ORIGINAL ARTICLE

Home care management, care and educational technologies used by nurses and nursing technicians

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ABSTRACT

Objective: to identify and analyze management, assistive and educational technologies that are used by nurses and nursing technicians in the Home Care Service. **Method:** qualitative research, supported by Marxist dialectics, conceiving technologies as processes resulting from daily human experience. In January 2019, semi-structured interviews were carried out with 13 nurses and 11 nursing technicians from Home Care Services in three municipalities in Minas Gerais. With support from Fairclough's discourse critical analysis, these participants' action on inputs/materials used in daily work was analyzed, obeying the ethical precepts of Resolution 466 of 2012. **Results:** a total of 29 technologies were identified in discourses, 14 of which were managerial, with emphasis on organization, work registration/documentation, material/input preparation and route coordination, nine of which were care, highlighting discharge and home care according to patients' needs, and six educational activities, emphasizing care guidance for patient, family, caregiver and training in/for work. **Final considerations:** nursing workers in the home setting use technologies commonly applied in different health settings. However, the classification of these technologies for their recognition in the practice of innovative technologies and specific to the home scenario.

Keywords: Technological Development. Home Care. Qualitative Research. Home Health Nursing. Technologies.

INTRODUCTION

Home care (HC) is defined as a substitute or complementary care modality, provided at home, which involves a set of practices and procedures of medium and high technological complexity[1].

Home Care Services (HCS) in Brazil have been developing and gaining political expression since Ordinance 2416 of March 23, 1998[2]. The consolidation of these services contributes to reducing hospital stays and, consequently, the costs and risks of complications inherent to this scenario of practices. Thus, the relevance of the need to implement services that provide HC stands out in the current and future health agenda of all health systems[1].

There are many definitions and classifications of health-related technologies. For this study, we followed the definition and classification, specifically designed within the scope of nursing work, in which technology is understood "as a result of processes based on daily experience and research for developing scientific knowledge for constructing material products, or not, with the aim of provoking interventions in practice"[3]. Technologies, inherent to nurses' work, according to this conception, can be classified into three dimensions: educational technology (ET); management technology (MT); and assistive technology (AT).

ET conforms from the association of scientific knowledge with workers' action, i.e., it consists of a set of knowledge that makes planning, execution, control and follow-up

possible involving the entire formal and informal educational process[3]. To apply ET, it is necessary that nursing workers (nurse or nursing technician) are the facilitators of the teaching-learning process and HCS patients and their caregivers are participating subjects, being necessary that both use their creative consciousness in the search for learning[3].

MT consists of a systematized process of theoretical-practical actions used to manage care and health services. It seeks to intervene in the context of professional practice in order to improve its quality. This technology involves human and material resources for its application[3].

AT conforms from the construction of a technical-scientific knowledge resulting from investigations, theories and experiences of subjects involved in care. Thus, AT consists of a set of systematized actions that, consequently, result in health care for subjects in situations of health and illness[3].

These dimensions constitute a technological framework available for use by nurses and nursing technicians, and can increasingly be developed and specialized by workers motivated to improve human health care. In the context of health work, however, especially in HCS, technologies are little known and recognized by the professionals who develop them[4], especially with this concept of process, which goes beyond the machine.

The conception most conveyed in daily work in health is that of technology as a product, equipment or machine. It is noticed that there is a certain limitation in the conceptual understanding, preventing the recognition of the technologies used by nurses and nursing technicians in their work process[5]. Considering this difficulty in understanding, it is essential to expand the concept of technology so that the technological dimensions inherent to nursing work in HC are known, recognized and understood. Nurses' technological competence is expressed during nursing care[6], and being aware of it can improve their ability to provide care at patients' homes[7].

The possibility of advancing knowledge about using technologies in nursing workers' practice[5] in HC is highlighted as relevant and, for this, it is important to identify which technologies make up these specific care scenarios. Moreover, recognizing and understanding them is also relevant to give visibility to their repercussions in the context of teamwork, planning, policy formulation so that they are integrated, better and with more quality into HC[8-10].

