

MOBILIZATION OF SCIENTIFIC KNOWLEDGE BY GRADUATES OF A NURSING MASTER'S DEGREE

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ABSTRACT

Study that aimed to understand how the process of training in the Masters of Nursing helped mobilizing scientific knowledge in terms of formal and political aspects, by graduates working in health services. Exploratory qualitative research, conducted at the state capital city of Mato Grosso, in 2012. The subjects were nine graduates, Masters in Nursing. Data were collected through semi-structured interviews, analyzed by using the technique of thematic content analysis, and discussed through the theoretical framework of Institutional Analysis. It was showed that the Masters was a device of the Institution knowledge, strongly instituting, by mobilizing in the educational process, the political quality of knowledge. It was concluded that the master's degree in nursing students who worked in health services, feel more prepared and ready to interfere and qualify their workspaces for the management of scientific, political and ethical knowledge; refined and deepened throughout the process of training in the Masters.

Descriptors: Nursing. Education, nursing, graduate. Nursing research. Knowledge.

RESUMO

Estudo que objetivou compreender como o processo de formação no Mestrado em Enfermagem contribuiu para mobilizar conhecimentos científicos em seus aspectos formais e políticos, pelos egressos atuantes em serviços de saúde. Pesquisa qualitativa exploratória, realizada na capital de Mato Grosso, em 2012. Os sujeitos foram nove egressos, mestres em enfermagem. Os dados foram coletados por entrevistas semiestruturadas e analisados por meio da técnica de análise de conteúdo temática e discutidos através do referencial teórico da Análise Institucional. Evidenciou-se o mestrado como dispositivo da instituição do conhecimento, sendo fortemente instituinte, por mobilizar no processo educativo, a qualidade política do conhecimento. Concluiu-se que os mestres enfermeiros, atuantes nos serviços de saúde, sentem-se melhor preparados para interferir e qualificar seus espaços de trabalho pelo manejo do conhecimento científico, político e ético, refinado e aprofundado ao longo da formação no mestrado.

Descritores: Enfermagem. Educação de pós-graduação em enfermagem. Pesquisa em enfermagem. Conhecimento.

Título: Mobilização do conhecimento científico por egressos de um mestrado em enfermagem.

RESUMEN

Estudio con el objetivo de comprender cómo el proceso de formación en la Maestría en Enfermería contribuyó a movilizar conocimientos científicos en sus aspectos formales y políticos, por los graduados que trabajan en los servicios de salud. Investigación cualitativa exploratoria, realizado en la capital de Mato Grosso, en el año 2012. Los sujetos fueron nueve graduados, magíster en enfermería. Datos fueron recolectados en entrevistas semiestructuradas y analizados por la técnica de análisis de contenido temático, y discutido a través del referencial teórico Análisis Institucional. Se encontró una maestría como elemento de la institución del conocimiento, siendo fuertemente instituyente, por movilizar en el proceso educativo, la calidad política del conocimiento. Se concluyó que los magísteres actuantes en los servicios de salud, se sienten más preparados y dispuestos a interferir y calificar en sus espacios de trabajo para la gestión del conocimiento científico, político y ético; refinado y profundizado durante su proceso formación en el Magíster.

Descriptores: Enfermería. Educación de postgrado en enfermería. Investigación en enfermería. Conocimiento.

Título: Movilización del conocimiento científico por egresados de un máster en enfermería.

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INTRODUCTION

The study brings the topic of education and knowledge production in *strict sensu* level of nursing. We considered Nursing as a science, working from the perspective of the unique and specific body of knowledge that has been built on the humane care, which brings identity and specificity. In this regard, the area in which education happens and where this knowledge is mostly produced in Brazil is the *stricto sensu* graduation studies in Nursing⁽¹⁾.

As science inside the broad area of health knowledge, Nursing has sought its legitimacy in the scientific and social fields. Studies suggest, first, that nursing research has increased quantitatively and qualitatively in the country^(1,2), on the other hand, they refer to a gap between scientific knowledge in the field and applying to professional practice in order to demonstrate whether and how its use has been occurring by working in care or in the management of nursing care^(1,3-6).

These initial facts lead to reflection on which knowledge is, in fact, necessary to improve the realities involving the nursing care and recommended to the questioning of the social utility of Nursing knowledge in order to turn it into welfare of individuals, groups and communities⁽⁷⁾.

