INTERDISCIPLINARY COURSE IN ADMINISTRATION OF MEDICINES FOR A HOSPITAL NURSES: DEVELOPMENT, IMPLEMENTATION AND EVALUATION

CURSO INTERDISCIPLINAR EN ADMINISTRACIÓN DE MEDICAMENTOS PARA ENFERMEROS DE UN HOSPITAL: DESARROLLO, IMPLEMENTACIÓN Y EVALUACIÓN

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ABSTRACT

Objective: to report the development, implementation and evaluation of an interdisciplinary course about medication administration in a hospital. Method: this is a descriptive study, of experience report, with as a sample ten nurses. It was approved by the Ethics Committee in Research of the State University of Montes Claros, under the Certificate of Presentation for Ethics Appreciation, Protocol nº 3185. Results: The course was developed in six classes, totaling twelve hours. As a programmatic content were done: preparation and administration of medications, gathering of information and knowledge in drug delivery, drug interactions, and general aspects of medication administration, medication side effects and mechanisms of action of drugs. It was taught by nurses, pharmacists and doctors. Conclusion: it was noticed that the initiative to develop, implement and evaluate the interdisciplinary course concerned obtained positive repercussion and consolidated itself as an educational action able to meet the educational needs related to medication administration. Descriptors: Nursing; Nursing Education; Medication Systems.

RESUMO

Objetivo: relatar o desenvolvimento, a implementação e a avaliação de um curso interdisciplinar sobre administração de medicamentos em uma instituição hospitalar. Método: trata-se de estudo descritivo, de tipo relato de experiência, tendo como amostra dez enfermeiros. Aprovado pelo Comitê de Ética em Pesquisa da Universidade Estadual de Montes Claros, sob o Certificado de Apresentação para Apreciação Ética, Protocolo nº 3185. Resultados: o curso foi desenvolvido em seis aulas, totalizando doze horas. Como conteúdo programático elencou-se: preparo e administração de medicamentos, obtenção de informações e conhecimento em administração de medicamentos, interações medicamentosas, aspectos gerais da administração de medicamentos, efeitos colaterais dos medicamentos e mecanismos de ação dos medicamentos. Foi ministrado por enfermeiros, farmacêuticos e médicos. Conclusão: percebeu-se que a iniciativa de desenvolver, implementar e avaliar o curso interdisciplinar em questão obteve repercussão positiva e se consolidou como uma ação educativa capaz de atender às necessidades educacionais relacionadas à administração de medicamentos. Descritores: Enfermagem; Educação em Enfermagem; Sistemas de Medicación.

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Objective: report the development, implementation and evaluation of an interdisciplinary course about medication administration in a hospital. Method: this is a descriptive study, of experience report, with a sample of ten nurses. It was approved by the Ethics Committee in Research of the State University of Montes Claros, under the Certificate of Presentation for Ethics Appreciation, Protocol nº 3185. Results: the course was developed in six classes, totaling twelve hours. As a programmatic content were done: preparation and administration of medications, gathering of information and knowledge in drug delivery, drug interactions, and general aspects of medication administration, medication side effects and mechanisms of action of drugs. It was taught by nurses, pharmacists and doctors. Conclusion: it was noticed that the initiative to develop, implement and evaluate the interdisciplinary course concerned obtained positive repercussion and consolidated itself as an educational action able to meet the educational needs related to medication administration. Descriptors: Nursing; Nursing Education; Medication Systems.

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INTRODUCTION

Faced with the constant changes in scientific and technological fields, in particular the area of drugs, the development of interdisciplinary educational activities for nursing staff requires updating and improvement in order to meet the needs that professionals are in their work processes in order common practice to construct more effective in drug administration.

In this sense, consists of an interdisciplinary approach to care in which two or more disciplines or areas of knowledge intentionally establish connections and links between them to achieve a comprehensive knowledge, while diverse, favoring permanent interactions and exchanges, enabling the creation of cooperation, reciprocity and shared responsibilities, whether individual or collective.1

However, the actions related to medication administration are disputed between different professions so unproductive delimiting the boundaries of their skills and knowledge, which further fragments the medication process.2

This fragmentation provides for the establishment of the care model-oriented market logic, which emphasizes the social and technical division of labor, with a tendency to specialization. Generates the dismissal of the sense of an overall process, which tends to keep the professional position has always lagged the whole process and that is directly related to the quality of health care.

Therefore, interdisciplinary becomes essential for health professionals to understand the roles and responsibilities of themselves and others and recognize where and how their knowledge and skills can build common practices more efficient medication administration.

