

MULTIPROFESSIONAL RESIDENCY IN HEALTH: INSERTION OF ACTORS IN THE UNIFIED NATIONAL HEALTH SYSTEM IN BRAZIL

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ABSTRACT

The Multiprofessional Residency Programs in Health (RMS in Portuguese) are regulated by the Ministries of Education and Health, and aimed at promoting assistance to the population and at training professionals of excellence to work, according to local health needs. The objective of this study was to analyze the insertion of the RMS at the university hospital of the Federal University of Mato Grosso do Sul. Under a prospective design, we analyzed the assistance provided by residents of physical therapy, nursing, dentistry, pharmacology and nutrition in the first seven months of implementation of the program. Data were collected from the medical record books and analyzed according to: profile and the number of assisted patients; amount of assistance provided by specialty; and outcome of cases. In the statistical analysis, we applied the chi-square and Mann-Whitney U tests, with 5% significance. Forty-six patients were treated by the team during the period, amounting to 1,979 assistances (an average of 43.02 assistances/patient). There was no difference between the amount of assistance provided by each area ($p = 0.89$). The implementation of RMS in that hospital was positive and provided support and comfort to patients. Establishing multiple scenarios of integrated practice is crucial to the training of specialized professionals aimed at the public health sector.

Keywords: Patient care team. Internship and residency. Critical care.

INTRODUCTION

The Multidisciplinary Residency Program in Healthcare of the Federal University of Mato Grosso do Sul - specialization in Critical Care Patient (RMS/UFMS) - is a modality of multiprofessional residency in health regulated by the Ministries of Education and Health, and supported by the University Hospital Maria Aparecida Pedrossian (UH) of UFMS. This residency, which is backed by Federal Law No. 11,129 of 2005, is composed of professionals from physical therapy, nursing, pharmacology, dentistry and nutrition, and developed at the UH/UFMS, supervised by the teaching-care staff. It seeks the realization of specialized care to patient, with qualified training for healthcare of the population and the reorganization of the work process in health toward the constitutional principles and guidelines of the National Unified Health System (SUS)⁽¹⁻³⁾.

In the current health context, the insertion and the experience provided by residency programs in the federal university hospitals and in other SUS services have been emphasized and required, given the need to prepare students with skills required for comprehensive health care through teamwork, focusing in the health needs of the population^(4,5). This need is more pressing due to the profile of professionals from health areas that are being prepared for individualized care, focused on illness and procedures, with little knowledge and little or no involvement with the public health system⁽⁶⁻⁸⁾.

The RMS/UFMS is a modality of in-service training based on learning by everyday practice. This practice is characterized by progressive acquisition of technical and interpersonal skills that are crucial in the development of the apprentice professional, and also by extension and research actions, through exposure to situations that favor training without being artificial - neither artificialized - but that

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represent everyday moments thought to be didactic⁽⁹⁾.

Despite the RMS is not focused on research, the participation of residents in scientific activities is important for their training. Since residents are involved in caring activities, they experience the care practice in different care settings to critical patients, with an interface between the hospital core and primary care of the public health system. In-service training also allows that residents have wider understanding of the context and health determinants, with an extended and complex view in the scope of promotion, prevention and rehabilitation⁽¹⁰⁾.

Additionally, there is teamwork - an important differential inherent in RMS. The proposal of implementation of the RMS aims at collective training inserted in the same field of work, while prioritizing and respecting the specific core knowledge and practices of each profession⁽²⁾.

The experience of RMS/UFMS was based on the need for greater interaction between the health service and academia, and on professional qualification to teamwork. From the beginning, the idea linked to the program is that the graduate resident should be able to: 1) Understand the reality of the country, identifying and analyzing specificities, diversity and complexity of the health-disease-care process of critically ill patients in hospitals; 2) Develop humanized care practices with ethics and social commitment, based in the popular and technical-scientific knowledge; 3) Develop clinical procedures of individual care in a comprehensive way, deepening knowledge and critical analysis to provide comprehensive care in interdisciplinary practices; 4) Exercising professional practices with knowledge of regional and national health policies, their support network and reference and counter-reference systems; 5) Develop managerial, planning, organization and evaluation functions of teamwork process where they work, resource management functions - human, material and inputs - and also the registration of data and health surveillance systems and information; 6) Use the information as a tool for knowledge of reality and for development of health interventions; 7) Participate in educational and training programs of the various actors working

in the health production space; 8) Develop their practices considering the health needs of the territory, facing identified challenges and committed to the development of transforming and resolute practices; and 9) Work in teams, aimed at professional practice in interdisciplinary perspective of healthcare⁽⁴⁾.

