

TRAINING OF NURSES TO WORK IN THE CENTRAL STERILE SUPPLY DEPARTMENT NURSE

Formação do enfermeiro para atuar na central de esterilização

Formación del enfermero para actuar en la central de esterilización

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ABSTRACT: Objective: To understand the training of nurses who will work in the Central Sterile Supply Department (CSSD). **Method:** Descriptive and qualitative study including a sample of 20 nurses enrolled in the professional and academic Master's Degree Programs of *Faculdade de Medicina de Marília* (Famema), in the period 2011 to 2014. The data were collected by interviews in 2014. **Results:** We found two thematic categories: nurse training based on the technician model and the perspective of generalist training. The world of work and training are intertwined and the undergraduate course, therefore, contributes to the development of competent and ethical professionals, since it considers their realities in training processes. **Conclusion:** Regardless of teaching institutions' curriculum, nurses faced difficulties in studying the proposed theme further; however, they have collaborated with suggestions regarding changes in the teaching and learning practices for nurses that work in the CSSD; and they have also suggested it could be reconsidered in a better way.

Keywords: Education, nursing, Materials management, hospital. Sterilization.

RESUMO: Objetivo: Compreender a formação do enfermeiro para atuar na Central de Material Esterilizado (CME). **Método:** Estudo descritivo qualitativo, constituído por uma amostra de 20 enfermeiros matriculados nos programas de mestrado profissional e acadêmico da Faculdade de Medicina de Marília (Famema), no período de 2011 a 2014. A coleta de dados foi realizada por meio de entrevista em 2014. **Resultados:** Foram identificadas duas categorias temáticas: a formação do enfermeiro pautada no modelo tecnicista e a perspectiva da formação generalista. Constatou-se que o mundo do trabalho e a formação estão entrelaçados, sendo que a graduação contribui para o desenvolvimento de profissionais competentes e éticos, considerando as suas realidades nos processos de formação. **Conclusão:** Independente da proposta curricular das instituições de ensino, os enfermeiros tiveram dificuldades para o aprofundamento quanto ao tema proposto, mas colaboraram com sugestões de transformações das práticas de ensino e aprendizagem para atuação dos enfermeiros na CME e que essa formação possa ser repensada mais adequadamente.

Palavras-chave: Educação em enfermagem. Administração de materiais no hospital. Esterilização.

RESUMEN: Objetivo: Comprender la formación del enfermero para actuar en la Central de Material Esterilizado (CME). **Método:** Estudio descriptivo cualitativo, constituido por una muestra de 20 enfermeros matriculados en los programas de maestrando profesional y académico de la Facultad de Medicina de Marília (Famema), en el período de 2011 a 2014. La colecta de datos fue realizada por medio de entrevista en 2014. **Resultados:** Fueron identificadas dos categorías temáticas: la formación del enfermero pautada en el modelo tecnicista y la perspectiva de la formación generalista. Se constató que el mundo del trabajo y la formación están entrelazados, siendo que la graduación contribuye para el desarrollo de profesionales competentes y éticos, considerando sus realidades en los procesos de formación. **Conclusión:** Independiente de la propuesta curricular de las instituciones de enseñanza, los enfermeros tuvieron dificultades para la profundización cuanto al tema propuesto, pero colaboraron con sugerencias de transformaciones de las prácticas de enseñanza y aprendizaje para actuación de los enfermeros en la CME y que esa formación pueda ser repensada más adecuadamente.

Palabras clave: Educación en enfermería. Administración de materiales de hospital. Esterilización.

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INTRODUCTION

The Central Sterile Supply Department (CSSD) is an essential sector of hospitals that integrates its infrastructure and collaborates with client's service by means of a work that is comprised of internal production steps. It is also an important health service that can be classified as care¹. Hence, trainers and students must pay attention to the importance of the CSSD.

The work of nurses in the CSSD requires specific knowledge about the diversity of equipment, pieces, and surgical instruments, as well as how to process them. This is a knowledge area of Nursing, whose main purpose is to ensure safe products for patient's support¹.

