

Politics and technologies in the administration of health care and nursing services

Políticas e tecnologias de gestão em serviços de saúde e de enfermagem

Políticas y tecnologías de administración en servicios de salud y de enfermería

Márcia Maria Bragança Lopes¹, Jacira Nunes Carvalho², Marli Terezinha Stein Backes³, Alacoque Lorenzini Erdmann⁴, Betina Hömer Schlindwein Meirelles⁵

ABSTRACT

Objective: To determine if Brazilian nurses have knowledge of politics and technologies for the administration of health care and nursing services. Method: A integrative literature review was conducted using the LILACS, MEDLINE, SciELO, BDENF, and PAHO databases. The key words "administration of health care," "health technology," and "health care technology and nursing," limited to publications in Portuguese, Spanish, and English were used to search the databases. Results: Eleven publications from 2003 to 2007 were retrieved. Nurses could articulate well in the nursing services and had technical competencies for professional nursing practice; however, they were fragile politically; this limited their professional autonomy and made them to be subordinated to other health care professionals. Conclusion: Advancement and continuing changes in health care, particularly in the organizational and technical-scientific levels, require nurses to develop and strengthen their political, management, and leadership skills to participate equally in a interdisciplinary leadership team. Keywords: Health management; Health technology; Assistance technology.

RESUMO

Objetivo: identificar se os enfermeiros do Brasil têm conhecimento das políticas e tecnologias de gestão nos serviços de saúde e enfermagem. Métodos: realizamos revisão integrativa da literatura, utilizando as bases de dados: LILACS, MEDLINE, SciELO, BDENF e PAHO e os descritores: gestão em saúde, tecnologia em saúde, tecnologia assistencial e enfermagem, incluindo as publicações nos idiomas português, espanhol e inglês. Resultados: A análise resultou em 11 referências completas, no período de 2003 a 2007. Constatamos que os enfermeiros possuem articulação nos serviços de enfermagem e competência técnica no exercício profissional, porém, apresentam-se frágeis politicamente, o que limita sua autonomia profissional e os torna ainda subordinados a outros profissionais. Conclusão: diante dos avanços e constantes mudanças no setor saúde, particularmente no nível organizacional e técnico-científico, torna-se imprescindível que o(a) enfermeiro(a) desenvolva suas habilidades políticas, gerenciais e de liderança com participação responsável e de forma interdisciplinar.

Descritores: Gestão em saúde; Tecnologia em saúde; Tecnologia assistencial.

RESUMEN

Objetivo: Identificar si los enfermeros en Brasil tienen conocimiento de las políticas y tecnologías de administración en los servicios de salud y enfermería. Métodos: Fue realizada una revisión integradora de la literatura, utilizando las bases de datos: LILACS, MEDLINE, SciELO, BDENF y PAHO y los descriptores: administración en salud, tecnología en salud, tecnología asistencial y enfermería, incluyendo las publicaciones en los idiomas portugués, castellano e inglés. Resultados: El análisis resultó en 11 referencias completas, en el período de 2003 a 2007. Fue constatado que los enfermeros poseen articulación en los servicios de enfermería y competencia técnica en el ejercicio profesional, sin embargo, se presentan frágiles políticamente, lo que limita su autonomía profesional y los vuelve subordinados de otros profesionales. Conclusión: Delante del avance y constantes cambios en el sector de la salud, particularmente en el nivel organizacional y técnico-científico, es imprescindible que el(la) Enfermero(a) desarrolle sus habilidades políticas, administrativas y de liderazgo con participación responsable y de forma interdisciplinar. Descriptores: Gestión en salud; Tecnología en salud; Tecnología asistencial.

Corresponding author: **Márcia Maria Braganças Lopes** Rua Generalíssimo Deodoro, 1 - Umarizal - Belém (PA), Brazil. CEP. 66055-240 E-mail: mmbl@ufpa.br Article received on 12/23/2008 and approved on 03/23/2009

Assistant Professor at Faculdade de Enfermagem da Universidade Federal do Pará — UFPA- Belém (PA), Brazil. Post graduate student (Ph.D.) Nursing Post Graduation Program, mode DINTER, Universidade Federal de Santa Catarina — UFSC — Florianópolis (SC), Brazil. Member of the Nursing and Education Research Group (EDEN).

² Post Graduation Student (Ph.D.) at the Nursing Post graduation Program, mode DINTER, at UFSC – Florianópolis (SC), Brazil. Member from the Study and Research Group in Health and Nursing Management (GEPADES).