The "care to critical patients" as a RMS proposal is supported in the severity and in the peculiarities to which patients are subject, as well as integrated multidisciplinary care involved in promoting care of excellence, which is directed not only to the pathophysiological problems of patients, but also to the psychosocial, environmental and family issues. In this sense, the quality of care depends not only on technical and scientific skills but also in the ability of interaction and communication between multidisciplinary team, that is, teamwork capacity⁽¹¹⁾.

From the perspective of multidisciplinary care - grounded in care principles of comprehensiveness, extended clinic, singular therapeutic project and humanization - this study aimed to analyze the insertion of RMS/UFMS in the internal medicine ward of the UH/UFMS with regard to: 1) the profile of patients assisted in a multidisciplinary way in the first seven months of the implementation of program; 2) the amount of assistance provided by each area in this period; and 3) the clinical outcome of cases.

MATERIAL AND METHODS

This is a prospective longitudinal study, exploratory-descriptive type with quantitative approach. Patients included in this study were those assisted by the RMS team from March to September 2010. Patients served by the RMS team were selected through a screening performed in groups, based on the identification of those most biologically, socially and/or psychological vulnerable as well as on staff demand. Data were collected in November 2011 from a specific medical record book to that residency. The attendance record was mandatory and standardized for all residents of the different professional categories, containing data such as date, name, medical record number and comorbidities of the patient, registrant resident's profession, medical specialty responsible for

treatment, among others. During the period, each professional category (physical therapy, nursing, pharmacology, dentistry and nutrition) was represented by a professional.

It was determined as critical patient subjects who were in hemodynamic instability, with poor prognosis, and under a high risk of associated death. The study excluded subjects who received care of only one professional area of RMS/UFMS. It is noteworthy that this happened when one of the specialties received request for an opinion, specific to their area, on patient clinical condition or for performance of specialized care (physical therapy treatment dental evaluations and consultations, health education and training for home care). To analyze the insertion of the multidisciplinary team, the following dependent variables were considered: 1) the profile and the quantity of patients assisted by the multidisciplinary team; 2) the amount of assistances provided by specialty; and 3) the outcome of each case (discharge/transfer or death).

Regarding the statistical analysis, the data of patients were grouped according to age, the specific nature of the disease and the clinical outcome. The care provided by professionals of RMS/UFMS was separated as the number of interventions carried out by each professional category (physical therapy, nursing, pharmacology, dentistry and nutrition). Then - using appropriate statistical softwares - data were processed using descriptive statistics with simple frequency measures, and confronted by nonparametric chi-square and Mann-Whitney U tests. In both analyzes, it was considered a significance level of 5% ($p < 0.05$).

As for the ethical aspects, the guidelines stipulated by the Declaration of Helsinki were respected. In addition, this study was approved by the Institutional Ethics Committee (protocol 1924/2011).

RESULTS AND DISCUSSION

In the dynamics of the work process of the RMS team, after selecting patients, an admission assessment was performed by each resident of

the five professional categories that together drew up the singular treatment project, which worked as a guideline for the care team. It was agreed that, during the whole process of in-service training, the minimum quantity of patients served by the team would be of three patients. Planned interventions were implemented and monitored by tutors/mentors of each occupational area, to achieve the proposed objectives, with the patient as a participant element of health production process. Weekly, in a collective process, residents, tutors and mentors discussed the clinical cases and reassessed behaviors, tracing goals and objectives to be achieved in the comprehensive care to patients.

Thus, in the stipulated period, the five occupational areas of RMS assisted in multidisciplinary and integrated manner 46 critically ill patients (mean age 59.6 ± 3.4 years, of both sexes and living in Mato Grosso do Sul) in the internal medical clinic of UH/UFMS. Table 1 characterizes the patients served in relation to the specificity of each clinical condition.