The Brazilian Nurse Council (COFEN) regulates the mandatory presence of nurses in all units of services developing high-complexity Nursing actions, which are common in critical patient's treatment².

In the last few years, health training, especially training of nurses, suffered several changes. It seems there has been a distancing between training and professional practice in the sector of CSSD. Several changes involving procedures have happened, like in regulations, in the mandatory recommendations regarding safety and quality process of medical-hospital articles and biosafety aspects. These procedures may cause several consequences, even though they are routine ones, due to the lack of professional preparation.

With regard to training of health professionals, the Brazilian Department of Education proposed the National Curriculum Guidelines (DCNs) for health courses that aim at changing teaching practices, since this process was conducted apart from the reality lived in the services of this area.

As it is understood in the Nursing education area, there are many transformation proposals that include pedagogical and philosophical aspects, which are supported by the Resolution of the Brazilian Education Council that institutes the DCNs in Brazil. These guidelines aim at professional formation by training students to face the challenges lived by the society, the world, and the work changes. They approach the social needs, the Brazilian health system, and the teamwork. By seeking knowledge as something unfinished and processual, we should not comprehend Nursing education as a sequence of standardized actions, but as an exchange of scientific and popular knowledge³.

Nevertheless, traditional education is still predominant in the nurses' graduation development by transmitting knowledge ministered in a fragmented manner and not contributing very much to the critical and transformative education that the new health attention context started to request⁴.

However, we have also noticed an attempt of changing the paradigm and behavior by nurses, which results in reeducation through presuppositions, adding values and perceptions that may form a certain view of the reality, thus recognizing the human potential as a triumph for the institution. Therefore, these professionals should be respected as drivers and formers of a reality⁵.

Based on the need of training professionals who are committed with technological and scientific advance of the area, with the aim of qualification, of learning, and care, we ask: Is the nurse prepared to work in the CSSD during the undergraduate course?

OBJECTIVE

To understand the training of nurses that will work in the CSSD.

METHOD

This descriptive research describes situations, occurrences, and how some phenomena are manifested⁶. It has a qualitative approach because it is a universe of reasons and meanings, aspirations and beliefs, values and attitudes; therefore, the expression of opinions and experienced feelings is a benefit to participants⁷.

This study was developed including nurses that study in professional and academic Master Degree's programs of Famema – both are multiprofessional programs. The study population comprised a randomized self-selection sampling of 20 subjects in the period 2011 to 2014. Each course provided 15 positions and the total of nurses was the same.

The participants graduated in five different higher-level institutions (IES), which, with regard to adopted curriculum, could not be identified. Nurses enrolled in undergraduate courses as regular students were included in the study, whereas participants who were enabled or refused to take part in the study formed the exclusion criteria. The anonymity

of participants was maintained by using the letter P, and the sequential number of interviews.

Data were collected through interviews conducted from October to November 2014, and which were recorded with the participants' consent and then were completely transcribed.

The Research Ethics Committee of Famema received the project and approved it under the CAAE 25424013.4.0000.5413, as established in Resolution no. 466/12 from the Brazilian Health Council⁸.

The data were analyzed by means of Bardin's content analysis technique⁹. We have chosen the thematic modality in the study because it is one of the most appropriate modalities to the investigation⁷. We found two thematic categories: nurse training based on the technician model, and the perspective of generalist training. The data on the identification of the interviewed subjects were submitted to the descriptive analysis.

RESULTS

In the analyzed group of nurses, 85% of them were females and 15% were males. There was an age variation (between 25 and 49 years old), with a mean age of 34 years (70%). The sample comprises 18 (80%) nurses who work both in care and in education, and 2 (20%) nurses of them work only in management. With regard to graduation, 68% of them had graduated in the last 10 years and 55% of the participants got their diplomas between 1998 and 2008.

The arduous and careful reading of statements and records enabled identifying similarities, differences, and contradictions regarding both categories.

Nurse's training based on the technician model

The participant declares feeling as if he were only an employee during his internship and had difficulties regarding learning and identifying his lack of knowledge and deepening his theoretical basis.