³ Post graduation student (Ph.D.) at the Nursing Post Graduation Program, UFSC – Florianópolis (SC), Brazil. Member from GEPADES.

⁴ Ph.D. in Nursing Philosophy, Associate Professor at the Nursing Department, UFSC – Florianópolis (SC), Brazil. GEPADES Coordinator. PQ 1 A at CNPq. Coordinator at the Nursing Area at CAPES.

⁵ Ph.D. in Nursing Philosophy, Full Professor at the Nursing Department UFSC – Florianópolis (SC), Brazil. Member from GEPADES.

INTRODUCTION

Management can be defined as a set of processes to plan, build, equip, assess, and keep reliability of spaces and technology. Regarding management of health services, including nursing services, there are a few formal examples of management of spaces and technology in most health units in Brazil. Health services where there is at least one nursing professional aware of this topic and using the methodology which is part of this type of management are also scarce. Management starts procedures and activities to maintain all environment components, infrastructure, and equipment in adequate conditions, making improvements or corrections according to priorities established⁽¹⁾.

The above mentioned reality, associated with developments on the practices of nursing health services lately have led to the development of policies and technologies of management processes that take into account the needs of human beings as dynamic beings that are able to participate actively in the struggle for rights and duties to become autonomous.

In this context, men as social, political, and cultural beings put ideas into actions, especially for solving problems affecting their lives and thus finding new ways. "In this sense, individuals' participation and responsibility in actions for care and health promotion make them responsible for actions, with an active participation, according to their individual, social, economic, and cultural singularities"⁽²⁾.

As a social being, men interact, share, articulate interests, and get closer to others for fulfillment. Understanding these movements is relevant because it demonstrates the need to conform to practices for health promotion.

Introducing management policies and technologies in health and nursing centers requires the discussion on human diversity; the dialog between partners or social actors; and acknowledging social, political, and cultural similarities and differences of this complex and multiple human being, who is a product and a producer of health practices⁽²⁾.

To understand men as social, political, and cultural beings in contemporaneity, knowledge is a milestone in the organization of work and in management processes. As knowledge is highly valued by organizations, its management has become more important in organizational practices and in the literature.

The present study is justified because of the great number of Management Nurses in the country. The guiding question is to know how Brazilian nurses master theoretical knowledge of Policies and Technologies for Managing Health and Nursing Services.

The objective of the present study was to identify and assess if Brazilian nurses are aware of the policies and technologies in nursing and health services.

METHODS

The present study was an integrative review of the literature on management policies and technologies in health and nursing services.

To start the study, the website www.bireme.br was accessed and after searching Health and Science Descriptors, the following descriptors were identified: health management; health technology; care and nursing technology, including the publications in Portuguese, Spanish and English.

Then, on April 28th, 2008, we accessed on the same website data from Latin American and Caribbean Center on Health Sciences Information (LILACS); from the International Literature on Health Sciences (MEDLINE); from Scientific Electronic Library Online (SciELO); from the Nursing Data Base (BDENF); and from the Library from the Pan-American Health Organization (PAHO); using the four above mentioned descriptors.

The following inclusion criteria have been established: full Brazilian texts on management policies and technologies of health and nursing services, written by nurses or with participation of nurses, published from 2003 to 2007.

At LILACS, 4,986 references have been found, 12 were full texts. Among full articles, we have excluded two references, thus resulting in 10 texts.

At MEDLINE, 20,402 references have been found, two were full articles and one article was included.

At BDENF, 282 references have been found, all of them were abstracts; at SciELO no references have been found on the issue; at PAHO, 1,089 references have been found, six were full articles, all of them have been excluded from the study because they did not match the inclusion criteria.

The 11 complete references freely available obtained from LILACS and MEDLINE that formed this sample were first organized and then assessed according to: type of publication; journal in which it was published; year of publication; political, technological and management idea; type of service, and perceived professional domain. All 11 articles have been described in the reference and have been mention on the article, and also on Table 1 from the present article.

The main difficulty was the limited number of full text regarding the references found. Data were treated through analysis of simple absolute frequency.

RESULTS

As for journals assessed in the present study, we show where the 11 articles have been published and how many articles have been published by each journal. Thus, the journal Texto & Contexto Enfermagem had three publications. The journal Arquivos Catarinenses de Medicina had two publications and the journals Revistas Latino-Americana de Enfermagem, Ciência & Saúde Coletiva, Cadernos de Saúde Pública, Revista da Escola de Enfermagem da USP, Revista Brasileira de Enfermagem, and Revista Baiana de Saúde Pública had one publication each respectivelly.