Table 1. Profile of patients served by the multidisciplinary team according to the specific clinical condition. Campo Grande/MS, Brazil, 2011.

Clinical specificity	Cases treated	Percentile
Neurology	16	34.83
General practice	11	23.91
Cardiology	9	19.56
Pulmonology	4	8.68
Nephrology	2	4.34
Rheumatology	2	4.34
Endocrinology	1	2.17
Hematology	1	2.17

Source: SPSS, 2011.

Among the 46 patients attended by all occupational areas of RMS, there were 1,979 medical services performed by staff, which is equivalent to an average of 43.02 services per patient. Figure 1 shows the amount of care provided by the residency, according to each occupational area. Despite the difference of services by area, the chi-square test showed no significant difference between the actual distribution and the hypothesized distribution of services per occupational area ($\chi^2 = 0.6$; $p = 0.89$).

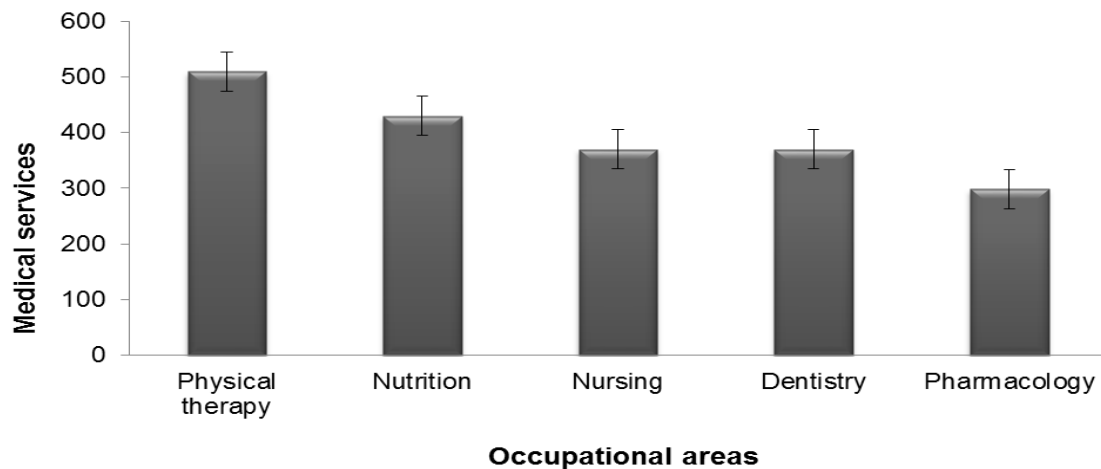


Figure 1. Amount of the medical services performed, according to the occupational area. Campo Grande/MS, Brazil, 2011.

Regarding the outcome of clinical cases, 65.2% of assisted patients were discharged and 34.8% died. The high mortality rate reflects the severity of critically ill patients treated. When dividing the patients in relation to age (elderly versus adults), the Mann-Whitney U test showed that the difference in age of the subjects did not affect the clinical outcome (UMW = 223.00; $p = 0.42$). Because it is not the focus of RMS/UFMS and of the hospital sector in which this practice occurred, no neonatal or pediatric patient was treated.

The National Curriculum Guidelines established for graduate courses in health and principles of RMS postulate that the training of health professionals should address the current healthcare system in the country, focusing on teamwork and comprehensive health care to the population⁽⁷⁾. However, in the initial training of most teachers and health professionals, the traditional and technical teaching centered in the physiopathology of diseases still prevails, and often without opening for questioning, reflection and building knowledge compatible with professional practice⁽¹²⁻¹⁴⁾.

Furthermore, during the training process, both in graduation as in post-graduation, opportunities for multiprofessional experiences between students from different courses in the health area are rare - or even nonexistent. The classical view of the training of health professionals is reflected in academic activities isolated to the patient. Although directed to the

same user and often developed on the same physical and social environment that other health professions work, these activities do not constitute integrative multidisciplinary practices of knowledge in teaching/service, resulting in a fragmented and distanced assistance of user needs⁽¹⁵⁻¹⁷⁾.