Therefore, this study was justified by the need to know and recognize the technological devices used in nursing workers' practice in HC. Although there are studies addressing technologies in health work, there are few in the literature that classify those used in HC, especially by nursing workers, due to the uniqueness of this care modality.

Thus, this investigation sought to contribute to this knowledge gap, guided by the research questions: which MT, AT and ET are used by nursing workers in HC? What activities are developed by nursing workers in each of these dimensions? And what elements are shown to be unique in nurses' and nursing technicians' work in the home context?

It is assumed that HCS nursing professionals use MT, ET and AT for care in this health scenario. It emphasizes the importance of health professionals and policy makers to better understand what these technologies are so that they can be integrated into quality HC[8].

Given the above, this study aims to identify and analyze MT, AT and ET that are used by nurses and nursing technicians in HCS.

METHOD

This is qualitative research, developed with Marxist dialectics theoretical-methodological framework[11], since the question under study is located in the context of human work, in the process of change existing in society as well as in historical construction, in the ability to transform and overcome contradictions through praxis.

Qualitative research made it possible to apprehend, interpret and describe reality, in addition to analyzing the complexity of human behavior and its relationships, with the aim of providing in-depth data on a given social behavior[12]. Moreover, this research approach allowed an approximation with the reality of work in HC and its transformations.

Data from three municipalities in the state of Minas Gerais were included: Belo Horizonte, Contagem and Pará de Minas. The research started from the intentional choice of scenario municipalities, whose HCS had different organizational characteristics, either due to regional variation or population size, service operating time and previous experiences in carrying out studies in these fields.

To delimit the population of this study, meetings were held with the HCS coordinators of each municipality to present the research. In those with more than one team in HCS, the coordinator was asked to indicate the teams to be interviewed. Meetings were scheduled via telephone contact and took place in January 2019; normally, two to three researchers were directed to the meeting.

The participants included in this study were nurses and nursing technicians, among whom they work in teams indicated by the coordinators of the scenario municipalities, computed in Chart 1, not applying exclusion criteria.

Chart 1. Number of teams in each municipality, nominated teams and potential participants. Minas Gerais Brazil, 2022

Municipality	Number of teams in each municipality	Number of teams indicated by the coordinators	Number of nursing professionals in the selected teams	
Belo Horizonte	24	2	16	6 nurses
				10 nursing technicians
Contagem	07	2	17	5 nurses
				12 nursing technicians
Pará de Minas	01	1	5	2 nurses
				3 nursing technicians
TOTAL	**32**	**5**	**38**	

Source: prepared by the authors.

Of the 38 potential participants, 24 nursing professionals (13 nurses and 11 nursing technicians) composed the sample and were interviewed, with 6 nurses and 5 nursing technicians in Belo Horizonte; 5 nurses and 4 nursing technicians in Contagem; and 2 nurses and 2 nursing technicians in Pará de Minas. Two professionals refused to participate, and twelve were not included, due to incompatibility of schedules to participate.

Each municipality provided the team's contact details indicated by the coordinator and the address of the headquarters where they were allocated for the initial approach and scheduling of the date of the interview. Upon contact with the team, a date was scheduled, choosing the day and time when all, or most, professionals were available.

A semi-structured interview was chosen so that interviewees could talk about their experience. Interviews were carried out from January to July 2019, and constituted the main source of data. They were conducted by two researchers in each scenario, nurses with experience in the qualitative approach, training at the doctoral or master's level completed or in progress, which were guided by a semi-structured script composed of the questions: what is your work like in HC? What do you understand by technologies? Describe the technologies you use daily in your work in HC.

The interviews lasted from 10 minutes and 21 seconds to 56 minutes and 45 seconds, with an average duration of 33 minutes and 02 seconds. Data from participants' discourses were recorded. Transcription was carried out in full, with the help of the InqScribee program, producing a database.