Making a correlation between the journal, the year of publication, and the type of text published, we have observed that the journal Cadernos de Saúde Pública published one original article in 2004; Revista-Latino Americana de Enfermagem published one original article on the theme in 2005; Arquivos Catarinenses de Medicina published two original articles in 2005; Revista da Escola de Enfermagem da USP and Revista Brasileira de Enfermagem published one reflection article; Revista Baiana de Saúde Pública published in 2007, an experience report; Revista Ciência & Saúde Coletiva published a reflection article in 2007, and Revista Texto & Contexto Enfermagem published more articles in 2007. This last journal published more articles on the issue in 2007 because it is a theme journal.

Despite diversification on production, the context of the political approach focused by authors refers to the following five central themes: SUS construction and its different social actors; Policy of Elderly Care; political disqualification of Nursing; creation of Continuous Education Programs and Improvement in Work Relations at the Brazilian Unified Health System.

The context of the technological approach had four

central themes that are: achieving management and leadership knowledge and skills; access to different levels of technologies; the different ideas on technology, and the assessment instrument.

The context of the management focused by the authors is based on the following ten central themes: the role of nurses as articulators in the process of elderly health care; instrumentation for management; technologies to enhance care provided to elderly in Intensive Care Unit (ICU); nursing political disqualification; new management models; integral care as a guiding axis for health practices; problems and potential in ICU work organization; social control; technological domain of nurses regarding management issue; nurse behavior regarding care management; and human resource management.

DISCUSSION

The analysis of the political idea presented in eight of the 11 texts highlights the Brazilian National Health Policy, making references especially to the introduction and effectiveness of SUS which was introduced two decades ago and is still being built. It claims for the participation of some of the following different social actors: public management from the different sectors of the government, private health sector providers, health workers, and the organized civil society, it points out to the principles of SUS especially those of integrality of actions and decentralization of services.

Authors also make reference to innovations and

TABLE 1- Total distribution of journals referring to Brazilian productions published on Management Technologies and Policies in Health and Nursing Services, according to year of publication and type of text published, 2003 to 2007

JOURNALS/TYPE OF PUBLICATION		YEAR OF PUBLICATION TOTAL				
	2003	2004	2005	2006	2007	
	N	N	N	N	N	N
Revista Latino Americana de Enfermagem Artigo Original	=	=	1	-	=	1
Ciência & Saúde Coletiva Reflexão	-	-	-	-	1	1
Texto e Contexto Enfermagem Artigo Original	-	-	-	-	3	3
Cademos de Saúde Pública Artigo Original	-	1	-	-	-	1
Revista da Escola de Enfermagem da USP Reflexão	-	-	-	1	-	1
Revista Brasileira de Enfermagem Reflexão	=	=	-	1	=	1
Revista Baiana de Saúde Pública Relato de Experiência	-	-	-	-	1	1
Arquivos Catarinenses de Medicina Artigo Original	=	=	2	-	-	2
TOTAL	-	1	3	2	5	11

Source: LILACS and MEDLINE database

TABLE 2 - Brazilian Publications on Management Technologies and Policies in Health and Nursing Services, published between 2004