It was considered that scientific knowledge has a formal face and a political face⁽⁸⁾. The first, highly valued at under graduation, is characterized by the dominance of instrumental and methodical knowledge. The second, which seems to be better focused on *strictu sensu* graduate studies in subtle nuances and little visibility, addresses the ethical, related to emancipation and autonomy of individuals, able to define their destination, at the same time, they can improve life of others under their care⁽⁹⁾.

The expression "mobilization of scientific knowledge" is understood as the ability of graduates to put in motion, to articulate the formal and political faces, i.e. to transform available knowledge, arising from readings, scientific research, into "practice"; here understood as the management of the political/ethical face of scientific knowledge, i.e. a wide range of different actions that includes from changes in the discourse of the subjects, their way of integration services, their relationship with the healthcare team and their critical view that may have about the nursing work process. And thus, contribute to the improvement of health care users and strengthening of Nursing as a science.

It is assumed that the conduction of a master's degree, due to diverse pedagogical experiences, besides production of knowledge through research, helps the management of scientific knowledge. Besides that, it brings adjacent gains to graduates, including qualitative differences in relation to the care process and to manage the nursing and health team, by providing a reflective teaching about the social role of the practitioner, and work expanding his/her potential as a transformer agent through where he/she is inserted.

From this problematization we aimed the following objective: To understand how the process of training in the Masters of Nursing has contributed to the mobilization of scientific knowledge in terms of formal and political aspects, by graduates of the course who work in health services in the state capital of Mato Grosso.

METHODS

This is an exploratory research with qualitative approach⁽¹⁰⁾, whose scenario was the Master's degree course at the Faculty of Nursing of the *Universidade Federal de Mato Grosso* (FAEN/UFMT), located in Cuiabá, the state capital. Created in 2005, the program has graduated, in the period from 2006 to 2009, forty-three Masters students in Nursing. There were twelve graduates students who presented his/her dissertation from 2008 to 2011 and met the inclusion criteria: to be graduates of the master's degree course; to be currently working in health care in the city of Cuiabá; to work in caring with the patient or working in care management and consider assistance the bond of equal or greater importance, if the person has also worked in teaching or other area, or activity. Of these, nine agreed to be part of the research.

For data collection, we used semi-structured interviews, which were recorded and transcribed. All subjects signed a Consent Form (CF), being a study matrix, from which it derives this study, approved by the Research Ethics Committee Julio Muller University Hospital, under the Protocol 798/CEP-HUJM/10. Data were collected during June and July 2012 and interviews, with an average duration of 44 minutes were structured from the following questions: 1) How did the Master's in Nursing contribute to the mobilization (production, socialization, incorporation) of your scientific knowledge about care produced in the nursing area?

2) How have you been using scientific knowledge about nursing care in your daily work activities in nursing?

For purposes of transcription and identity preservation, subjects were identified as (E1), meaning respondent one, (E2) respondent two and so on until (E9) as respondent nine.

The collected data were analyzed through the technique of thematic content analysis⁽¹¹⁾, and interpreted from the theoretical framework of Institutional Analysis⁽¹²⁾. This theory, chosen for its dialectic flexibility, which will be presented together with the results and discussion, allowed us to capture/interpret the movements of workers in the constitution of their work object and themselves into the world of work, considering the diversity of learning, the plurality of life and values in constant shock, leading to possibilities of social transformation⁽¹²⁾.

In the initial movement of data organization, pre-analysis, conducted by vertical reading of the transcripts, we tried to, in each interview, highlight the instituting movements, productive/innovative forces, which tend to establish institutions or transform them, and instituted, conservatives/established, which exist for ordering social activities⁽¹²⁾. This choice, of individualized reading of the speech was made considering the subjects on their singular aspects, seeking to highlight the particularities of their perceptions.

We rearranged, then, the corpus by identifying the similar units of meaning, moment in which were performed the first interpretations based on the theoretical framework. Thus, after analyzing the different units of meaning, a bigger theme emerged, called: The Masters as a device of the Institution's knowledge.