Data analysis was guided by critical discourse analysis (CDA), based on Norman Fairclough. This author proposes an approach that articulates social and linguistic practice in analysis. The term "discourse" refers to use of language (text and discourse) as part of a social practice, a socially and historically situated mode of action and representation, in a dialectical relationship with social structure[13].

Data were submitted to Norman Fairclough's CDA, in which the term "discourse" refers to use of language (text and discourse) as part of a social practice. Through discourse, a mode of action and representation is socially and historically located in a dialectical relationship with social structure[13].

It was articulated, therefore, with empirical data, linguistics and social practice interpretation, present in nursing workers' discourses. Their semantic analysis identified words, expressions and phrases, which originated two important axes of analysis for understanding the MT, AT and ET used by nursing professionals in HCS: an axis on the activities developed by nursing professionals during the work process in HC and the other on the use of these technologies during HC.

The research complied with the ethical precepts of Resolution 466/12 of the Brazilian National Health Council, which regulates research involving human beings. The project was approved by the Research Ethics Committee of the *Universidade Federal de Minas Gerais*, under CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 44483315.3.0000.5149 and Protocol 3.338291, and obtained an Informed Consent from the municipalities of Belo Horizonte, Contagem and Pará de Minas. Data collection was preceded by the signing of the Informed Consent Form.

RESULTS

Data analysis showed the activities carried out by nurses and nursing technicians in HCS. Such activities are described in Chart 2.

Chart 2. Activities carried out by nurses and nursing technicians. Belo Horizonte, Minas Gerais, Brazil, 2022

Nurses' activities	Educational technology activities
Organization of care	
Use checklist to not forget tasks	
Record the activities carried out	Record the activities carried out
Read previous records	Read previous records
Calculate statistics with data from records	
Elaborate visit schedule	
Analyze complications and define conduct	
Elaborate a scale of nursing technicians	
Perform patient admission	
Change visit schedule, if there are complications	Change visit schedule, if there are complications
Elaborate a scale of nursing technicians	
Request coverage	
Coordinate visit routes	
	Replace materials used in the bag
	Assemble bag for home visit
	Help thinking about route logistics
	Separate medical records and form
	Dismantle medical records
	Take forms and charts to visits
Direct patient care	
Perform active search to discharge	
Perform clinical care/nursing consultation	
Identify patients' physical, social and psychological needs	
Administer medication	Administer medication
Assess injury	
Define conduct	
Perform dressing	Perform dressing
Identify possible complications	
Activate the Mobile Emergency Service, if necessary	
	Check vital signs data
	Collect samples for laboratory tests
Educational activities and relationships with the multidisciplinary team	
Perform active search to discharge	
Guide patient, family and/or caregiver	Guide patient, family and/or caregiver
Guide on educational technologies	
Train on educational technologies	
Supervise educational technologies	
Discuss, case in multidisciplinary team	
	Work in teams
	Train patient, family and/or caregiver

Source: prepared by the authors.

In Chart 2, it is evident that nurses take on a greater number of activities than nursing technicians in HCS, but this does not mean that one professional works more than the other, since there is a repetitive nature in the actions performed by technicians, i.e., they can be performed more than once during the same work cycle.

From the activities carried out by nurses and nursing technicians, MT, AT and ET were identified as well as their components and purposes.

MT turned to organization of care, ranging from material and input preparation, records of work processes to planning routes (Chart 3).

Chart 3. Management technologies and their purposes. Belo Horizonte, Minas Gerais, Brazil, 2022