TITLE OF THE MANUSCRIPT	POLITICAL IDEA APPROACHED
Politica Nacional de Atenção ao Idoso e a Contribuição da Enfermagem (Brazilian Policy on Elderly Care and the Nursing Contribution)	The text describes and assesses the Brazilian Policy on Elderly Care and its relationship with nursing. It portraits the participation of nursing in the implementation of the Government Action Plan to Integrate the Brazilian Policy for the Elderly (PNI) (11).
PROJETO INTEGRARE: integração dos serviços de DST e AIDS de uma Secretaria Estadual de Saúde (Integrare project: Integration of STD and AIDS services of a State Health Secretariat)	The article discusses the role of workers in the social-historical context of Brazilian Health policies, considering their place on the micro and macro organizational space (12).
Repensando a tecnologia para o cuidado do idoso em UTI (Rethinking technology for elderly care in ICU)	The article states that health crisis reflects on the care offered to the population, and the most evident characteristics of it are impersonality and lack of commitment from health workers. It stresses that political will is necessary to change this way of work, producing actions to minimize users' suffering. It defends the idea that the change in the health care model occurs with the "publicity" of institutional spaces with the active presence of a set of actors, especially users (9).
A Participação Política de Enfermeiras na Gestão do Sistema Único de Saúde em Nível Municipal (Political Participation of Nurses in the Management of the Brazilian Unified Health System in the Municipal Level)	The text reports that the political vacuum perceived on the speeches of nurses affects the quality of their participation in public spaces and that nurses' understanding on their political participation is connected especially with the technical performance of their work and that exercising this power in an alienated way gives limited autonomy to nursing, making it subordinated to other powers of higher hierarchy or to other professionals (6).
Gerendamento e liderança: análise do conhecimento dos enfermeiros gerentes (Management and lea dership: assessing knowledge of managing nurses)	Not approached by the text.
A integralidade na atenção à saúde da população (Integrality in the health care provided to the population)	The text states that politics is formed by management practices where integrality is built with the participation of public managers from different sectors of the government, private providers, health workers, and the organized civil society. (13).
A Tecnologia e a Organização do Trabalho da Enfermagem em UTI (Technology and Nursing Work Organization at ICU) Avaliação da aupacidade de gestão de organizações sociais: uma proposta metodológia em desenvolvimento (Assessment of management capacity of social organizations: an ongoing methodological	The article stresses that the Technology Politics in Brazil in the 90's produced important advances in the health area, with increase in industrialization of hard technologies for hospitals, which required training workers to handle equipment. The creation of continuous education nursing programs both inside and outside hospitals was an important political achievement for nursing (9). The article refers to the political moment of the country at the time it was written and the will for change of the of president Fernando Henrique Cardoso's administration. The project aimed to strengthen the functions of Brazil's regulation and coordination agencies, by separating activities of regulation and performance, and this was transferred to the "non-government owned public sector" represented by social organizations. (14).
proposal) Avaliação tecnológica como competên aa do enfermeiro: reflexões e pressupostos no cenário da ciência e tecnologia (Technological assessment as a nurse's competence: reflections and assumptions on the setting of science and technology)	Not approached by the text.
Fundamento para o proæsso generial nas práticas do cuidado (Bases for the management process in care practices)	Not approached by the text.
Gestão de reaursos humanos nos centros de atenção Psixossocial no contexto da política de desprearrização do Trabalho no sistema único de saúde (Management of human resources in Psychosocial care centers in the context of the policy to improve the quality of work in the Brazilian Unified Health System)	The article explains that the introduction of SUS represented an innovation for the history of public health in Brazil, both in the field of health policies and in the macro politics of the state Reform. The work focused on some aspects adopted by the intervention of the Policy to Improve Work Relations at SUS, it starts with how it was introduced in the services, respecting work rights and ensuring social protection, then it deals with education/ professional qualification, and concludes with the democratization of work relations and the way health care is carried out (3).

TABLE 3 – National publications on Policies and Technologies in Management of Nursing and Health Services, published from 2004 to 2007, according to the Idea of Technology approached, searched at LILACS and MEDLINE database.

