EDUCATION ACTION WITH NURSING TEAM IN OUTPATIENT CHEMOTHERAPY SERVICE: CASE STUDIES

AÇÕA EDUCATIVA COM EQUIPE DE ENFERMAGEM EM SERVIÇO DE QUIMIOTERAPIA AMBULATORIAL: RELATO DE EXPERIÊNCIA

ACCION DE EDUCACIÓN CON EQUIPO DE ENFERMERÍA EN SERVICIO DE QUIMIOTERAPIA AMBULATORIAL: INFORME DE EXPERIENCIA

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ABSTRACT

Objective: reporting the professional experience of an educational activity in service to technicians and nursing assistants related to cancer care to patients undergoing chemotherapy. Method: a descriptive study of experience type report of an educational program developed in the outpatient chemotherapy clinic with the nursing staff. Results: it was first held observation in the sector; later, there was applied a first questionnaire to assess the knowledge of staff about chemotherapy treatment. Before the needs identified, there was implemented the educational activity in health. At the end of the activity there was applied new questionnaire to assess their knowledge, it was remarkable the improvement on the performance, proving the importance of the implementation of the National Policy of Permanent Education in Health. Conclusion: it is expected that this educational activity produces positive effects on performance of nursing staff members on patient care in chemotherapy. Descriptors: Ambulatory Care; Health Education; Continuing Education in Nursing; Oncology Nursing.

RESUMO


RESUMEN

Objetivo: reportar la experiencia profesional de una actividad educativa en servicio a los técnicos y auxiliares de enfermería relacionados con el tratamiento del cáncer a los pacientes sometidos a quimioterapia. Método: un relato de experiencia del tipo estudio descriptivo de un programa educativo desarrollado en la clínica de quimioterapia con el personal de enfermería. Resultados: primeramente, se llevó a cabo la observación en el sector, que se aplicó después un primer cuestionario para evaluar los conocimientos del personal en la quimioterapia. En las necesidades identificadas, fue implementada la acción educativa en salud. Al final de la acción se aplicó nuevo cuestionario para evaluar sus conocimientos; fue notable la mejora en el rendimiento, lo que demuestra la importancia de la implementación de la Política Nacional de Educación Permanente de Salud. Conclusión: se espera que esta actividad educativa produzca efectos positivos en el rendimiento de los miembros del equipo de enfermería en la atención al paciente en la quimioterapia. Descriptors: Atención Ambulatoria; Educación para la Salud; Educación Continuada en Enfermería; Enfermería Oncológica.

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The high incidence of cancer is something troubling in the world due to high mortality and even the stigma of aggressiveness that the disease is associated to. Important cause of illness and death in Brazil for the year 2014, estimates there are also valid for 2015 point to the occurrence of about 576.000 new cases of cancer.\(^1\) There have been found to provide comprehensive care to cancer patients should be prioritized, as the effects that cancer and its treatments bring to all areas of life of the patient, the family and the context in which it appears. Thus, it becomes important, qualified training and continuous updating of knowledge, health professionals working with cancer patients.\(^2\)

The National Policy on Permanent Education in Health contributes to the formation and development of SUS health professionals. Lifelong learning can be understood as learning-work, it happens in the daily lives of people and organizations, turning professional practice; it is made from the problems faced in reality and takes into account the knowledge and experience that people already have. The permanent education processes in health have as objective the transformation of professional practices, the organization of work itself and also provide quality patient care.\(^3\)

The educational activity is a training process of individuals and groups to take the solution of health problems, a process that includes the growth of health care professionals, through joint reflection on the work they do and their relationship to improving conditions of health of the population. This should occur in all contact between health professionals and population.\(^4\)

In our professional practice we found that many professionals who make up the different classes of workers in the health area, are not always able to act together to patients with specific needs, such as cancer patients, whether related to their own signs and symptoms of the disease or in the care of side effects and adverse reactions resulting from the treatment needed.