Nurses' and nursing technicians' activities	Management technologies		Purpose
	Instruments/products	Worker process/action	
Organization of care			
Record the activities carried out.	- Medical record; - Nursing knowledge about writing health records.	Written record.	Ensure continuity of care, multidisciplinary means of communication and legal support.
Use checklist.	- Checklist.	Use of checklist.	Do not forget something.
Read previous records.	- Medical record; - Daily report book; - Forms.	Reading of actions.	Continuity of care according to Home Care Service patients' needs.
Launch productivity.	- Productivity spreadsheet of the Ministry of Health System.	Data typing.	Production of service statistics for control and assessment by local coordination and the Ministry of Health.
Coordinate route and help think about route logistics.	- Nursing knowledge about coordination and management; - Car; - Team; - Visit schedule.	Route coordination (assess the number of cars available, the number of visits to be carried out, the available and necessary professionals, and the distribution of professionals according to the number of cars and cases).	Carry out a home visit schedule and take the necessary professionals for care.
Elaborate visit schedule/roster and change if there are complications.	- Visit schedule (document); - Nursing knowledge about triage of more urgent cases.	Visit schedule management (schedule organization according to patients' demand, making changes to schedule if there are complications, rescheduling missed visits).	Carry out visits in a timely manner, assisting as needed and intervening in complications.
Admit patient.	- Admission form; - Telephone; - Spreadsheet of patients referred to the Home Care Service; - Visit schedule; - Nursing knowledge.	Patient admission (reading the completed forms with patients' case or dialogue with the professional who is performing the referral; data entry in the Home Care Service worksheet; inclusion of patient in visit schedule; carry out a visit to assess patient).	Admit and provide home care to patients eligible for the Home Care Service.
Develop a scale of nursing technicians.	- Nursing technician scale; - Nursing knowledge about staff resizing and scale.	Allocation of nursing technicians by shifts so as not to lack human resources in any shift.	Carry out nursing care activities in the Home Care Service, patient care.
Create a monthly coverage map.	- Coverage map; - Map registration; - Sending the map for input management; - Nursing knowledge about input management.	Creation of coverage map based on available inputs and those that need to be requested.	Have the coverage available for dressing in the Home Care Service.
Assemble a bag for a visit.	- Bag; - Materials needed for visits.	Assembly of bag with necessary materials.	Take all the necessary materials for care.
Replace materials used in the bag.	- Bag; - Necessary supplies.	Replacement of used materials.	Take all the necessary materials for care.
Separate medical records for visits.	- Medical record; - Visit schedule.	Separation of medical records for visits.	Take the medical records of the patients who will be visited for registration in medical records.
Dismantle medical records.	- Medical record.	Dismantling of medical records after discharge.	Keep files up to date.
Take service forms to visits.	- Printed.	Take necessary forms for visits.	Use the forms on the visit.

Source: prepared by the authors.

The MT described supported workers' action in 14 activities, identified in interviewees' discourses: recording the activities carried out; use checklist; read previous records; launch productivity; coordinate route and help think about route logistics; prepare visit schedule/roster and change if there are complications; admit patient; elaborate a scale of nursing technicians; carry out a monthly coverage map; assemble a bag for visiting; replace materials used in the bag; separate medical records for visits; dismantle medical records; take service forms to visits.

In turn, the identified AT focused on direct patient care processes, including discharge and HC, according to patients' needs (Chart 4).

Chart 4. Assistive technologies and their purposes. Belo Horizonte, Minas Gerais, Brazil, 2022

Nurses' and nursing technicians' activities	Care technologies		Purpose
	Instruments/products	Worker process/action	
Direct patient care			
Perform an active search in the hospital and emergency room.	- Nursing knowledge; - Application of eligibility criteria; - Conversation with patient, family and/or caregiver.	Eligibility classification according to the criteria (living in the municipality where they are hospitalized; having a caregiver; being clinically stable) and dialogue to explain about the Home Care Service.	Discharge and admission to the Home Care Service.
Perform nursing care.	- Nursing knowledge; - Materials for the physical examination; - Medical record.	Conducting anamnesis, physical examination, definition of conduct and follow-up.	Diagnosis of the needs of each patient to define the interventions to be carried out.
Identify patients' needs during home visits.	- Nursing knowledge; - Nurses' glance.	Identification of physical, social and psychological needs for intervention.	Improve care.
Administer medication.	- Materials to administer medication; - Prescription; - Medication; - Nursing knowledge about medication.	Medication administration technique.	Patient treatment.
Assess injury, define conduct and perform dressing.	- Materials for performing dressing; - Nursing knowledge about injuries.	Dressing technique, injury classification and coverage definition.	Skin injury care.
Deal with complications and define conduct.	- Nursing knowledge about urgencies and emergencies; - Phone to contact the Mobile Emergency Service, if necessary; - Emergency bag.	Identification of severity, basic care and activation of the Mobile Emergency Care Service.	Intervention on complications.
Home visit.	- Bag; - Records; - Forms; - Nursing knowledge; - Car; - Visit schedule.	Patient care.	Patient health care as needed.
Check vital data.	- Materials for checking data (oximeter, blood pressure device, stethoscope, thermometer); - Nursing knowledge about vital parameters; - Medical record.	Data check and interpretation.	Understand patients' health condition.
Collect laboratory tests.	- Nursing knowledge about exam collection; - Bag with materials needed for collection.	Exam collection.	Understand patients' health condition.