TITLE OF THE MANUSCRIPT	IDEA OF TECHNOLOGY APPROACHED
Política Nacional de Atenção ao Idoso e a Contribuição da	Not approached by the text.
Ensermagem (Brazilian Policy for Elderly Care and the contribution of Nursing)	
PROJETO INTEGRARE: integração dos serviços de	As a result of the activities performed, from their dynamics, some
DST e AIDS de uma Secretaria Estadual de Saúde	conclusions were drawn concerning the functional dynamics of the Unit;
(Integrare project: Integration of the STD AIDS services of a State Health Secretariat)	automation of SAME and the laboratory; planning to guarantee materials and equipment (12).
Repensando a tecnologia para o cuidado do idoso em UTI (Rethinking technology for care of elderly at ICU)	The approach on technology does not refer exclusively to equipment, machines and instruments, but also to knowledge for product generation, and to organize human actions in the productive process even in its inter-human dimension. Technological knowledge is to know how to do. It is what must be done first, how it should be done, when to wait before taking the next steps in production, requiring intelligence and ingenious capacity (9).
A Participação Política de Enfermeiras na Gestão do Sistema Único de Saúde em Nível Municipal (Political	Not approached by the text.
Participation of Nurses in the Management of the Brazilian Unified Health System at the Municipal Level)	
Gerenciamento e liderança: análise do conhecimento dos enfermeiros gerentes (Management and leadership: assessing knowledge of managing nurs es)	Not approached by the text.
A integralidade na atenção à saúde da população (Integrality in the health care provided to the population)	Focus the need for accessing the different levels of technology, including sophisticated technology for a successful care (13).
A Tecnologia e a Organização do Trabalho da Enfermagem em UTI (Technology and Nursing Work Organization at ICU)	The text refers that technology has been the focus of several studies from different professions, Nursing among them. It sees technology as a process, reflective activity, implying scientific knowledge, instrumental relationships, structured knowledge, and product. Technology cannot be considered only as equipment, machines and instruments, but also as knowledge to create products and to organize human actions in the productive process. It classifies health technologies into three types: hard technologies, soft-hard technologies and soft technologies. Hard technologies are equipment such as machines, instruments, rules, routines, and organizational structures. Soft-hard technologies are structured knowledge such as Physiology, Anatomy, Psychology, Clinics, Surgery and other types of knowledge from the work process, the soft technologies are connected with the knowledge on the production and the relations between individuals (9).
Avaliação da capacidade de gestão de organizações sociais: uma proposta metodológica em desenvolvimento (Assessment of management capacity of social organizations: an ongoing methodological proposal)	The article states that the proposal to create an assessment model or instrument requires reviews and theoretical methodological debates on the object to build concept and instrument frameworks that make the proposal viable. The result was a model with three sections; the first section explain theoretical and methodological aspects that guide the proposal, the second section provides information on the process to build the plan of indicators, and the third section explains the assessment of indicators (14).
Avaliação tecnológica como competência do enfermeiro: reflexões e pressupostos no cenário da ciência e tecnologia (Technological assessment as a nurse's competence: reflections and assumptions on the setting of science and technology)	Technology must provide a service to men, and especially in the hospital context, it should be totally mastered by professionals as a guarantee of safe and efficient use. Nursing is supported by two work bases: care technology representing knowing how to do, and the value of life as a moral and ethical support of its work which is supported by professional formation, scientific, and philosophical production and by political strategies (10).
Fundamento para o processo gerencial nas práticas do cuidado (Bases for the management process in care practices)	The study states that soft technologies can be important management tools used by nurses to search for quality of care provided to users, since they establish periods of intersection between workers and users, allowing for a real possibility of recognizing and meeting individuals' needs. These new care practices must be supported by the different and innovative use of the several types of technologies rather than only those belonging to the technological models used in the development of scientific management and in the clinical model of care (7).
Gestão de recursos humanos nos centros de atenção Psicossocial no contexto da política de desprecarização do Trabalho no sistema único de saúde (Management of human resources in Psychosocial care centers in the context of the policy to improve the quality of work in the Brazilian Unified Health System)	Not approached by the text.

TABLE 4 – National publications on Policies and Technologies in Management of Nursing and Health Services, published from 2004 to 2007, according to the Idea of Management approached, searched at LILACS and MEDLINE database