RESULTS AND DISCUSSION

The Masters as a device of the institution's knowledge

The term **institution**, for the theory of Institutional Analysis (IA), is an essential concept, defined as "[...] trees of logic compositions"⁽¹²⁾ that depending on their materialization and degree of formalization adopted, can be laws or regulations, if described, may be agendas, regularities in behavior, when they are not contained as expressed⁽¹²⁾.

Scientific knowledge was the analyzed institution in this study and it materialized in the process of training in *strictu sensu* level, in a Master's degree course. As an institution, knowledge is ruled by logic very formal and well-known regulations by peer, which at all times go through reformulations, which interfere and produce new knowledge and new methods. This logic requires constant updating of those who work in the scientific field, since a study that did not correctly follow a method, or is in disagreement with the theory that supported their work, may expose the risk of being rejected in the area to which it is intended. In Nursing, as in other sciences, the process is similar; one acquires legitimacy when rules and regulations in the knowledge field are observed.

Scientific knowledge, as all other institutions, health and education among these, are composed and distinguished by instituting and instituted sources, one does not exist without the other, one is in constant dialectic confrontation with the other. In the **instituting** side from institution knowledge there are productive forces that tend to "[...] operate mutations, transmutations"⁽¹²⁾ on the characteristics of knowledge, which can bring the new, functioning as a creative process, visualized in the statements:

So today as I relate this to my duties [...] trying to bring the person that I assist [...] a more expanded view, a care that transcends the nursing care on the body, on the individual, but understanding all their social, emotional background, bringing the family to participate in the process. Within the management when I propose actions here [...]. (E3)

[...] [The masters] was important in general... [...] The nurses we have gave objective assistance. [...] Today, I do not say al of theml... [...] Today we try to work... What we do with the staff here is an integral work [...]. (E4)

Institutions, abstract entities in IA, to exist, materialize in **organizations**, these defined as large or small sets of material forms that composes institutions⁽¹²⁾. Organizations give life to institutions and in the case of the institution knowledge, its main organization is the University, which transform itself in smaller units, called **facilities**⁽¹²⁾.

The facility where this study took place was the School of Nursing of the *Universidade Federal de Mato Grosso* (FAEN/UFM), that the thought

of starting an academic master's in Nursing, conducted various instituting movements, internal and external to the organization of the University. There was a belief within the group, that was worth the effort, as to its legitimacy in the scientific field, such as faculty researchers, it was necessary to have a *strictu sensu* graduate studies running at the site. This graduate course considered regional peculiarities arising in scientific production; besides this desire to be in line with the policy of expansion of the V National Plan for Graduate Studies (PNPG).

This academic master's provided the management of the formal face of knowledge, translated by the theory and instrumentation of subjects in science, in a dialectical movement with its political face, which resulted in ethics, autonomy and emancipation. By triggering changes in positions of power, the graduates have raised an instituting process, in which new ways of functioning established new relationships between workers, and this was done from the diverse knowledge acquired during the master's degree course, as noted in the following statement:

In my dissertation, I managed to convince people who are with me here, that we need to change the models, and outpatient clinic that used to be Medical course, it will be a teaching outpatient clinic, bringing students from other areas of health [...] This [referring to the Masters] also brought me a lot of reading [...] and then we ended up with scientific arguments [...] within the readings I realized, [...] and how I demonstrated it here, [...] then I was put in the Outpatient clinic Coordination. (E3)

For the manifestation of instituting, IA says there must be **devices** or assemblages, defined as "[...] an assembly or artifice purposeful/intentional producing innovations that generates events"⁽¹²⁾, emerges the desire for the new, by which brings us together, makes us collectively. This was the perspective that proved strong in research and in the masters it has emerged as the device, capable of causing the mobilization of knowledge, both in its formal and political aspects, because the study subjects revealed the most diverse instituting movements that in understanding them were processed during the master's training.

The IA says that devices as producers of innovations, generate **events**, whose concept is "[...] the act, process and result of the affirmative activity

by chance. It's the time of appearance of the new, of the difference and uniqueness"⁽¹²⁾. Actions that escape from the constrictions of the institutes, of the organized and established.