[...] we were only employees, we helped washing materials; we rolled gazes and syringes the whole day. (P4)

The statements show that the development of learning needs an articulation between theory and practice:

During my training following the traditional model, we used to give emphasis to the issue of the central sterile supply department. We had to make packages, to identify, to make those packages [...]. This helped my training. We, of course, were more focused on doing; we were more task makers. The teacher used to make we lead the department as if we were employees of the house. (P7)

But we did not further our practice; we only went there to make packages and leave. We did not think of anything else. (P11)

The concern about how the student will experience the work process was also mentioned in the research; however, this future professional needs to be stimulated to seek knowledge, since he/she is still on training, because this will interfere directly in the quality of the care provided to patients.

We should not provide theory; we should put them in the scenario and then raise questionings, the experience. Anyhow, the foundation. (P7)

Distancing between theory and practice was emphasized as well, i.e. what is approached in theory and what is experienced in professional practice.

During the undergraduation course, we had a little approach to these cleaning, disinfection and sterilization processes. But, we only had them in theory, not in practice. We really need the practice to lay the foundation of theory and return to practice. (P3)

The feeling of "area inferiority" is verbalized, although it is considered a space of construction that is extremely relevant to care.

We even affirm that the Central Sterile Supply Department is the heart of the hospital, even though it is known that "bad" professionals should work in it. However, we realize the CSSD is the opposite; it is the place where people with better qualification and more compromised

should work, because in the event of a failure in such department, the entire hospital will face a health issue. (P15)

Nurses that will work in the CSSD should be able to teach other colleagues and demonstrate confidence to perform the activities, as well as to value the service.

I believe support nurses should care more for it and should also pass it to their students, because it would be better and the service would be more valued. (P9)

In some curricula for training of nurses, the CSSD specific content was approached only in one subject; however, the interviewed subject still considers training as insufficient to his work capacity, and such subject should have been more widely approached throughout the undergraduate course.

We do not learn about it in our college subjects. There are some comments in the surgical center subject, but they are very vague and short; it is not a specific formation. I suggest a larger training regarding this subject, because I believe it is still very lost. (P19)

The perspective of generalist nurse training

It would be important to such participants that the nurse had a generalist view during the training process, because this practice could be further developed in his/her professional life, thus providing knowledge in all specialties.

I think [to approach] specificities are important during training, because they could even provide the nurse the opportunity of choosing. (P6)

The moments of discussions and experiences of the CSSD functioning during Nursing undergraduate course strengthens the formation of the critical and reflexive generalist to also satisfy the market demand.

We have studied the RDC [collegiate board resolutions] on how the place should be, on how input

and output materials should be organized through different doors; we could even make a critical analysis regarding the structure of what we had in the hospital (if they were appropriate or not). (P9)

A better identification of the nurse's role in the CSSD was extremely important to develop learning during the undergraduate course, as well as its presence in this location.

I think we should have had a larger approximation to the practice scenario with the aim of changing, of showing what is the nurse's role inside the CSSD, of the evaluation of the entire complex within – which is very specific. We need to see how is the nurse's action inside there, regarding prevention, education, work on all of that, the team. (P11)

I think the CSSD should be part of a practical experience. We are involved directly with body fluids and we should understand and learn the least about it. It was not very large, although we had a problematization methodology. (P16)

Specialization and contact in the undergraduate course may deepen knowledge in this area by supporting the nurse's training, especially to work in a health attention context. Additionally, the student remembers all his/her learning with the teacher's support.

I believe internships in the material and surgical centers should be provided again, because we can no longer find them, it became a specialization. I really do believe it should be inserted in the curriculum; I had the opportunity of learning about it in my undergraduate course. (P17)

It is surely important, because the Nursing department is the one in charge of materials. But I do believe it should not be something exclusively to the central sterile supply department. I think the processing area should be approached all the time, and not as a point. I believe this approach should be discussed throughout all contents. (P18)

DISCUSSION

Training of a technician nurse, which is translated in the statements through procedures and tasks, (dis)articulation between theory and practice, (de)valuation and search for specialties, considers the knowledge of the CSSD as being of great importance to the performance of a nurse's current activities, in such a way as to ensure safety and quality of the articles to be used by professionals.