Source: prepared by the authors.

AT were described from nine activities aimed at care provided by HC nursing workers, namely: perform an active search in the hospital and emergency room; perform nursing care; identify patients' needs during home visits; perform medication; assess injury, define

conduct and perform dressing; deal with complications and define conduct; home visit; check vital data; collect laboratory tests.

The ET described were aimed at multidisciplinary team qualification and its work processes as well as patients and their caregivers (Chart 5).

Chart 5. Educational technologies and their purposes. Belo Horizonte, Minas Gerais, Brazil, 2022

Nurses' and nursing technicians' activities	Educational technologies		Purpose
	Instruments/products	Worker process/action	
Educational activities and relationships with the multidisciplinary team			
Train, guide and supervise nursing technicians.	- Nursing knowledge about nursing technicians' work. Note: they do not show the methods used.	Training and supervision of nursing technicians' work by clarifying doubts and helping to carry out the tasks procedures that nursing technicians have not yet performed.	Ensure that nursing technicians perform their work properly.
Guide patient, family and/or caregiver.	- Nursing knowledge; - Communication.	Guidance and clarification of doubts of the families about the care.	Ensure that patient, family and/or caregiver are able to carry out/continue care at home.
Observe patient's, family's and/or caregiver's difficulties during home visits.	- Observation of actions performed by patient, family and/or caregiver.	Identification of difficulties and reinforcement of guidelines and explanations.	Ensure quality care for patients.
Discuss/share cases in a multidisciplinary team.	- Nursing knowledge about the cases monitored by the Home Care Service; - WhatsApp; - Meeting.	Case discussion in person or via the WhatsApp application.	Articulation of behaviors among the team.
Work in teams.	- Nursing knowledge about the cases monitored by the Home Care Service; - Communication.	Teamwork.	Ensure quality patient care.
Train patient, family and/or caregiver.	- Nursing knowledge; - Communication.	Patient, family and/or caregiver training.	That patient, family and/or caregiver can perform care.

Source: prepared by the authors.

ET were described based on six activities carried out by HC nursing workers, namely: train, guide and supervise nursing technicians; guide patient, family and/or caregiver; observe patient's, family's and/or caregiver's difficulties during home visits; discuss/share cases in a multidisciplinary team; work in teams; train patient, family and/or caregiver.

DISCUSSION

The findings made it possible to analyze MT, AT and ET used in nursing workers' practice in HCS based on the identification of the activities carried out and the material instruments used by these professionals, pointing to the singular praxis of nurses' and nursing technicians' work at home.

The results demonstrate the division of labor between nurses and nursing technicians. When analyzing the activities carried out, it is noted that nursing technicians perform more hands-on work, and nurses take on activities related to intellectual work. Intellectual work is that focused on care planning, supervision and administration. Hands-on work, on the other hand, refers to instrumental actions[14]. Dialectically, even though this differentiation is evident, the result of work is no longer the product of individual workers and becomes the product of a "collective worker"[9], a reflection of the social division of labor[15].

