



Nephrology service: partnership between academic and clinical nursing institutions

Setor de nefrologia: uma parceria entre ensino e serviço

El Sector de nefrología: una sociedad entre enseñanza y servicio

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ABSTRACT

This paper describes teaching-learning experiences of senior nursing undergraduate students in providing care for clients on substitutive renal therapies in the nephrology service of a university hospital in the state of Rio de Janeiro. The process was facilitated through a partnership between academic and clinical nursing public institutions. Structured interviews were used to evaluate the process during the second semester of 2008. Data led to the identification of the environmental factors, clients' profile, and students' nursing care. Evaluation of the experience indicated great interest and good performance of students, but there were limitations on fundamental knowledge to provide care for clients on renal substitutive therapies. Therefore, theory and practice are very relevant to provide quality care for clients on renal substitute therapies.

Keywords: Teaching; Learning; Nephrology/education; Nursing

RESUMO

Trata de experiências de ensino, de aprendizagem e de avaliação da prestação dos cuidados de enfermagem, por graduandos do sexto período, à clientela em terapias substitutivas renais, em serviço de nefrologia de hospital universitário no Estado do Rio de Janeiro. Realizada pela parceria entre instituições públicas de ensino e assistencial, procedemos a avaliação coletiva com entrevista estruturada com os participantes do processo, no segundo semestre de 2008. Os dados apontaram diagnóstico do ambiente e perfil da clientela, os cuidados parciais de enfermagem prestados pelos graduandos e cujas avaliações com os participantes do processo indicaram: interesse e bom desempenho dos graduandos e limitações na abordagem dos conteúdos essenciais ao cuidado nas terapias substitutivas renais. Consideramos relevante a aprendizagem teórica e prática da assistência de enfermagem prestada aos clientes em terapias substitutivas renais.

Descritores: Ensino; Aprendizagem; Nefrologia/educação; Enfermagem

RESUMEN

El presente artículo trata de experiencias de enseñanza, de aprendizaje y de evaluación de la prestación de los cuidados de enfermería, por estudiantes de pregrado del sexto período, a la clientela en terapias sustitutivas renales, en el servicio de nefrología del hospital universitario del Estado de Río de Janeiro. Realizada por la sociedad entre instituciones públicas de enseñanza y asistencial, procedimos a efectuar la evaluación colectiva con una entrevista estructurada a los participantes del proceso, en el segundo semestre del 2008. Los datos señalaron el diagnóstico del ambiente y el perfil de la clientela, los cuidados parciales de enfermería prestados por los estudiantes y las evaluaciones como participantes del proceso indicaron: interés y buen desempeño así como limitaciones en el abordaje de los contenidos esenciales para el cuidado en las terapias sustitutivas renales. Consideramos relevante el aprendizaje teórico y práctico de la asistencia de enfermería prestada a los clientes que se encuentran en terapias sustitutivas renales.

Descriptores: Enseñanza; Aprendizaje; Nefrología/educación; Enfermería

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INTRODUCTION

The present study is a description and assessment of the teaching and learning experiences of a federal superior education institution undergraduates and its actual application to the nursing care of patients assisted at the nephrology sector of a large school hospital in Rio de Janeiro.

Because of its specificities as one of the important scenarios used in the learning experience of 6th period undergraduate students of Anna Nery Nursing College, IX Inter-Department Curricular Program, the focus of learning is, since 2007 and up to nowadays, the high complexity nursing situation diagnosis and intensive care to hospitalized patients and their families, where undergraduates have to deal with life and death situations.

In this partnership between nursing graduation teaching and hospital service where patient care is provided, we highlight the physical space related aspects, understood as social, professional and interpersonal space that must provide a human, warm, and resolving care to patients.

Some elements guide such partnership between teaching and providing services, with a scope in interpersonal relationships in this space, both related to the reflection concerning the subject and the work/care process, and the care standard, focused on the involved subjects privacy and individuality. We also value the facilitating tool used for the interaction between professors and the nursing team, which favors the learning process and the human, warm, and resolving care in this sector.

In order to bring attention to the partnership between teaching and service providing, besides planning and modifying the program for the next undergraduates enrolled, we aimed to describe the program activities in the learning and patient care context, and assess, along with undergraduates, professors, and nursing professionals, such initiative to understand the teaching and care experience in this specialty.

The learning context is related to the kidney transplant wards, which have a total of 18 beds, 6 of which are used by kidney clinic and 12 by transplant patients, however having their occupation reduced at the moment. The learning experiences occurred in the wards, having both female (46.6%) and male (54.4%) patients; two of which were 13 years old, two were between 20 and 29, one between 30 and 39, seven between 40 and 49, two between 50 and 59, and one between 60 and 69 years old. The disease presents 30% more cases among men than women.

One hundred percent of patients being treated when this supervision occurred lived in the state of Rio de Janeiro, 67% of which lived in the city of Rio de Janeiro and the rest in adjacent districts, such as São João de Meriti,

Teresópolis, Volta Redonda, Nilópolis and Niterói.