This incorporation of knowledge coming from the masters is recognized as an event, ie, it changes the subjects, the casual occurrences that touch the agents and make them more supportive and ethical, trying to make the difference in the performance of their actions as Master's in Nursing in micro spaces of practice, aiming to change the everyday practices that not only do by doing:

[...] I managed to bring into the institution that I have worked from that time I enrolled in the nursing masters, a different view. [...] I had the opportunity to present my dissertation as soon as I finished, in a scientific Workshop and the professors were present [...] then, when we were thinking about the political pedagogical project of the subject [...] we changed much of what had already been discussed earlier."(E3)

The production of knowledge in nursing is a factor of changes in the practice, due to greater visibility and recognition of the various actions undertaken by nurses within the health service. It is noteworthy the socialization process of the research, which acted as a device to provide changes in the pedagogical project of the subject and the involvement of other practitioners and nurses-professors.

Other graduates saw the realization of their Masters as an encouragement to fellow nurses of the practice which also acts to conduct the *strictu sensu* graduate studies:

I realized how... at least when I was doing my masters, my colleagues, the others, none of them were doing. It took me four years after I had finished. Whoa! Many colleagues who have been here did it[...]. So I think it makes a difference, we try to bring something more concrete, with scientific proof for all we know. (E8)

This fact is understood as a device, even if unintentional, important for nursing as a science, which performs practices evidenced and needs research as a tool for developing scientific knowledge that legitimizes and is the basis of care⁽⁷⁾.

In its uniqueness, the subjects of the research perceived in different ways, the changes brought by scientific knowledge arising from the masters. There are those who realized as a source of knowl-

edge, deepening theoretical foundation of what was once perception:

I think when I started... to conceptualize, understand more things... I had many perceptions, so to speak, but with very little reading. And in the masters, one of the things we really do, is to read, read, read... but we read good stuff. So we will begin to understand why I do so, [...]. (E5)

With the masters, you start reading a lot, getting a lot of things and seeing the progress, because you're not restricted to such a subject, but try to get all, you are in touch with others in the scientific world, going to conferences, [...] and we see a big difference at work, it seems that the mind expands greatly. [...] You start having another view of things [...]. (E2)

These graduates have developed an expanded view after the Masters, arising from the readings, by the incorporation of scientific knowledge and understanding that knowledge is the differential in the implemented practices, in the contextualization and reflection on the work itself and its product, the care. Therefore, the master's degree is a device capable of causing, through the knowledge provided, changes in posture in its graduates, which in turn may cause changes in the realities of nursing and health care for the mobilization of scientific knowledge.

In addition to professional changes, the knowledge coming from the masters also brings personal changes for the subject:

As extended... we know that... we always have to be looking for more, researching, but a big difference was noted... that is how I think... before the Masters and after the Masters. [...] I think the masters gave me that, this professional and personal growth in my entire life. (E2)

[...] That influenced my professional life, my personal life... I say this a lot, I think it was very good. [...]. (E8)

The knowledge provided by the masters favored the dimension that contains the knowledge of self, belief in their own potential and to recognize the limitations and ways to overcome them, providing increased self-esteem and self-confidence⁽¹³⁾. It is the instituting side of the institution knowledge, that emerges gradually during studies and reflections made during the studies of a master's degree.

The masters, as a device, brings the reaffirmation of the political/ethical subject, as a profes-

sional in your reality of the health services, who can now relate their study in the masters in a more solidary view towards the others which is cared and need a management service with expanded view, of comprehensive care, of attentive listening and consensus in the nursing actions, as seen in the statements:

[...] What I apply more is the matter of course that the person goes through. [...] I see the difficulty, I try to improve. The path she travels to get that care. At least so... talk, guide. Because if the person is oriented, it will make easier for her the path to go. (E9)

[...] A person with diabetes, hypertension [...] and he/she ends decompensate, we end up discovering during care, some popular practices, cultural practices that he/she learned from the family, in the community where he/she lives. And then we try, in the transportation, make some orientations. (E8)

The practice of these Master's in Nursing, agents for IA, is in service of **organizing**, as an action performed that ultimately operate transformations of reality⁽¹²⁾ to go beyond meeting physical situation of the patient, and be willing to listen to each other, practice listening, otherness, trying to understand the culture that surrounds the illness of another, to facilitate their access to health services, attitudes fleeing current reality among professionals.