So, occupational practices should be organized from the health needs of each individual, and not from the needs of each profession. The conceptions of teaching-care integration and the experiences to link educational institutions and health services are part of the movement of universities and of health management toward the changes desired by these sectors^(7,18). This must be taken into consideration in the development of national curriculum guidelines of healthcare graduate courses, but especially in pedagogical political projects, given the peculiarities in health of each region in which higher education institutions is inserted.

Some advances have been achieved, such as the Education through Work Program for Health (*Programa de Educação pelo Trabalho para a Saúde - PET-Health*) and National Program for Reorientation of Professional Training in Health (*Programa Nacional de Reorientação da Formação Profissional em Saúde - Pro-Health*), of the Ministry of Health, together with the Ministry of Education. However, to achieve SUS policies and guidelines, it is needed much more than only to understand them and master them:

we need to implement them and continuously evaluate them in the everyday of health institutions⁽¹⁹⁾.

The process of construction and establishment of strategies in a multi-residency course, hampered by such historical vices, does not have a simple setting: it involves a synchronicity of management mechanisms and academic-scientific tasks so that assistance activities come with excellence to patients. Thus, this study was idealized based on the need to verify the insertion of the RMS/UFMS in its first year of implementation in a teaching hospital, 100% SUS. As noted in the results, the Residency served 46 patients in a multidisciplinary way, totaling 1,979 medical services performed by the health team.

Anticipating possible criticism on the aforementioned numbers, it is important to demystify the role of the resident as "service player." Still, it is worth remembering that this study included only patients who received treatment indication of the entire multidisciplinary team and, before that, were inserted in the weekly discussion of patients receiving care, performed by students and tutors teachers from all program areas. In addition to the weekly meetings, clinic visit and discussion at the bedside were held daily by residents of all areas and mentors, seeking to review individual and group therapies, grounded in holistic care - according to the principles of comprehensiveness, extended clinic, singular therapeutic project and Humanized SUS.

On the one hand, these practices are challenge in everyday service in the medical clinic of the university hospital. On the other, the organization of RMS seeks to holistically train professionals to work in SUS. However, it is important to note that this is not the reality of many professionals working in the system⁽⁸⁾.

Regarding the practice scenarios of RMS/UFMS, we decided to start the multidisciplinary care in clinical wards, as this service covers several clinical conditions that provide a broad academic development early in its first practice scenario. As seen in the results, the assistance of residents involved care to critical patients hospitalized for neurological, cardiac, pulmonological,

nephrological, rheumatic, endocrine and hematological reasons.

Nevertheless, the multidisciplinary care to seriously ill patients failed to prevent the high death rate (34.8%). This can be explained by the severe clinical instability observed in these customers. This same finding and justification is registered in a recent systematic review⁽²⁰⁾ that analyzed the outcome of seventy-two randomized clinical trials in critically ill patients. However, the multidisciplinary care to patients and to their families has a positive aspect since it is more resolute in relation to the traditional method of the health work organization, causing SUS users to feel more supported and comforted in their daily needs⁽⁴⁾.

The diversity of the conditions presented by the users who received care from the RMS team in that period enabled the residents to have a professional experience with patients with different clinical characteristics, expanding their view in the therapeutic process, and - especially - stimulating the experience of integrated multidisciplinary work, guided in the extended clinic and in the health needs of each user served. Thus, it becomes evident that establishing multiple scenarios of integrated practice is essential for the multidisciplinary residency perform its function of preparing expert professionals, technically and scientifically competent, as well as user-centered care practices, aligned with the health care model advocated by SUS.

About the Brazilian health system, an article⁽¹⁴⁾ published in the online version of the British journal "The Lancet" shows that the main determinant of low quality of care provided by the SUS is the limitation of human resources, which, however, is qualitative, not quantitative. With a view to overcoming these challenges, the Multidisciplinary Residency Program in Health is identified as an important policy of the Ministries of Education and Health for the training of health professionals, with ample potential to overcome this limitation.