TITLE OF THE	MANAGEMENT IDEA APPROACHED
MANUSCRIPT	
Política Nacional de Atenção ao Idoso e a Contribuição da Enfermagem (Brazilian Policy for Elderly Care and the contribution of Nursing)	Nurses are responsible for making integrality of care available to the elderly. Care should be provided according to the needs identified in the elderly population in all dimensions, taking into account the diversity and complexity of this population to plan and implement the health care plan at home and, according to the type of intervention required, to make use of the services available in the primary, secondary, and tertiary levels in an integrated fashion (41)
PROJETO INTEGRARE: integração dos serviços de DST e AIDS de uma Secretaria Estadual de Saúde (Integrare project: Integration of the STD AIDS services of a State Health Secretariat)	(11). The project was carried out with meetings with the General Board of Directors, managers and Human resource teams, and teams of the Program to Humanize the Unit and technicians from a public health state school. In these places, the identified main problems for planning activities were discussed. From this, a proposal was made to start the work with the group of leaders in a workshop carried out by EESP (Public Health State School), to create the role of coordinator in the institution. Additionally, there was the challenge of aligning attitudes and practice of professionals among the 250 workers responsible for medium and high complexity care in the fields of STD/AIDS
Repensando a tecnologia para o cuidado do idoso em UTI (Rethinking technology for care of elderly at ICU)	The article refers to the need to introduce a more humanized care to ICU patients and that the process to change the teams' behavior is slow. It recommends searching for alternative ways to carry out the work. The Senior Citizen Statute in its article 18 says that "health institutions should meet minimum criteria to care for senior citizens, fostering training and professionals' capacity building, guiding caregivers, and self-help groups" (9).
A Participação Política de Enfermeiras na Gestão do Sistema Únio de Saúde em Nível Municipal. (Polítical Participation of Nurses in the Management of the Brazilian Unified Health System at the	Actors incorporated to SUS management are co-managers of the system and management is shared in its nature, forming a permanent process of negotiation and agreement in conflict situations in order to formulate, implement, and support public health policies. Among these new actors mentioned, nurses are stand out because they are increasingly assuming key positions in the management of SUS. (6).
Municipal Level) Gerenaumento e liderança: análise do conhecimento dos enfermeiros gerentes (Management and lead ership: assessing knowledge of managing	The text states that the new management models must be introduced to make the necessary changes in the health sector feasible, to increase care coverage with equality, efficiency and efficacy (5).
nurses) A integralidade na atenção à saúde da população (Integrality in the health care provided to the population)	The article states that integrality is the organizational axis of practices to manage actions whose challenge is to guarantee access to more complex care levels (13).
A Tecnologia e a Organização do Trabalho da Enfermagem em UTI (Technology and Nursing Work Organization at ICU)	The study assesses management aspects that are evident when individuals state their concerns regarding the management of places such as the ICU with obsolete equipment which very often requires improvisation, so that patients are not left without care. Another aspect was the placement of workers in these environments with no qualifications (9).
Araliação da capacidade de gestão de organizações sociais: uma proposta metodológia em dexenvolvimento (Assessment of management capacity of social organizations: an ongoing methodological proposal)	The focus of the assessment proposed was management of public services and of the government structure, especially regarding to: greater autonomy of organizations to decide on hierarchy levels of the Brazilian public management that would enable a faster and more effective decision making process; greater flexibility to break the rigidity of the organizational structure with the purpose of having more interdependence and sharing authority and responsibility; greater transparency in the organizational structure of the social organizations, and in the management councils with the participation of State representatives and the civil society to make more consensual decisions. Implementation of channels and means to publish and share these decisions with workers and users, contributing to a more transparent decision-making process and thus, to individuals with greater social control (14).
Avaliação tecnológica como competência do enfermeiro: reflexões e pressupostos no cenário da ciência e tecnologia (Technological assessment as a nurse's competence: reflections and assumptions on the setting of	Technology domain in the field of health will contribute for a more humanized management of nursing care, with quality, efficiency, creativity, and safety so as to guarantee the expected results. Thus, nursing team will have greater safety, less stress and, especially, the necessary operational performance to use these resources in their places, activities and interventions. There is also an added organizational value of those acquiring and producing technology, according to technical and legal requirements (10).
science and technology) Fundamento para o proæsso gerencial nas práticas do cuidado (Bases for the management process in care practices)	The edge that will guide the management carried out by nurses will be their positioning regarding the way they develop their work. Care management requires that health professionals, especially, nurses, have a view that integrates and welcomes different values and logics of users' needs. Therefore, it is necessary to reflect critically and to take a new look on the management processes of care so that a new organizational reality is built, aligned with best practices (7).
Gestão de recursos humanos nos centros de atenção Psicossocial no contexto da política de desprecarização do Trabalho no sistema único de saúde (Management of human resources in the Psychosocial care centers in the context of the policy to	With the introduction of SUS there were changes in the organization of practices and health services, in health management and, particularly, in human resources management. The field of human resources management was one of the sectors initially neglected, which led to a worsening in health work, characterized by lack of labors' rights and social protection, by the insertion of workers with low professional qualification and unsatisfactory working conditions. (3).
improve the quality of work in the Brazilian Unified Health System)	

achievements of health policies and the challenges that have to be faced. Among the innovations and achievements mentioned is the process of SUS implementation in the history of public health in Brazil, both in the field of health policies and in the macropolitics of the country's reform, and the creation of continuous education programs for nursing workers inside and outside hospitals, as an important political achievement for nursing.

Regarding the challenges to be faced, authors mention the need to invest in human resources policies, making work relations at SUS more democratic, in the way people are introduced in the service, respecting workers' rights, granting social protection, improving professional education/qualification⁽³⁾ and, thus, improving health care, and making services more humanized⁽⁴⁾.

As for nurses specifically, authors refer that nurses present a "political fragility" which reflects on the "political vacuum" of their speeches, in the small participation in public spaces, and in their difficulty to be leaders, especially in interdisciplinary health work⁽⁵⁻⁶⁾.