These professionals signalize the need of capacitation to those who follow this area of knowledge, as a way to ensure the quality of the provided service and to maintain decreased risk levels to users' health regarding the complexity of sterilization processes, the high costs for acquisition of surgical instruments and more sophisticated equipment, as well as investments in the CSSD professional qualification.

In order that nurses may perform their activities following current concepts of the laws, the technician may represent a challenge for the emerging chains of larger care, especially because nurses who work in the CSSD have to know much more than only performing proper procedures. They need basic knowledge to provide the quality and safety of the pieces presented to their users, besides efficient coordination of their team.

Thus, focus integrality is essential in health actions to users, and it should not only use care fragmentation, but it should aim at the knowledge horizontal logic¹⁰.

Hence, the DCNs establish that graduates become competent professionals with skills to present the desired profile, i.e. the profile of generalist, critical, and reflexive professionals, besides technical-scientific, ethic-politics and socio-educational skills to become secure in their future care actions. The health training issue based on the Brazilian Unified Health System (SUS) principles may be one of the current demands of professional training. Therefore, the capacity of fighting the challenges pointed out in the services is necessary, with duly critical comprehension and awareness of the experienced reality, including transformation of care practices focused on social integrality and justice¹¹.

Not all professionals understand the purpose of the CSSD; they verbalize their displeasure by manifesting unawareness and devaluation of professionals who work in such place. The professionals themselves undervalue the activities. They seek to being recognized and

valued, so they are continuously trying to overcome their difficulties.

The majority of hospitals and health units with a CSSD incite nurses to perform their services. Therefore, with regard to management, the position in the CSSD needs to be occupied by a health professional with a specific qualification degree and experience in the area, and which legally responds to the action performed there. The nursing professional has the proper profile to perform it¹².

A technical opinion of the Brazilian Nursing Regional Council (Coren) from 2012 presented a questioning on the legal attributions that can be developed by the Nursing team in the CSSD and about the nurse's responsibility. Such roles are described in the RDC of the *Agência Nacional de Vigilância Sanitária* (RDC/ANVISA) from March 15, 2012 and in the Nursing Professional Exercise Law no. 7.498/1986 regarding the team and the nurse. Nurses must be prepared for such activities in the undergraduation course and historically they assume the entire process of the CSSD management in health services¹³.

Another study signalizes the valuation of professionals working in the CSSD. Administrators of hospitals should pay more attention to the needs of the CSSD and should provide more attention to their professionals; despite their indirect attention to the patient, it is as important as those of direct performance¹⁴.

Generalist nurses should learn about the CSSD during their training. Although it does not involve the patients directly, this hospital unit is a field of learning and professional work.

Since complexity involves processing activities, it implies that nurses seek formal educational processes that approach all actions developed systematically at short, medium, or long terms, to increase their professional capacitation. The increase of professional skills related to efficiency in the performance of the developed activities is a result of it¹⁵.

With the aim of changing the paradigm in nurses' training, new teaching methodologies and alternative curriculums are sought to respond to the population's health issues. We recommend educational practices that value students' preparation and motivation to overcome such logic in order to graduate critical, motivated, creative, and flexible professionals who are committed with the purpose of their work.

Many health education institutions have adopted active learning methods, thus providing students with the independence and responsibility for their own study. They are supported by significant learning and discovery, they value learn-to-learn, stimulate participative management of the experience protagonists, and reorganization of the theory/practice relation. Hence, students started to be recognized as responsible for their own learning and to enjoy autonomy in knowledge (re)construction. They became able to interconnect knowledge and experiences before those available in the scientific field. They were also able to develop skills to reconnect knowledge, which were fragmented and disconnected before, for autonomy in the search of pertinent knowledge by stimulating continuous update, and awakening the critical view on scientific materials with which they have more contact¹⁶.

Because CSSD work reflects directly on the quality of the care provided to the client, its good operation requires a combined work of technically and scientifically skilled personnel, in appropriate number to perform a set of large specificity tasks¹⁴.