Other studies point out that the division of nursing into different categories of workers occurs in different countries[15-16]. In the United Kingdom and the United States, the division of nursing work has historically been established, with work divided between nurses, nursing

assistants and technicians, in addition to free student work[16]. This division favors the for-profit capitalist system, since the health service owner has efficient nursing work that reduces waste, has more efficient shift systems, and keeps wage costs as low as possible[16]. Therefore, nursing work, which was professionalized under Florence Nightingale's influence, assumed a dialectical relationship with capitalism in which it both determines it and is determined by it[17].

The relationship between work and technology is mediated by productivity gains. Capitalism's history involves the prodigious increase in productivity made possible by the development of technologies[11] that have demonstrated their ability to radically transform the field of nursing[17]. Technology is understood by health professionals who work in HC as a set of material and human actions that make up a movement towards transforming praxis[18] in dialectical sense. Thus, the technologies presented reflect this set of actions carried out by nurses and nursing technicians, aiming to provide the necessary care for patients in HC, from each singular reality served, with the intention of transforming this action into a result for the subject in focus: patients.

Data analysis demonstrates that participants use MT, AT and ET during their work process in HCS. The technologies identified in this study are used in activities commonly performed by the nursing team, not only in HCS, but also in other scenarios, such as "checking vital signs, applying dressings, simple procedures and guidance on health care"[19]. Vital data check is a common activity of nursing workers for patients' clinical monitoring that must be carefully thought out and adapted to each situation[20]. Thus, vital sign monitoring is a fundamental action of nursing care present in nurses' routine, assisting in monitoring and in clinical decision-making for care[21].

Other studies show that care for injuries is interrelated with nursing workers, considering their fundamental role in injury treatment[22-23]. In this regard, nurses have a legal responsibility and must: assess the injured person, prepare care plan; guide and supervise the technical team on performing dressing; guide patients, family and caregivers about wound care; perform dressing

in more complex conditions; and follow injury evolution[23-24]. These activities confirm the evidence of this study on the use of MT, AT and ET necessary for the care of nursing team in the home context and in other network services.

In addition to the technologies commonly used by nursing at different points in the network, the results highlight innovative and specific technologies for work in HCS, such as: route planning and coordination; visit schedule management; eligibility classification for admission to HCS; case discussion in person or via WhatsApp; assembly of a bag with materials needed for home visits. This result is supported by Marxist dialectics' ideas about transforming practice[16,18]. In this regard, the home is a scenario that allowed using technologies needed specifically in this context of health work, differing from what occurs in other traditional health scenarios.

It is also identified, in this study, the relationship of the three types of technologies for professionals to carry out their work process at HCS. The description of the instrument/action that shapes technologies highlights the processes that involve them; for instance, when registering the activities carried out, professionals need to describe the care and the guidance provided. Thus, a dialectical relationship is established between the instruments and processes that require them to guarantee quality care[24].

It can be said that technologies are a set of knowledge that innovate nursing workers' daily practice in their fields of activity in management, care, teaching and research[5]. Thus, technology is a mediator for the performance of a subject who can carry out transformations in reality. However, although flexible, technology is not something undefined, and its permanence is relative to changes in the scientific field that sustains it[5,25-26]. Thus, the theme of technologies in HCS, as a process and product, is dialectically in constant development based on the needs of each work scenario.

Thus, the nursing technologies used by nurses consist of an expression of patient care, seeking to achieve their well-being based on the needs presented[25], and the specific technologies of this work scenario represent evidence for the evolution of the profession.

It is worth recognizing, as a limitation of this

research, the possibility of having other technologies used in HCS, in addition to those mentioned in this study, considering the Brazilian context in which each territory can present other realities that require specific technologies to carry out HC.

The present study can contribute to the political field of HC, as it points out the technologies and activities developed in this scenario, thus contributing to a better management of the studied service.

FINAL CONSIDERATIONS

Technology use analysis in the work process of nursing professionals in HCS allowed identifying and analyzing AT, MT and ET used in the work process of these professionals.

This way, technology use in nurses' and nursing technicians' daily work in HCS is evident. The research seeks to give visibility to these AT, MT and ET present in HC and the consequences of their use in the work process.