This political fragility is clear in the participation of Nursing disconnected from the construction of health policies which has "legitimized health policies that may or may not favor the consolidation of SUS" (5). Furthermore, these professionals are frequently in intermediate levels of the management hierarchy, their management hierarchy is limited and confusing, distant from interdisciplinary practices, jeopardizing quality of care provided (7).

A study carried out on the influence of nursing work in public institutions providing health services in Latin America shows that the biomedical model which is impregnated in the institutions these nurses work lead to work overload and loss of professional autonomy⁽⁸⁾.

Finally, and even worse, is the fact that these nurses accredit the achievement of their space in the local management at SUS only or mainly due to their technical power. Thus, nurses' potentiality is only on the technical ability, with greater emphasis in control, and a political power exercised in an alienated fashion which makes these professionals subordinated to superior hierarchical levels or even to other professionals at the same level⁽⁶⁾.

Nursing technical capacity is directly connected with the biomedical model of health, guided by fragmented care and the Technology Policy developed in Brazil from the 70's to the 90's, with important developments in the health area, especially the industrialization of heavy technology for hospitals which led to the need for technical qualification of workers to handle sophisticated equipment correctly⁽⁹⁾.

In the analysis on the idea of technology demonstrated by 8 of the 11 articles selected for review, we see that it is seen as an essential element to organize health services. To that end, nursing professionals should have knowledge and master the several tools used, to provide a more efficient and high-quality care.

For authors, technology is a set of knowledge and actions related to products and materials that define therapies; work processes are instruments or extensions of our physical and mental abilities to perform actions which occur in a cultural, social, and professional relation in health promotion⁽¹⁰⁾.

Mastering these new care practices should be accompanied by techniques of interpersonal relations sustained by a different and innovative use of the several types of technologies. Health technologies are classified into three types: hard, soft-hard and soft technologies. Hard technology is formed by machines, instruments, rules, routines, and organizational structures. Soft-hard technologies are structured knowledge such as Phisiology, Anatomy, Psychology, Clinic, and other types of knowledge which are part of the health work process. Soft technologies are related with the knowledge on the relations between individuals. Thus, technology has several meanings according to the different forms and context of its application. For some people, it is just technique, for other, it is machines and equipment. Some people consider it as a tool, an instrument. However, a broader view technology sees it as a process, as a reflective activity implying scientific knowledge, instrumental relations, structured knowledge and a product⁽⁹⁾.

So that nursing can foster, in all levels of care, an action planned by scientific knowledge, it should acquire knowledge, technical, management, and leadership abilities as primary needs to develop their labor activities. Thus, continuous education has an imperative role to reach the goals of any nursing action for successful care⁽⁵⁾.

Using the expressions from authors, we also agree that technology should serve human beings, especially in hospitals where professionals must master it to guarantee a safe and efficient use with no stress to those using or operating it. We have to remember that that technology should and must be employed in the routine of our interpersonal relations in any context or reality of our practice⁽¹⁰⁾.

The analysis of the idea of management approached in the 11 texts assessed demonstrates that the main focus of this approach is almost exclusively in Technical Management of Care in detriment of the Management of the System and Health Policies.

This corroborates the political fragility demonstrated by nurses in their work context. Because these professionals focus care and techniques, their action field is limited to the context of the health system and their participation in the public spaces, this fact is strongly reflected in the difficulty they have to be leaders in interdisciplinary health work⁽¹⁰⁾.

This study shows that the work of nurses presents limitations and contradictions, their main role seems to be the technical domain, especially the control, both of personal and materials to organize the care environment, performed not only by nursing, but also by the other health professionals, which makes clear that nurses do a lot more for others, in detriment of their own work which should be performed with competence in its different dimensions.

Thus, professional work of nurses is basically based on their technical domain, as a moral and ethical support is very small and limited. And therefore we ask: aren't these limits too small for a profession which is growing and becoming increasingly important, a profession that is considered the career of the future and that presents a great potential to articulate health services? Nurses "have power" in their work, or at least they should have. Why don't nurses use this power, why do they feel so helpless and have so little authority in their work? Power is not bad or good in itself, it depends on the use made by individuals. Power can be positive and depending on what nurses do or do not do with it, it can hinder the work of the nursing team and the care provided to patients.

FINAL CONSIDERATIONS

When we concluded the present study of integrative review of the literature to identify and assess if Brazilian nurses know the management policies and technologies in health and nursing services we saw that they present a great potential to articulate health services, especially nursing services, they present great technical competence however, they are still politically fragile, which restricts their professional autonomy and makes them subordinated to other professionals.