These skills express important ideas to analyze the nurse's training, because they provide developments to the professional practice by recommending the development of skills so that nurses can become proactive and integrated to the social context and overcome the specialty focus. After 16 years of operation, the DCNs have enabled us to apprehend how much these new professionals have translated these guidelines in practice.

Professionals that can follow all evolutions in the work market have been asked to ensure the quality of the provided service, and to keep decreased levels of damage risk to the users' health. The study has revealed that many nurses still need to learn more knowledge in this area – a question reported by them due to the low insertion in the training process. Therefore, we need to understand that nurses should graduate with basic knowledge of the CSSD.

Some statements mentioned the lack of comprehension about the work process carried out in the CSSD, which is the result of little involvement with training.

Almost all interviewed subjects expressed valuation of the work carried out in this department and highlighted its importance. Although some experiences regarding material processing have been reported, there

was higher prevalence of total or partial unawareness of the activities that might be performed in these places, with emphasis on the mechanicism that was seen in the majority of statements.

Qualified care provision to users from health units, requires that CSSD employees, especially nurses in charge of work process management, be well qualified to respond to the demands of other hospital departments, including the most critical ones.

With regard to the content discussed throughout the undergraduation course, the professionals point out inadequacies in education methods, lack of content, and higher knowledge appropriation, especially in the CSSD practice scenarios. This has been happening both in IES that adopt traditional methodologies and in IES that chose active methodologies. The practice scenarios seem to be the main point so that future nurses may acquire more knowledge. Interviewed subjects believe it is necessary to make teaching closer to the reality of health services, because the practice field cannot be treated as something beyond the curriculum development.

Transformations in nursing curricula have been occurring slowly, but there is still, in the majority of them, the predominance of the medical-hospital model for the under-graduation course.

Literature shows a movement of change in the formation of the Brazilian nurse; however, decreasing the resistances to changes is necessary, as well as providing reflections about teaching in order to overcome challenges and implement the new training process. We have seen the support of curriculum matrices divided into disciplines; the existence of doubtful pedagogical reference as opposed to difficulties of insertion in the real world; and the predominance of the theoretical value on practice, seeking strategies that will result in decrease of health services distancing, by reinforcing the classical dichotomy between thinking and doing. In addition, especially in private IES, there is an excessive number of students, and the appearance of difficulties regarding the establishment of partnerships with health services, as well as hiring of teachers, which does not agree with the real needs¹⁷.

Since the nursing formative processes approach the theme superficially, as seen in the statements, it can cause some distancing of the students, because they are afraid that the unknown may result in lack of deepening in this

area. Soon, graduated nurses, in turn, will need to search for graduation courses for their specializations and therefore decrease their lack of knowledge to work in a relatively unknown department.

CONCLUSION

The adopted methodology enables to accomplish the proposed objective, i.e. understanding nurse's training. It allows identifying the need of a greater involvement between theory and practice to optimize the nurse's professional exercise together with the approached and applied content throughout his/her training.

We also found that training models have been looking for innovative methods throughout the year, for improving the teaching-learning processes. However, ideal conditions are still needed to achieve such a purpose.

As a positive point, the CSSD presents, as a care area, its importance for health units regarding the processes being performed. In addition, the nurse should graduate with basic knowledge of this area. However, these professionals did not show much interest in studying this theme further during their undergraduation courses. There was no encouragement to seek this knowledge; some of them

by free will, others because they did not have enough contact to it or because they did not identify themselves to this area. However, this issue will be the subject of a future investigation with the IES. There is a need of analyzing what is making the stimulation of graduates difficult or what is still needed to awaken the interest for specific areas like the CSSD.

The known weaknesses include traditional formation, which is still fragmented, and the existence of a hospital focus, which may damage the development of their skills.

There were some limitations throughout the study, such as insufficient theoretical foundation and long-lasting production. Still, the interaction with statements and possible adjustments was made throughout the inclusion of limitations.

This may also mean relevant aspects of this study, i.e. the lack regarding the theme and the importance of making public something that was not evident.

We expect this study to contribute for providing visibility to the professional training for the CSSD as a relevant health area and that provides new views regarding teaching methodologies, with the aim of improving Nursing conducts and perceptions of this professional work field.

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