But knowledge also has its **instituted** side which is "[...] final effect, exhausted from instituting activity"⁽¹²⁾, the result catalyzed, the product, revealing the ways in which the subject manages knowledge depending on their ways of seeing and understanding the world and integrate it. There is one subject among the nine who participated in this research, who was found in the instituted part, and who failed to recognize the process of diverse learning in the masters as an instituting device, to reiterate not occurred significant learning capable of leading changes in the ways to perform his/her care practices, which are now in their daily work.

[...] When you enroll in the Masters, you will focus on your work [dissertation]. All you will search... Regardless of the classes you will have to meet, it's your job. So if you're working with information system, you have to go search only system information, [...] there is no care in the information system. [...] So it has to be specific, so... I did not interact, so I have new knowledge, new

empowerments, so to speak ... related to the masters, but with care. Not really. (E1)

It was noticed that each subject reacted in a very particular way to the training process, confirming that the differences and uniqueness of each subject shows in the learning process, and that "[...] the context of care as the educational process, can function as loci of consensus or dissent, production of autonomy or heteronomy, depending on the potential of many desiring subjects who participate in [...]" there is no serialization of reactions, some subjects react with proactive actions and others introspect and silence, others reflect and prepare to flee or face in untimely way the event ⁽⁹⁾.

From the perspective of IA, another statement illustrates clearly the strength of scientific knowledge and the importance of graduate courses to the development/execution of Nursing as a science and social practice through their nurses:

[...] I was so technical! One thing that I carried for years! Since 2000, always doing that routine... and I was not aware of a few things. [...] Then I began to notice a few things that before [the Masters] I did not observe ... (E7)

In the above statement we obtained that knowledge, provided by the masters, provided an opportunity to see a new perspective on the facts and awakening to others, what has been called an enlarged view. **Agents**, persons protagonists of **practices**, step into the organizations, still with own aspirations, tend to be involved in the processes of reproduction, reiterating what is already said, already exists, keeping the conservative function, crystallized of the **organized**⁽¹²⁾.

The masters also showed, as a device for reframing these subjects. There are changes in the ways to be seen and also the ways of seeing and acting, making it far more safely and interference power. Master's students in Nursing who make use of the political quality, acquired in training to try to break the established structures and show managers to look the other humanized, solidarity care, manifested as:

[...] So we tried, it was not just me, of course! We're a team. We made a proposal so that he and his family would meet with a psychologist, a nutritionist, but they did not really bought the idea. (E7)

I feel so, when I left I was in the right place. If things had gone as they should, I could have done very well this bridge. The master explained a lot to me, the readings were taken, the way I did, how this network should be... the points that are fragile in our state that need to be worked out. (E6)

We remind that the masters worked as an important device, which caused many diverse and unique movements in the institution knowledge, as they called the subjects to move in other directions than those who were habitual. And, in this way, performed the first processes of IA, ie **self-analysis**, which allows the subjects to assess the conditions in which they are inserted, and seek their own solutions to the problems identified, and **self-management**, which takes place concurrently with self-analysis, resulting in new articulations in the search for improvements in practice and life⁽¹²⁾ and in this case, the strengthening of Nursing as science.

FINAL CONSIDERATIONS

In the studied reality we found approximation between the *strictu sensu* graduate studies and effective transformation in the ways of managing scientific knowledge, possible to be captured by the flexibility of dialectical theory chosen, Institutional Analysis. Theory, which was able to give meaning to the findings of the field, and helped to interpret the differences that stamp each subject in the task of learning and manage the knowledge provided by the masters.

The master showed to be a device that favored instituting setting in motion the institution knowledge providing changes in the practices of the graduates. Most participants made it clear that the master has prepared them and now they have better understanding of their limits and possibilities, expanding the capacity of reasoning, greater understanding and reflection on the profession by the institutionalization of activities and the enlarged view of the other who is cared. Subjects who believe to do a better political/ethical management of scientific knowledge through teaching strategies, provided by the master, contributing in the wake of new organizational arrangements, where knowledge becomes the basis for proposing changes in work and care relationships and even in institution knowledge.

The research was limited due to the fact we have applied only one technique of data collection. This research suggests studies that capture the instituting movements made by nurses, specialists, masters or PhDs, in order to identify possible changes in care practices, resulting from the mobilization of scientific knowledge, which a less careful view or more instituted view cannot capture.

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