METHODS

In the result production stage, we highlight the teaching, assistance and research methodologies to assess the nephrology sector nursing undergraduates learning.

As of the second semester of 2007, the teaching and learning process of such students are permeated by the introduction of contents concerning the urinary system deviations through theoretical and practical classes, in the beginning of the inter-department curricular program, where 10 hours are reserved for this activity. The pedagogical perspective is guided by the dialogic action theory principles⁽¹⁾.

Therefore, the nursing care provided to substitute renal therapy patients is focused on priority contents to this approach, in order to subsidize, in the future, the assistance methodology.

The undergraduates begin the practical activity with a sector visit and elaborate and present an assistance intervention proposal, to be provided to patients during the supervised internship in nephrology.

Care is provided daily, for six hours, in a rotation around the hemodialysis, peritoneal dialysis, and kidney clinic/transplant sectors, totalizing a 24-hour workload.

Considering the need to assess the teaching and care methodologies, we elaborated two structured questions regarding the undergraduate insertion in the nephrology patient care context and the performance standard presented when providing care.

With the nursing head department acquiescence and authorization, according to what was planned in the initial phase of the teaching and service partnership, nursing professionals working in the peritoneal dialysis, hemodialysis, and transplant sectors, undergraduates, and professors involved in the process were interviewed in September 2008.

The 15 subjects randomly chosen that agreed to take part in the formal assessment, an important stage to the teaching and care processes, answered the questions and signed a document authorizing the results to be published and divulged with scientific purposes. The questionnaire application happened during the shifts, after the care activities had been performed, and the main results will be presented, preserving the subjects' identity.

The analysis prioritized the signification units related to the learning and care positive and negative aspects experienced by undergraduate students in the 6th period of the course.

RESULTS PRODUCTION AND ANALYSIS

In order to facilitate the learning context

comprehension, we highlight that not only the characteristics of the clients assisted by the program undergraduates, but also some aspects related to the admission, in the second semester, 2007.

It is worth highlighting that such data are currently the same, for they are determined by both the sector capacity, and the clients' profile, which does not vary so often.

Other data concern care provided by the undergraduate and the assessment of their precocious insertion in the nephrology specialty assistance process.

The admission time lasts for an average of 5 to 10 days in 53.4% of cases; 11 to 25 days in 26.6% of cases, and from 30 to 60 days in 20% of cases. Such admission period is due to: associate disease, treatment modifications/ tests performance, or disease aggravation. In this period, undergraduates provide care to acute phase patients, contributing to the case stabilization and release from the hospital. Some serious patients may have their admission time extended.

Data demonstrated that 46.7% of the inpatients go through hemodialysis on a regular basis, and thus learning is amplified with regard to emergent questions to the healthcare practice, even with a reduced workload, such as the program. Currently, it provides 20 hours in the sector.

It is worth highlighting that understanding the patients' disease, in the nephrology sector wards of the hospital chosen as scenario, is interesting and brings responsibility to the undergraduates, who can also work promoting and protecting the population health. Eight patients acquired their kidney condition due to systemic arterial hypertension, two due to diabetes mellitus, one due to lupus, and four due to kidney problems.

The patients admission reasons were distributed as follows: four transplantation dysfunctions (rejections), one necrotizing lung aspergillosis, one with fever and diarrhea (with no defined diagnosis), one with an infection, one with biopsy, two with chronic renal failure, one with nephritic syndrome, and one about to have a kidney transplantation (recovery).

Data showed that 26.6% of inpatients were admitted due to post-transplantation complications, or were about to have a kidney transplantation.

In the peritoneal dialysis sector, 28 patients receiving continuous peritoneal dialysis (CPD) receive care, which corresponds to 93.3% of cases, and only two patients (6.7%) were at APD.

Sixty four patients were receiving care at the hemodialysis sector, 35 of which were females (55%) and 29 males (45%), nine of which were between 16 and 28 years old, three were between 29 to 38 years old, fourteen were ranging between 39 and 48, sixteen, between 59 and 68, and nine, between 69 and 78 years old.

The 64 patients venous accesses were: 36 (57%) with arteriovenous fistula, 19 (29%) with a double-lumen catheter (DLC), (5%) with polytetrafluoroethylene biologic prosthesis (PTFE), 5 (7%) with AVF and DLC, 1 (2%) with DLC and PTFE.

The learning process on accesses care is extremely important, for it is the initial guarantee to the venous access when going through substitute renal therapy sessions.

The environment allows information regarding the sector to be collected before the internship beginning, facilitating its integration with the nursing team and the understanding of how the hospital environment interferes in the recovery of patients with chronic diseases under substitute renal therapies.