Knowledge on the subject will contribute to identifying technological innovations in nursing in the field of health, favoring the recognition of the profession and the advancement of care at this point in the RAS. It points out the need for further studies to advance the content produced on the theme of health technologies.

TECNOLOGIAS GERENCIAIS, ASSISTENCIAIS E EDUCACIONAIS DA ATENÇÃO DOMICILIAR UTILIZADAS POR ENFERMEIROS E TÉCNICOS DE ENFERMAGEM

RESUMO

Objetivo: identificar e analisar as tecnologias gerenciais, assistenciais e educacionais que são utilizadas pelos enfermeiros e técnicos de enfermagem no Serviço de Atenção Domiciliar. **Método:** pesquisa qualitativa, apoiada na dialética marxista, concebendo-se as tecnologias como processos resultantes da experiência humana cotidiana. Realizaram-se, em janeiro de 2019, entrevistas semiestruturadas com 13 enfermeiros e 11 técnicos de enfermagem de Serviços de Atenção Domiciliar de três municípios de Minas Gerais. Com aporte da análise crítica do discurso de Fairclough, analisou-se a ação desses participantes sobre insumos/materiais utilizados no cotidiano do trabalho, obedecendo aos preceitos éticos da Resolução nº 466 de 2012. **Resultados:** identificaram-se nos discursos 29 tecnologias, sendo 14 gerenciais, ressaltando-se a organização, registro/documentação do trabalho, preparo de materiais/insumos e coordenação de rotas, nove assistenciais, destacando-se a desospitalização e cuidados no domicílio conforme necessidades dos pacientes, e seis atividades educacionais, enfatizando-se a orientação de cuidados para paciente, família, cuidador e capacitação no/para o trabalho. **Considerações finais:** os trabalhadores de enfermagem do cenário domiciliar utilizam tecnologias comumente aplicadas em distintos cenários de saúde. Destaca-se, no entanto, a classificação dessas tecnologias para o seu reconhecimento, na práxis, das tecnologias inovadoras e específicas do cenário domiciliar.

Keywords: Desenvolvimento Tecnológico. Assistência Domiciliar. Pesquisa Qualitativa. Enfermagem Em Saúde Domiciliar. Tecnologias.

TECNOLOGÍAS GERENCIALES, ASISTENCIALES Y EDUCATIVAS DE LA ATENCIÓN DOMICILIARIA UTILIZADAS POR ENFERMEROS Y TÉCNICOS DE ENFERMERÍA

RESUMEN

Objetivo: identificar y analizar las tecnologías gerenciales, asistenciales y educativas que son utilizadas por los enfermeros y técnicos de enfermería en el Servicio de Atención Domiciliaria. **Método**: investigación cualitativa, apoyada en la dialéctica marxista, comprendiendo las tecnologías como procesos resultantes de la experiencia humana cotidiana. Se realizaron, en enero de 2019, entrevistas semiestructuradas con 13 enfermeros y 11 técnicos de enfermería de Servicios de Atención Domiciliaria de tres municipios de Minas Gerais/Brasil. Con base en el análisis crítico del discurso de Fairclough, se analizó la acción de esos participantes sobre insumos/materiales utilizados en el cotidiano del trabajo, obedeciendo a los preceptos éticos de la Resolución nº 466 de 2012. **Resultados**: se identificaron en los discursos 29 tecnologías, siendo 14 gerenciales, destacándose la organización, registro/documentación del trabajo, preparación de materiales/insumos y coordinación de rutas, nueve asistenciales, destacándose la desospitalización y el cuidado en el domicilio según las necesidades de los pacientes, y seis actividades educativas, enfatizando la orientación de atención al paciente, familia, cuidador y capacitación en/para el trabajo. **Consideraciones finales**: los trabajadores de enfermería del escenario domiciliario utilizan tecnologías comúnmente aplicadas en distintos escenarios de salud. Se destaca, sin embargo, la clasificación de esas tecnologías para su reconocimiento, en la praxis, de las tecnologías innovadoras y específicas del escenario domiciliario.

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