Given this, it is evident that the administration of medication to be a complex process must be undertaken in an interdisciplinary way, involving various professionals from different areas of health such as nurses, pharmacists and physicians. Another aggravating factor is the lack of knowledge of nurses on issues of fundamental importance for the safe administration of medications as seen in the literature.3 4 6

This study is justified since we chose to report the development, implementation and evaluation of an interdisciplinary course, with the participation of nurses, doctors and pharmacists in order to facilitate the dissemination of the course as well as the administration of medications and updated

OBJECTIVE

• To report the development, implementation and evaluation of an interdisciplinary course about medication administration in a hospital.

METHOD

A descriptive study, of the type experience report, which aims to collect testimonies and recording situations and relevant cases that occurred during the implementation of a program or project in a given situation problem.7

The research was carried out in a hospital located in a municipality in the state of Minas Gerais, polo Macro-Jequitinhonha, considered a regional reference in the field of education, and medium and high complexity in health care.

The population consisted of twenty nurses who make up the nursing staff of the hospital under study, ie, a nurse service director and nineteen nurses. However, we excluded nine nurses who were unwilling to participate in the research due to the difficulty of time and a nurse who was on vacation.

Therefore, the sample consisted of ten nurses, with the inclusion criteria the availability of nurses to participate in the study and active participation in supervision and / or administration of medicines.

Regarding ethical aspects, the study was initiated after approval of the Director of the hospital under study as well as the approval of the Ethics Committee of Research of the State University of Montes Claros, under the Certificate of Introduction to Ethics Assessment n° 3185.

It was made clear to participants that the survey results would be for the development of scientific work and possible publication, it would be ensured confidentiality and anonymity of respondents, the researchers would undertake to provide additional information and clarification on any doubts that could occur by chance and that the withdrawal of their participation could occur when considered convenient, without this entailed personal injury and / or professional or the institution to which they were bound.

Each participant learned the Terms of Consent for Participation in Research and issued written record.
RESULTS AND DISCUSSION

From the total of ten nurses, four worked in medical, surgical, neurological and covenants clinics, two in intensive care, one in the emergency room, one on hemodialysis, one in surgical block and one nurse technician responsible for nursing staff in the institution.

The following describes the stages of development, implementation and evaluation of interdisciplinary course in medication administration.

* Development

The interdisciplinary process of teaching-learning arises as a condition for overcoming the fragmented practice and its effects on health care, from the point of view of the academic and the construction of knowledge, or the need to implement effective practices in interdisciplinary service to health.8

It is noteworthy that the development of an interdisciplinary course in medication administration reveals itself as an essential tool to meet the educational needs of nursing staff in relation to the theme. Thus, by analyzing the data and checking the diverse range of educational needs identified in several studies7,8,9, established the need to develop an educational activity, since the lack of knowledge on the process of drug administration may direct Professional nursing enforcement of faulty procedures, which entails complications in patients submitted to drug therapy. Therefore, it was felt that the most appropriate educational action would be to develop, implement and evaluate an interdisciplinary course, to promote the possibility of debate and discussion between the experts as well as the display and study of bibliographic material updated.

This course is designed to be held over three days in the hospital, with a workload of 2 hours / class, totaling 12 hours, intended for nurses. As listed the syllabus are: preparation and administration of medications, gathering of information and knowledge in drug delivery, drug interactions, and general aspects of medication administration, medication side effects and mechanisms of action of drugs.

While teaching strategies were planned lectures dialogued with debates and discussions of texts related to the theme.

The following figure shows the 1 with the course schedule.

<table>
<thead>
<tr>
<th>Classes/Syllabus</th>
<th>Subtopics</th>
<th>References</th>
</tr>
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<tbody>
<tr>
<td>1. Preparation and administration of medicines.</td>
<td>Dilution of medicines; Nursing care with the patient before and after administration of drugs; Conservation and stability after dilution of the medicinal product; Five certain; Preparation of medicines; The medication dosage calculation, volume and weight and dosage.</td>
<td>Soares NRCG. Administração de medicamentos na enfermagem. 9th ed. Rio de Janeiro: Guanabara Koogan, 2010.9</td>
</tr>
<tr>
<td>5. Side effects of medicines.</td>
<td>Adverse reaction; Side effects of medicines: Drugs that cause phlebitis; Administration of medicines in conjunction with blood transfusions and allergic reaction to medication.</td>
<td>Bare BG, Suddarth DS. Tratado de enfermagem médico- cirúrgica. 12th ed. Rio de Janeiro: Guanabara Koogan; 2011.18</td>
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Figure 1. Interdisciplinary Course schedule in drug administration. Diamantina-MG, 2012.