In the analysis of their conception of technology, we

REFERENCES

- Azevedo Neto FPB. Desenvolvimento de tecnologia de gestão para ambientes hospitalares; o caso do Instituto Fernandes Figueira – FIOCRUZ [dissertação]. Rio de Janeiro: Escola Nacional de Saúde Pública Sérgio Arouca; FIOCRUZ; 2004.
- 2. Erdmann AL, Andrade SR, Mello ALSF, Horner V. Gestão das práticas de saúde na perspectiva do cuidado complexo. Texto & Contexto Enferm. 2006;15(3):483-91.
- Jorge MSB, Guimarães JMX, Nogueira MEF, Moreira TMM, Moraes APP. Gestão de recursos humanos nos centros de atenção Psicossocial no contexto da política de desprecarização do trabalho no sistema único de saúde. Texto & Contexto Enferm. 2007;16(3):417-25.
- Martins JJ, Nascimento ERP. Repensando a tecnologia para o cuidado do idoso em UTI. ACM Arq Catarin Med. 2005;34(2):49-55.

have seen that it is perceived as an essential tool to organized health services. Nurses point out that they chose to take up management functions because of their involvement, availability, responsibility, and resoluteness regarding their technical work.

However, because of the developments and constant changes in the health sectors especially in the organizational and technical and scientific level, nurses must develop their political, management and leadership skills with a responsible and interdisciplinary participation. To that end, nurses must be prepared to carry out their functions properly.

This preparation should start in professional education making nurses ready to perform their functions of management and leadership, that is, their political functions and their work at SUS, thorough their education period in a cross-sectional and in-depth fashion since this system is still being built.

To ensure Nursing Foster actions based on scientific knowledge in all levels of work, it should acquire knowledge, technical, management and leadership skills as a primary need for developing their labor activities. Thus, continuous education also plays an important role in achieving the goals of any nursing action for a successful care.

References to public health policies are present in all texts and SUS was treated as central in all contexts discussed with emphasis to the principle of integral health care to the population, taking into account the differences expressed in health demands and decentralization of services. This is the great challenge to nurses, since integral care and decentralized services require that nurses are involved, instrumented, prepared and committed so that they can develop their different technical, political, technological, and management skills, abilities and competences.

- Lourenço MR, Shinyashiki GT, Trevizan MA. Management and leadership: analysis of nurse manager's knowledge. Rev Latinoam Enferm. 2005;13(4):469-73.
- Melo CMM, Santos TA. A participação política de enfermeiras na gestão do Sistema Único de Saúde em nível municipal. Texto & Contexto Enferm. 2007;16(3):426-32
- Rossi FR, Silva MAD. Fundamentos para processos gerenciais na prática do cuidado. Rev Esc Enferm USP. 2005;39(4):460-8.
- Poblete Troncoso M, Valenzuela Suazo S. Cuidado humanizado: un desafio para las enfermeras en los servicios hospitalarios. Acta Paul Enferm. 2007;20(4):499-503.
- Martins JJ, Nascimento ERP. A tecnologia e a organização do trabalho da Enfermagem em UTI. ACM Arq Catarin

- Med. 2005;34(4):23-7.
- Arone EM, Cunha ICKO. Avaliação tecnológica como competência do enfermeiro: reflexões e pressupostos no cenário da ciência e tecnologia. Rev Bras Enferm. 2006;59(4):569-72.
- Rodrigues RAP, Kusumot L, Marques S, Fabrício SCC, Rosset-Cruz I, Lange C. Política nacional de atenção ao idoso e a contribuição da enfermagem. Texto & Contexto Enferm. 2007;16(3):536-45.
- 12. Rizzato A, Cabral A, Araújo DG, Miranda MCG, Jesus V,

- Santos VMG. Projeto INTEGRARE: integração dos serviços de DST e AIDS de uma Secretaria Estadual de Saúde. Rev Baiana Saúde Pública. 2007;31(Suppl 1):44-53.
- 13. Pinheiro R, Ferla A, Silva Júnior AG. Integrality in the population's health care programs. Ciênc Saúde Coletiva. 2007;12(2):343-9.
- Guimarães MCL, Santos SMC, Melo C, Sanches Filho A. Avaliação da capacidade de gestão de organizações sociais: uma proposta metodológica em desenvolvimento. Cad Saúde Pública. 2004;20(6):1642-50.