The nursing professionals to build their knowledge generally do not reach the necessary expertise to work in different clinical specialties. Access to expertise is in rare opportunities through offers refresher courses, participation in scientific and training events offered by the institution or on the job sector. Contents are passed briefly in not clarifying general doubts and failing to act as significant learning trainers will often be mechanical learning. In this situation, they are observed various demands of knowledge involving the very depth of the disease interfaced with treatment modalities, rehabilitation, management of symptoms and expected reactions and unexpected, among others.\(^5\)

From this problematic, the development of this work has been proposed which seek to meet the specific knowledge needs the technical staff in nursing presented, related to chemotherapy, and then based on these needs, develop an educational activity in service with in order to contribute to the transformation and improvement of care, referencing the current teaching-learning paradigm in the proposals of the National Policy of Permanent Education in Health of the Ministry of Health.\(^3\)

In this scenario, the importance of this work is justified by the difficulties and needs faced by nursing professionals in ambulatory patient care in chemotherapy.

Based on these, the aim of this study is to reporting the experience of an educational activity in service to technicians and nursing assistants related to cancer care to patients undergoing chemotherapy.

**METHODOLOGY**

This is a descriptive study of type report of professional experience of an educational program developed in the chemotherapy clinic with technicians and nursing assistants, describing the strategies used and the action steps.

As a theoretical reference there was used the guidelines of the National Policy of Permanent Education in Health.\(^2\) This is an important tool for: change the mechanistic conceptions to a constructivist design, where you have the questioning of knowledge; build new educational practices; ensure the quality of care offered to the patient and family.\(^6\)

Participants were nine technicians and three nursing assistants from a university hospital Chemotherapy Clinic in Minas Gerais/MG.

The whole health education process consisted of four stages, which were:
1st) Insertion moment, environmental monitoring and the work of professionals to adapt and link establishment;

2nd) Explanation of the activity stages of development in the sector and on the free and informed consent form (ICF). Then we applied the first questionnaire, aiming to characterize the population, and identify the main needs of knowledge;

3rd) In view of the needs identified in the questionnaire there was implemented educational activities in health for the technical staff of nursing;

4th) In the last meeting with the completion of the educational action, the second questionnaire was administered to the participant group in order to verify the effectiveness of educational activities proposed to the group.

A compound schedule of four meetings was prepared and distributed the contents to be worked with major issues as the content of the interview and questionnaire, according to the needs raised in the first questionnaire. Each meeting lasted 30-40 minutes, with the release and acceptance of industry leadership. The development of educational activity took place from November 2010 to February 2011 and consisted of lectures, discussion groups with the use of didactic and audiovisual materials, as well as discussion of routine situations experienced by the participants, seeking to bring the reality on field work for the learning environment.

The study had the research project approved by the Research Ethics Committee on Human Beings (CEP), meeting the requirements of Resolution 466/2012 of the National Health Council, approved under protocol 711/10. Participants signed the Informed Consent (IC).

CASE STUDIES

♦ Insertion and observation stage of the service

To better recognizing of the staff and the Oncology Clinic service, a period of integration has been set, environmental monitoring and the professional performance of servers. This first stage of activity was held for two weeks in November 2010 at the Oncology Sector Chemotherapy Clinic of a university hospital in a city in Triângulo Mineiro. Seeking to establish ties and familiarity with all members of the nursing team, the frequency and retention in the sector occurred in diverse times, sometimes in the morning, sometimes evening, as the service has no evening activities. This period was very important to minimize any resistance ahead to future stages, when these professionals would be invited to participate in educational activities. Each team member has been individually invited, receiving a formal invitation prepared by the student-researcher.

The reception was positive by most employees, with desire to show their work, and especially the importance of the nursing team working in the sector. It was notorious for overcharging for services rendered by employees of the morning shift; indeed observed due to the increased flow of care patients scheduled; it emphasizes more employees during this period. Still, it was noticeable that during this shift occurred more guidance to patients, on the process of chemotherapy, by the nursing staff.

During the observations we realize how industry routine is, the appointment of a nurse to carry out general guidelines for patients who are starting chemotherapy; a team of technicians and nursing assistants assuming management functions of chemotherapy drugs, carrying out assistance activities during the infusion of chemotherapy and answering questions from patients and/or caregivers.

Even at the time of observation, we noticed that patients have many questions about the treatment and the time of infusion of chemotherapy often becomes inappropriate for guidance, since many complain of immediate adverse reactions or long time spent with guidance only in the first treatment cycle; thus, patients and caregivers do not focus effectively passed on information, generating many questions in the course of treatment. Perform constant questioning the technical team of nursing, which seeks to answer as their knowledge and everyday experiences, showing affection and understanding with the situation of patients and caregivers.