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J Nurs UFPE on line., Recife, 7(spe):5786-91, Sept., 2013 5788
Implementation

The course was scheduled to take place on three consecutive days. However, due to the unavailability of hospital nurses in dispensing, there was the need to reprogram it. Meeting all the requirements, was distributed as follows: the first class, “Preparation and administration of drugs”, was held on July 11th, 2012, beginning at 12 am and delivered by a nurse. The second lecture, “Getting information and knowledge in drug delivery”, was held on July 11th, 2012, beginning at 14h and delivered by a pharmacist. The third lecture, “Drug Interactions”, was held on October 29th, 2012, beginning at 16h and delivered by a doctor. The fourth class, “General aspects of medication administration,” was held on July 11th, 2012, beginning at 16h and administered by a nurse. The fifth class, “Side effects of drugs”, was held on October 8th, 2012, beginning at 20h and administered by a physician. The last class, “Mechanism of action of drugs,” was held on October 29th, 2012, beginning at 14h and delivered by a pharmacist. It is noteworthy that the researcher was present throughout the course and contributed to the debates and discussions among participants.

Observe that the sequence of days of classes has been changed due to the difficulty of agreement between teacher’s time employees and participants of the course.

To teach these classes were invited nurses, pharmacists and physicians, skilled and experienced in relation to drug administration. The classes were chosen and taught by professionals according to their areas of study and in agreement with a focus on the practice of medication administration by nursing.

It is noteworthy that all were willing to participate with the common goal of meeting the educational needs of nurses being able to interact with other fields in order to become a reality in which the lack of knowledge can lead to slips and unsafe by nursing staff.

It is noteworthy that these attitudes of openness and collaboration characterized the new interdisciplinary practice, critical to overcoming a fragmented practice imposed on the practice of drug therapy.

Regarding compliance of nurses to the course, a total of twenty, only ten attended due to the mismatch between the course schedule and work activity of the same. It is noteworthy that all possible adjustments in relation to the time and date of the course were conducted to ensure the highest number of participants since the same happened in diverse times and days.

In this context, the adequacy of the time and date of the course for the largest amount of professionals could participate, emerged as the main difficulty for implementation. Fact also reported in another study, which highlights the importance of entering the educational process in the routine of work, conducting educational activities as part of the workload of the professional contract in order to enable participation and to ensure that those most in need qualify are actually present.

Evaluation

The course evaluation was carried out by filling in an adapted questionnaire provided to participants at the end of it when the nurses expressed the positives, negatives and suggestions regarding the same.

On the positive side, four participants stressed that the course provides knowledge update for safe practice in medication administration. Three mentioned the qualifications of professionals who taught classes as well as the quality and clarity of these, two reported the importance of the initiative to develop and implement an interdisciplinary course in relation to the theme medication administration and a professional reported that the course promotes closer relationship service - university.

On the negative side, five professionals highlighted the issue of the time incompatible with the labor activity of some classes and the need to be absent in certain classes with syllabus relevant and cited not develop basic subjects. The other four wrote nothing.

Positive and negative aspects like were also identified by another study, in which the initiatives to give concreteness to educational activities, lose strength in the service routine, because there is no prioritization in relation to disposal of workload for professionals engaged actions. Thus, it is emphasized that the process of educational action imposes a number of challenges that need to be overcome to become effective and that the difficulties encountered in the implementation of this course will serve as an experiment to adapt and improve future educational activities.

Regarding suggestions, four professionals highlighted the importance of the course and the possibility to implement it on another occasion to allow that others will also participate; one reported the need to expand topics and cited the need for greater load time to occur most discussions and involvement of professionals during lessons. The other four had no suggestions.
In this context, the initiative to develop, implement and evaluate interdisciplinary course concerned obtained positive impact from nurses and consolidated as an educational able to meet the educational needs related to medication administration.

CONCLUSION

With the completion of this study it was possible to report the development, implementation and evaluation of an interdisciplinary course in medication administration, allowing its dissemination and the search for a safe practice, aware that due to the lack of knowledge errors occurs medication.

It is noteworthy that the course was interdisciplinary collaboration with nurses, doctors and pharmacists, professionals willing to develop a common project that met the educational needs of nurses. Classes were taught with interactive discussions, productive discussions and create knowledge with positive feedback from the participants.

It is noteworthy that the pursuit of scientific knowledge and strategies of interdisciplinary training of nurses, focused on themes related to medication administration, seems of great importance, which allows the existence of a medication process date and secure.

It is hoped that this study may have provided reflections for professionals to rethink their practices and behaviors in order to seek new strategies of intervention and pursue, also overcoming difficulties in individual and group work, in particular those related to medication administration with the objective of ensuring drug therapy quality, efficient and safe for the patient and himself.

REFERENCES

3. Telles Filho PCP, Praxedes MFS, Pinheiro MLP. Erros de medicação: análise do