CONCLUSION

The singular therapeutic project was the instrument used to integrate the different actors in the health production process. Based on the

health problems raised in the admission evaluation, residents discussed what and how each professional category could contribute to solve or mitigate the problems. It was found that the insertion of the actions of RMS/UFMS provided the realization of an integrated multidisciplinary care to a large number of critically ill patients, among which a variety of clinical conditions was noted, and whose hospital discharge was the clinical outcome presented by most of the assisted patients.

The hospital discharge has always been crafted from admission. In addition to the counter-reference, health education activities aimed at patients/family/caregivers were implemented and trained in the very hospital environment in order to reduce the anxieties and ensure continuity and effectiveness of care. In addition, in order to reduce readmissions rates, we promoted interrelation with social work, psychology and speech therapy services when necessary, integrating them in the discharge plan.

RESIDÊNCIA MULTIPROFISSIONAL EM SAÚDE: INSERÇÃO DE ATORES NO SISTEMA ÚNICO DE SAÚDE

RESUMO

Os programas de Residência Multiprofissional em Saúde (RMS) são regulamentados pelos Ministérios da Educação e da Saúde, e visam promover assistência à população e formar profissionais de excelência para o trabalho, segundo as necessidades de saúde local. O objetivo deste estudo foi analisar a inserção da RMS no hospital universitário da Universidade Federal de Mato Grosso do Sul. Sob um desenho prospectivo, foi analisada a assistência realizada pelos residentes da fisioterapia, enfermagem, odontologia, farmacologia e nutrição, nos sete primeiros meses de implantação do programa. Os dados foram coletados do livro de registros de atendimentos e analisados segundo: perfil e o número de pacientes assistidos; quantidade de atendimentos realizados por especialidade; e desfecho dos casos. Na análise estatística, aplicaram-se os testes qui-quadrado e Mann-Whitney (U), com significância de 5%. Quarenta e seis pacientes foram atendidos pela equipe durante o período, perfazendo 1.979 atendimentos (média de 43,02 assistências/paciente). Não houve diferença entre a quantidade de atendimentos realizados por cada área ($p=0,89$). A implantação da RMS no referido hospital mostrou-se positiva, proporcionando amparo e conforto aos pacientes. Estabelecer múltiplos cenários de prática integrada é fundamental para a formação de profissionais especializados voltados ao setor público de saúde.

Palavras-chave: Equipe de assistência ao paciente. Internato e residência. Cuidados críticos.

RESIDENCIA MULTIPROFESIONAL EN SALUD: INCLUSIÓN DE ACTORES EN EL SISTEMA ÚNICO DE LA SALUD BRASILEÑO

RESUMEN

Los Programas de Residencia Multiprofesional en Salud (RMS) están regulados por los Ministerios de Educación y Salud, y su objetivo es promover la atención a la población y formar profesionales de excelencia para el trabajo, de acuerdo a las necesidades de la salud local. El objetivo de este estudio fue analizar la inserción de la RMS en el hospital universitario de la Universidad Federal de Mato Grosso do Sul. Bajo un diseño prospectivo, se analizó la atención realizada por los residentes de la fisioterapia, enfermería, odontología, farmacología y nutrición, en los primeros siete meses de implantación del programa. Los datos fueron recogidos del libro de registros de atenciones y analizados según: perfil y número de pacientes atendidos, cantidad de atenciones prestadas por especialidad, y desenlace de los casos. En el análisis estadístico, se aplicaron las pruebas de chi-cuadrado y Mann-Whitney (U), con una significancia de 5%. Cuarenta y seis pacientes fueron atendidos por el equipo durante el período, un total de 1.979 atenciones (promedio de 43,02 atenciones/paciente). No hubo diferencia entre la cantidad de atenciones realizadas por cada área ($p=0,89$). La implementación de la RMS en ese hospital fue positiva, proporcionando amparo y confortación a los pacientes. Establecer múltiples escenarios de práctica integrada es importante para la formación de profesionales especializados dirigidos al sector público de salud.

Palabras clave: Grupo de atención al paciente. Internado y residencia. Cuidados críticos.

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Submitted: 01/04/2014

Accepted: 13/04/2015