♦ Characterization of the participants of the Educational Activity

For development of educational activities are meaningful and appropriate to the context, it is of paramount importance to know the socio-cultural characteristics of the participants. In this activity, 11 participants were aged between 26 and 56...
years old; a participant was of the age of 57. Regarding gender, there was a predominance of women (9). Regarding the religious orientations, seven were Catholic, four evangelicals and a spiritualist. On the professional category, three were assistants and nine nursing technicians.

**Surveillance of the Needs of Knowledge**

After the adjustment period and establishment of a connection between the staff and the student-researcher, it was presented and explained the proposal of educational action proposed for the oncology sector. The first questionnaire prepared with questions that allowed the characterization of the team and the needs assessment of knowledge about chemotherapy, as the general guidelines of nursing was applied.

In this survey, the first question asked participants to define the “chemotherapy”. Of the 12 participants, we find 8 correct answers and 04 answers classified as wrong, totaling 66.7% and 33.4% of correct errors. In the face of several similar answers about the concept of chemotherapy, we assume the specialized scientific literature: Where is chemotherapy a systemic treatment of malignant tumors? They do not consider the concept of chemotherapy as “an aggressive medication”. Already participating Margarida presents its opinion about the therapy, showing no definition of chemotherapy, directing its response to social and psychological aspects. Sunflower emphasized his opinion on psychological and social aspects of treatment and as well as in other answers, there was the dispersion of the matter.

With regard to question 2, participants were asked to describe the roles of nursing before the patient in chemotherapy. According to the resolution of COFEN-210/98, about the performance of the technical team of oncology nursing competing activities of Nursing shares to clients undergoing chemotherapy anticancer treatment under the supervision of the nurse and also: Attend the therapeutic nursing protocols in prevention, treatment and minimizing side effects in clients undergoing chemotherapy anticancer treatment [...] Promoting and participating in the integration of the multidisciplinary team, seeking to ensure comprehensive care to clients and families [...] Participating in orientation programs and customer education and family with a focus on risk prevention and disorders, aimed at improving client's quality of life [...] Keeping the technical and scientific updating of individual, collective and environmental biosafety, allowing professional work effectively in routines and emergency situations; among others that are listed in this resolution.

Through these aspects of the nursing staff labor legislation, there were classified as correct the answers presented pursuant to resolution 210/98 of COFEN, according to the following reports:

*Carry out the administration of chemotherapy and guidance needed in order to demystify and calm the client and treatment. (Hydrangea)*

*Administer medication, guide [...] actually nursing does role of psychologist, social worker, because most often the patient has more freedom with nursing; It is where he makes his major complaints. (Tulip)*

Regarding the third question, participants were asked with the same would guide a response Carnation presents its opinion on the effectiveness or otherwise of the treatment, there is leakage of the question. Violet participant sets chemotherapy as “an aggressive medication”. Already participating Margarida presents its opinion about the therapy, showing no definition of chemotherapy, directing its response to social and psychological aspects. Sunflower emphasized his opinion on psychological and social aspects of treatment and as well as in other answers, there was the dispersion of the matter.
patient and his family about the care at home, in case of occurrence of reactions/side effects of chemotherapy. The replies to two or more correct guidelines were classified as correct. Following are some answers classified as incomplete.

Guiding the ice pack in the first three days and put the member, who always spilled up, and look if by chance you do wound or redness, swelling, seeking the institution for more guidance. (Gardenia)

It guidelines as treatment depends on each medication. (Sunflower)

In the usual orient the reactions that are considered normal what they are, and may, one should look for the nearest emergency room of their home. (Glass of milk)

After applying the first questionnaire and checked responses, we performed a study of the needs of knowledge of the technical staff of Nursing on chemotherapy.

From the survey records were found inadequate or incomplete answers or total lack of content related to some important forms of care, demonstrating expertise deficiency of general guidelines, such as: definition of chemotherapy and its interfaces; feeding and excretory functions; skin care and mucositis; changes in the blood and preventing infections.