The type and quantity of procedures performed by the 30 undergraduates in the program were: assistance on curatives (18), ulcer curatives by pressure (34); hemodialysis catheter curatives - HD (5), HD curative observation (7), peritoneal dialysis catheter curative - PD (2), PD catheter curative observation (14), PD catheter curative assistance (4), HD blood sample collection (1), HD subcutaneous medication (6), HD medication observation (5), PD medication (1), PD medication observation (2), renal transplantation medication (1), HD patient installation material assembly assistance (11), PD patient installation observation (15) PD catheter washing assistance (1), HD patient installation observation (30), HD blood pressure verification (30), HD hypotension intervention (1), patient weighing (30), CAPD training (19), physical exam (31).

In this context, stimulated by the growing professional interest, by the responsibility taken in the sector, and mainly aiming to improve the nursing care, we started the undergraduates' specific care context insertion, for they need to learn about the context, new techniques, and about the substitute renal therapy patient itself.

The nephrology teaching insertion during the sixth graduation period, considered early, reflects the great concern we have graduating future *praxis* based professionals, who have real knowledge about their specialties, as a way of understanding the patients needs.

Other procedures were also performed, they were: material request observation, drain bag exchange, vital signs verification, capillary glicemy, vein puncture, superior airway aspiration, vesical catheterization, and admission.

We attempted to rescue the nephrology nurse human side during such teaching and learning experience, by valuing the nursing activities that demand nurse-patient interaction, as well as the human being integration to their own context.

With regard to the positive experience the undergraduate students had, we highlight the following:

patient situational diagnosis learning; care prioritization; HD and PD catheter curative participation and unit preparation procedures; good interaction with the team in each of the sector scenarios; and welcoming nursing team reception, favoring the patient care observation and participation.

Learning should come from significations created by the student him/herself, so as to provide insights, be deep and valuable. The empathic comprehension⁽²⁾ establishes a self-started and experiential learning environment. Professors must have the ability to understand the students' intimate reactions going through it, and to do so, they have to use their sensitive perception, attempting to understand the learning process as of the students perspective.

The self-started learning⁽²⁾, is the one that happens in a "visceral level", deep and impregnating, involving both intelligence, feelings and abilities generated by creative learning.

Meaningful learning occurs in a more personal level, self-started independence and responsibility, creativity liberation, and a tendency to becoming more and more, a person⁽²⁾. Defining how, why, and when students learn, besides observing that learning seems to be and is felt as something that comes from within, demands the professor trusts and respects the apprentice, which includes a sensitive, empathic and careful ability to listen to them.

The professors' assessment stimulated the development of a holistic view of kidney patients' essential care; some learnt about the structure, environment, equipment, the care context, and the nephrology patients' clinic occurrences; some of them were focused on the initial care, such as: weighing, blood pressure verification, medication and hygiene, comfort, and integral care to dependant patients; and due to poor practical and theoretical knowledge, several procedures could not be performed, for being considered specialized procedures.

The professors' facilitation attitude demands authenticity, accuracy regarding the concepts that guide the learning, and understanding that undergraduates must be aware of the care dimension and importance so as to provide it.

In the kidney clinic/transplantation nursing team assessment, the following was highlighted: there are very positive aspects to care, because students know how to take critics, put effort on the tasks, want to learn, want to observe, see how it is done, therefore there are gains for both the sector and the patients. From the hemodialysis team perspective: students are interested, they ask questions when changing patients, which is not the best moment to give explanations, but when

professionals are free, they are pleased to explain; such experience contributed to the professional background in a new nursing area; students will not have the opportunity to see such specialty anywhere else, which creates an opportunity for the nephrology area to grow.

Regarding the negative aspects, the hemodialysis team highlighted the need for an internship configuration review by the college, for the information transmitted to the undergraduates do not comprise the whole scenario, due to the reduced theoretical and practical workload. Most of the times, the team does not have time to show the process in details, and they cannot define what is more important to show students. They do not have enough knowledge *priori*, which is necessary to better define what has to be observed in details.

The curricular concepts that guide Anna Nery Nursing College⁽³⁾, highlight the learning flexibility, the student's role and the value of his/her self-learning and competences development.

If we want students to be free and responsible people, we have to be able to let them face life and problems. Our task, as learning facilitators, is to discover which are the real challenges to youngsters, and give them the chance to face them.

Giving the student a participant role planning and building the whole program he/she belongs to is a revolutionary challenge to superior education institutions.

We attempt to give our patients the best of us, which is represented by *avant garde* examples, such as Florence Nightingale⁽⁴⁾, through care provided by the team itself and also by those undergraduate students enrolled in the program.

FINAL CONSIDERATIONS

The healthy interaction among undergraduates, professors and nursing team favors the learning conditions and the initial insertion of the ones learning about care provided to patients in the nephrology sector.

The professors/nursing team integration has been the focus of several debates that try to establish objectives so as to offer patients care with collaboration from all parts involved in the process, preserving both the hospital global performance, and the teaching process.

We believe that, when preserving the care therapeutical environment, we are reflecting a team model that strengthens the teaching and service providing partnership, which makes it possible to consolidate both the learning and care experiences, promoting a more amplified graduation that prioritizes the possible recovery, maintaining the special care patient's quality of life.

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