACES Journal**, Belo Horizonte, v.13, n.2, p.83-98, abr./jun. 2014. Disponível em: <http://www.fumec.br/revistas/facesp/article/view/2021>. Acesso em: 4 ago. 2017.

CÂNDIDO, C. A; VALENTIM, M. L; CONTANI, M. L. Gestão estratégica da informação: semiótica aplicada ao processo de tomada de decisão. **Data Grama Zero: Revista de Ciência da Informação**, Rio de Janeiro, v. 6, n. 3, jun. 2005. Disponível em: <http://basessibi.c3sl.ufpr.br/brapci/index.php/article/view/0000003073/252e5794a34943c843fd4219154d1ec9> . Acesso em: 1 set. 2017.

CARVALHO, André Luis Bonifácio de. **A Gestão da Informação em Saúde e o Município: um estudo sobre municípios que implantaram o Programa Saúde da Família e que estão integrados ao Projeto da Rede Estadual de Informação em Saúde REIS/RNIS-PB**. 2004. Dissertação (Mestrado). Universidade Federal da Paraíba, João Pessoa, 2004.

CARVALHO, André Luis Bonifácio de. Informação em saúde como ferramenta estratégica para a qualificação da gestão e o fortalecimento do controle social no SUS. **Tempus: Actas de Saúde Coletiva**, v.3, n.3, p.16-30, jul./dez. 2009. Disponível em: <http://www.tempusactas.unb.br/index.php/tempus/article/view/719/1553>. Acesso em: 06 ago. 2017.

CAPURRO, Rafael. Epistemologia e ciência da informação. In: ENCONTRO NACIONAL DE PESQUISA EM CIÊNCIA DA INFORMAÇÃO, 5. Belo Horizonte, 2003. **Anais...** Belo Horizonte, 2003. Disponível em: <http://www.capurro.de/enancibp.htm>. Acesso em: 06 ago. 2017.

CHAVES, Eduardo. **Pilares da educação digital**. Pilar 2: gerenciamento da informação (2013). Acesso em: 12 jul. 2017.

DAVENPORT, Thomas H.; PRUSAK, Laurence. **Conhecimento empresarial: como as organizações gerenciam o seu capital intelectual**. São Paulo: Campus, 1998.

DAVIDOFF, Frank.; FLORANCE, Valerie. The informationist: A new health profession? **Annals of Internal Medicine**, v.132, n.12 p.996-998, 2000. Disponível em: <http://annals.org/aim/article/713553/informationist-new-health-profession>. Acesso em: 03 jul. 2017.

DE BIAGGI, C. **Perspectivas e tendências da atuação do bibliotecário na área da saúde**, 2017. 125p. Trabalho de conclusão de curso (Bacharelado em Biblioteconomia) – Universidade Estadual Paulista (UNESP), Faculdade de Filosofia e Ciências, Marília, 2017.

FREIRE, Isa Maria. **A responsabilidade social da Ciência da Informação e/ou olhar da consciência possível sobre o campo científico**. 2001. Tese (Doutorado em Ciência da Informação). Convênio CNPq/IBICT – UFRJ/ECO, Rio de Janeiro, 2001.

LIPSCOMB, Carolyn E. Clinical librarianship (Historical notes). **Bulletin of the Medical Library Association**, v.88, n.4, p.393-395, Oct. 2000. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC35263/>. Acesso em: 12 jul. 2017.

MARCHIORI, Patricia Zeni. A ciência da gestão de informação: compatibilidades no espaço profissional. **Ciência da Informação**, Brasília, v.31, n.2, p.72-79, maio./ago. 2002.

Disponível em: <http://revista.ibict.br/ciinf/article/view/962/999>. Acesso em: 10 ago. 2017.

MORAES, Ilara Hammerli Sozzi de.; GÓMEZ, Maria Nélide González de. Informação e informática em saúde: caleidoscópio contemporâneo da saúde. **Ciência & Saúde Coletiva**, Rio de Janeiro, v. 12, n. 3, maio/jun. 2007. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232007000300002. Acesso em: 5 ago. 2017.

OLIVEIRA, Marlene.; BERTUCCI, Maria da Graça Eulálio de Souza . A pequena e média empresa e a gestão da informação. **Informação & Sociedade: Estudos**, João Pessoa, v.13, n.2, p.65-87, jul./dez. 2003. Disponível em:

<http://www.ies.ufpb.br/ojs2/index.php/ies/article/view/91/1558>. Acesso em: 4 ago. 2017.

OLIVEIRA, Djalma de Pinho Rebouças de. **Sistemas de informações gerenciais: estratégicas, táticas e operacionais**. 9. ed São Paulo: Atlas, 2004.

PINOCHET, Luis Hernan Contreras.; LOPES, Aline de Souza.; SILVA, Jheniffer Sanches. Inovações e tendências aplicadas nas tecnologias de comunicação e informação na gestão da saúde. **Revista de Gestão em Sistemas de Saúde**, v.3, n.2, jul./dez. 2014. Disponível em: <http://www.revistargss.org.br/ojs/index.php/rgss/article/view/88/0>. Acesso em: 3 ago. 2017.

PLUTCHAK, T Scott. Informationists and librarians. **Bulletin of the Medical Library Association**, Chicago, v. 88, n. 4, p.391-392, oct. 2000. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC35262/>. Acesso em: 2 jul. 2017.

PONJUÁN DANTE, Gloria. **Gestión de información: dimensiones e implementación para el éxito organizacional**. Gijón: Trea, 2007.

SERAFIM, Sonia Aparecida Dias. **Impacto da Informatização na Dispensação de Medicamentos em um Hospital Universitário**. 99 p. Dissertação (Mestrado em Saúde na Comunidade) – Faculdade de Medicina de Ribeirão Preto da Universidade de São Paulo, Ribeirão Preto, 2005.

SIMEÃO, Elmira.; MENDONÇA, Valéria. Comunicação da Informação em Saúde no Brasil: aspectos de qualidade e desafios. In: Congresso Ibero-Americano de Comunicação da Informação em Saúde (CIACIS), I, 2007, Brasília. **Anais...** Brasília: [s.n], 2007. p. 85-93.

TABOSA, Hamilton Rodrigues.; PAES, Denyse Maria Borges.; FERREIRA, Ana Lúcia Duarte.; SOUZA, Maria Naires Alves de. A gestão da informação no programa saúde na escola em Fortaleza-CE: impasses e alternativas. **RACIn**, João Pessoa, v.1, n.1, p.30-49, jan./jun. 2013. Disponível em: <http://www.repositorio.ufc.br/handle/riufc/12258>. Acesso em: 4 ago. 2017.

VALENTIM, Marta Lígia Pomim. Equipes multidisciplinares na gestão da informação e conhecimento. In.: BAPTISTA, Sofia Galvão.; MULLER, Suzana Pinheiro Machado. (Org.). **Profissional da informação: o espaço de trabalho**. Brasília: Thesaurus, 2004.

VALENTIM, Marta Lúcia Pomim. Gestão da Informação e Gestão do Conhecimento em ambientes organizacionais: conceitos e compreensões. **Tendências da Pesquisa Brasileira em Ciência da Informação**, v.1, n.1, 2008. Disponível em: <http://inseer.ibict.br/ancib/index.php/tpbci/article/view/3/14>. Acesso em: 2 ago. 2017.