♦ Education activity

On the checks and identified the needs, it was planned and implemented a continuing education action in health for the technical team of nursing, seeking to improve the knowledge and consequently the capacity to improve direct assistance involving the activity of adequate guidance to patients. This activity was developed during periods of lower patient flow in the sector.

The educational activity was carried out in the classroom of the industry itself, over a period of seven days, aiming at involving the largest possible number of employees. It was divided into four (4) subjects, with an average duration was 30 to 40 minutes, held in two working shifts - morning and afternoon. The themes set derived from the needs identified in the responses of participants, namely:

1) General concepts of chemotherapy;

2) Nursing guidelines on feeding and excretory functions during chemotherapy;

3) Skin Care and with the mouth for patients on chemotherapy;

4) Changes in blood cells and preventing infection during chemotherapy. Visual aids for presentation and discussion among participants about different everyday situations, experienced by staff were used.

Participants showed great interest and made compliments about the selected themes. During the presentation of themes, exposed doubts and seized the moments of activity to exchange their experiences and experiences in the service.

As an incentive to the participating nursing technical team of this activity, it was given a certificate of participation.

♦ Evaluation of the education activity

As the Step 4 of this activity, after completion of the educational activity there were conducted survey and analysis of the knowledge acquired by the participants on nursing care to patients in chemotherapy.

The first questionnaire was administered again, which consisted of questions about the definition of chemotherapy, and the role of nursing in the care of these patients.

After answered the questions previously applied have been added another seven multiple-choice questions consist of general guidelines to be provided by the nursing staff to patients and families about chemotherapy.

For questions regarding the definition of chemotherapy and based on the established concept identified in scientific literature, we find yet a participant with an inadequate response to define chemotherapy.

It is a rigorous treatment that requires much care and attention, with food, hygiene, skin care and mucosal and hematological system, involving the patient and family always in constant surveillance. (Narcisium)

But nine (9) other participants were able to bring answers consistent with the given concept; ie appropriate settings and related scientific content already validated. Here are a few correct answers:

It is the isolated using chemical agents or in combination (MDT) for the treatment of malignant tumors. (Daisy)
Curative or palliative treatment using chemicals to ease or end the malignant tumor. (Sunflower)

By analyzing the answers of question 2, which questioned the role of nursing in patient care in chemotherapy, we found that the answers were classified as correct when presented two or more technical staff functions Nursing according to COFEN-210 resolution/988 already cited previously. There were examples of correct answers:

- Administer chemotherapy and guide for adverse reactions. (Carnation)
- Administer prescribed medications after client assessment and carry out relevant guidelines to the prescribed treatment to the client. (Hydrangea)
- Guide the patient regarding the various changes that may occur with treatment as well as side effects from it. Reducing his anxiety and allow the patient to accept treatment safer by giving you guidelines to minimize these side effects making it more quiet. (Pink)

The participant Carnation emphasized that specific guidance should be provided to the patient and family in order to answer questions and avoid incorrect and harmful actions during the period of chemotherapy. He speaks also of the administration of chemotherapy, which is also due to the nursing technician according to resolution COFEN-206/97, already detailed at work.

The seven multiple-objective questions of the questionnaire evaluation of educational action follow the pattern of research on how participants would guide a patient and his family about the care at home for both reactions/side effects of chemotherapy, such as for special care, regarding the treatment. Table 1 below shows the number of correct answers of multiple choice questions.

Table 1. Hit the objective questions from 3.1 to 3.7 in the second questionnaire. Uberlândia (MG), 2015.

<table>
<thead>
<tr>
<th>Question numbers</th>
<th>Hit numbers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Guidelines for the weakness (asthenia / fatigue)</td>
<td>12</td>
</tr>
<tr>
<td>3.2</td>
<td>Guidelines for the diarrhea</td>
<td>11</td>
</tr>
<tr>
<td>3.3</td>
<td>Guidance on the lesions in the mouth (mucositis)</td>
<td>12</td>
</tr>
<tr>
<td>3.4</td>
<td>Guidance on the nausea and vomiting</td>
<td>10</td>
</tr>
<tr>
<td>3.5</td>
<td>Guidelines for the fall and hair and body hair</td>
<td>12</td>
</tr>
<tr>
<td>3.6</td>
<td>General guidelines</td>
<td>12</td>
</tr>
<tr>
<td>3.7</td>
<td>Guidelines for hygiene</td>
<td>12</td>
</tr>
</tbody>
</table>

The question 3,2 related to diarrhea and issue 3,4 related to nausea and vomiting were the ones that did not reach 100% accuracy. These errors brought surprising, since complaints are very common for most patients and should be routinely oriented in the daily business activities.

