

Nutritional Intervention in the Area of Clinical Nutrition in a Hospital Environment: A Report of Field Experience

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Abstract

The present experience report narrates a nutritional intervention in the area of individual and collective clinical nutrition that took place in a University Hospital (HU) in the interior of the State of Mato Grosso do Sul - Brazil. The main objective of this field work was the professional training for hospital and outpatient nutritional care through general and specific activities performed on site. The specific activities consisted in writing care protocols and standardization of hospital diets while the general activities consisted in the analysis of medical records, survey of clinical diagnoses, proposal of dietotherapeutic conduct, monitoring of nutritional status, prescription and dietary adequacy, preparation of nutritional guidelines and development, presentation and discussion of clinical cases. This work also reports on the difficulties in implementing and carrying out this intervention agenda and, given the results obtained, it was concluded that the field experience in the hospital area was a valid and beneficial opportunity in which it was possible to harmonize theory with practice.

Keywords: Clinical Nutrition; Nutritional Diagnosis; Dietotherapy; Hospital Feeding.

1. Introduction

This article is a report on the experience of individual and collective nutritional intervention performed in the area of clinical nutrition at a University Hospital (HU) in the interior of the State of Mato Grosso do Sul - Brazil. The main objective of this intervention was to train the professional for hospital and outpatient nutritional care through general and specific activities performed on site.

Specific activities consisted of computerizing protocols and standardizing hospital diets. Thus, in the present work, the difficulties in its implementation are outlined and, at the end, the results obtained during the field experience period. The method used was both a bibliographic survey and field research, an opportunity in which it was possible to harmonize theory with practice.

The second topic is intended to explain the main characteristics of this experience as well as its importance for the nutrition professional while the third topic announces the activities performed in detail. First, the typing of protocols and records and, at the end, the standardization of diets were addressed, and in both cases the difficulties, nuances and results of these works were exposed.

2. Field Experience Report

According to the objectives proposed by the intervention team at the beginning of the field experience, the main objective was to train the team for hospital and outpatient nutritional care, in addition to reviewing the contents related to clinical nutrition care such as nutritional screening, nutritional assessment and diagnosis, nutritional therapy, dietary prescription, demonstration of care practices such as screening and

nutritional assessment, data collection in medical records and preparation of nutritional diagnosis.

As an integral part of this action, a plan of activities was drawn up listing the practices to be carried out throughout the cycle, which can be divided into two categories: general and specific.

The general activities were the analysis of the medical chart, survey of clinical diagnosis (through electronic chart), nutritional assessment and diagnosis (through online form), proposal of dietotherapeutic conduct and nutritional intervention, monitoring of nutritional status (through secondary data), prescription of diets and dietary adequacy, preparation of nutritional guidelines and development, and presentation and discussion of clinical cases.

The specific activities were the online typing of hospital nutrition care protocols, the organization of printed materials and the standardization of special hospital diets according to the HU diets manual.

From all the experience, the results were compiled and delivered to HU through a final report with all hospital and outpatient care performed by sector of hospitalization, from which this article emanates. Thus, field experience is an essential and fundamental activity for the preparation of professional practice as well as for the academic conception and humanization of the intervention team, since it is only in practice that the opportunity arises to confront the theoretical content absorbed during the intellectual formation, besides establishing possible future professional ties.

3. Specific Activities

In this topic the specific activities carried out will be analyzed, as well as reported the nuances of their execution, difficulties inherent to the accomplishment and the results derived from the activities, delimiting them in: online typing of protocols and standardization of hospital diets.

3.1 Typing Protocols and Prontuaries Online

This specific activity consisted of online typing of hospital nutritional care protocols, such as nutritional screening (NRS-2002 and Strong Kids), admission of clinical and surgical patients (children, adults and elderly) and follow-up of patients at nutritional risk in nutritional therapy (enteral or oral). In addition, the objective in this task was to maintain the regular weekly typing of all the protocols and organization of the printed materials.

During this activity some difficulties occurred for its effective realization, since it was a new situation for the parties involved so that there was, therefore, a process of adaptation and adequacy to the necessary demands.

One of the difficulties encountered was to reconcile the typing of the forms with the standardization of the diets, that is, the other specific activity, in the sense that the activities took more time than previously foreseen. Therefore, it hinders the concomitant good progress of both.

Another difficulty found was to harmonize the online typing with the HU routine, since several times the folders of the medical records were being occupied in the medical posts by both teams at the time intended for typing, i.e., there was conflict in the schedules, making it difficult to perform them.

Finally, the adaptation of both activities (standardization and typing) in logistic terms is also mentioned, since both were carried out in different places and, undoubtedly, also hindered the good progress of this

specific activity.

As results, it is pointed out that even in face of the difficulties mentioned above, typing maintained, on average, a pattern of 4 to 8 beds/day, considering triage, daily follow-ups and evaluation protocols. In addition, the activity was of paramount importance to establish greater contact between the team and the pertinent attributions to the specific clinical area of action of nutrition professionals in a hospital environment, characterizing a unique opportunity for contact with a considerable number of diagnoses, clinical cases and dietotherapeutic conducts.