According to Table 1, which brings the amount of errors when we add the individual errors of each issue, we totaled the percentage of 3,57%, while the overall batting average was 96,42%. In view of these observations and numerical data, to conduct a comparative analysis between the two distinct moments of the work in which participants were assessed, we consider relevant to utilization rate and learning.

Table 2 presents the successes and failures related to essay questions, where Question 1 (one) requested the definition of chemotherapy and Question 2 (two), the role of nursing in patient care in chemotherapy.

Table 2. Successes and failures related to open questions 1 and 2 of the questionnaires. Uberlândia (MG), 2015.

<table>
<thead>
<tr>
<th>1st Questionnaire</th>
<th>2nd Questionnaire</th>
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<tbody>
<tr>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Hits question 1</td>
<td>8</td>
</tr>
<tr>
<td>Errors question 1</td>
<td>4</td>
</tr>
<tr>
<td>Hits question 2</td>
<td>11</td>
</tr>
<tr>
<td>Errors question 2</td>
<td>1</td>
</tr>
</tbody>
</table>

About the question 1 that ask participants about the definition of chemotherapy, we found 66,7% accuracy, whereas in the second phase, after the implementation of educational activities, the positive result was 91,6% accuracy, showing the relevance of the educational activity in the chemotherapy clinic.
In the matter of the first questionnaire nº 2 on the role of nursing with the patient undergoing chemotherapy, we found the percentage of 91.6% right. In the subsequent evaluation to the implementation of educational activities, all responses were classified as correct, amounting to 100% success. Therefore, we confirm that the educational activity was valid and effective for this team, providing benefits to both the service as the patients receiving care.

In the final comparative analysis between the question 3 of the 1st Questionnaire and Question 3, multiple choice, the 2nd Questionnaire, which have similar contents but different structure, it was also identified considerable increase relative to this topic knowledge, translated by numerical increase of hits.

In question number 3 of the 1st Questionnaire it was asked how the guidelines would be offered to the patient and family, about care at home in case of reactions/side effects of chemotherapy. We found that of the 12 responses, only 07 were classified as correct, totaling 41.7% yield.

When analyzed the issue 3 of the 2nd Questionnaire, which was structured in the form of multiple choice questions, and numbered sequentially from 3.1 to 3.7, we find that the total of 84 questions, 81 had correct answers, making a total of 96.42% of use, being highly satisfactory. This positive result was achieved after the implementation of educational activities, with a small number of errors before the percentage of success, confirming again that the educational activity in service is possible, timely and significant. Denoted improved overall knowledge of the team, where participants of this activity after the educational activity improved and acquired specific knowledge for proper care, safer and better for the patient on chemotherapy, surprising us with excellent result.

CONCLUSION

Given the methodological course of this work, we can conclude from the results and their interfaces that do not always indicators such as vocational training, long time period of staying in one job sector and participation in courses is enough to say that a team is qualified.

It is worth noting that among the duties of nurses, we find the continuing education service which aims to improve the health of the population, the customer care with cancer and in outpatient chemotherapy, since the information/orientation is critical for patients to adapt to changes that will occur in their daily lives.

They are required sequential and continuous activities that should be instituted through a continuing education program. Nurses should, which is usually the leader and coordinator of the team, offer space for its members bring their needs and work them, seeking better quality of care and active patient involvement in treatment and self-care.

We hope that the needs assessment and implementation of educational activities into service produce positive effects on learning and activities of members of the nursing staff who develop their work directly in patient care in outpatient chemotherapy, favoring both the team, as the user service.

Based on these, we find the results of this study provided needs identification inherent in a nursing staff that works in outpatient chemotherapy and, through the implementation of educational activities in service, was favored safe and better patient care.

We hope that the dissemination of this experience in scientific circles serve as a model for other teams in order to enhance scientific knowledge on improving practical assistance.

REFERENCES


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