3.2 Standardization of Hospital Diets

At the same time as the online typing of medical records, the standardization of hospital diets was performed. For this specific activity, a schedule was established, together with the field supervision, which is divided into 6 stages, which we now present.

First, a familiarization and study of the Hospital's Diets Manual was carried out, and a bibliographic survey was performed in order to compile theoretical data regarding the methodological procedures of a diets standardization process.

Then field observation was performed, consisting of a passive observation that included the recognition of the environment of production and assembly of diets and, subsequently, the processes adopted by the team of collaborators for the assembly and distribution of the diets to the beds.

In step number three, the unique homemade dinner weighing of each preparation and the complete assembly of all the diets offered daily for a period of approximately 20 days was performed. As the supply of the preparations depended on the hospital demand, not every day there was the opportunity to perform the complete weighing, however, at the end of this stage at least 5 meals were weighed for each diet.

Soon after, the data were compiled, tabulated and processed, and the weights were separated by type of diet according to the manual and quantified in caloric terms. At the same time, this same conversion was made to the standard dinner of 1800 Kcal of the manual and menus sent to the preparation sector, thus making it possible to cross the data. Subsequently, the daily caloric variation of the marmites was quantified in all repetitions compared to the standard manual.

A statistical treatment of the data was also performed with the application of the ANOVA and t Student test in order to assign more reliability to the values found. For this purpose, Microsoft® Excel® software, version 2016, enabled for the data analysis tools and Visual Basic for Application (VBA), was used.

As a result of this step number four, it is pointed out that the variations were all statistically significant with p values lower than 0.0001 in caloric terms of the distributed marmites compared to the standard prescription of the HU diets manual.

Table 1. Average variation of the diets offered (n=5).

DIETA	AVERAGE % CHANGE	DP	PATIENT ACCEPTANCE
Soup	35,6	5,8	Good
General	54,8	5,6	Variable
Hyposodium	103,2	5,2	Superior

DM	130	8,9	Superior
Net	131	18,8	Bottom
Softy	272,4	6,9	Good
Restricted liquid	289,4	39,3	Bottom
Take	298,2	4,7	Bottom
Pasty	325,2	16,7	Good

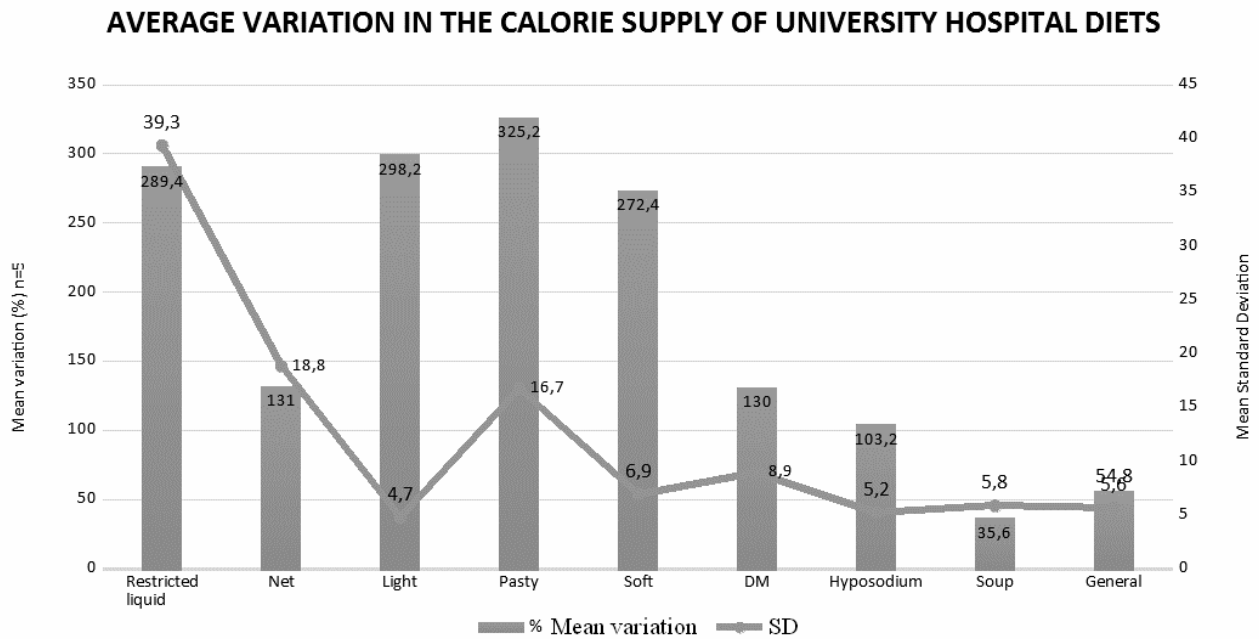


Figure 1. Average variation of the diets offered (n=5).

4. Conclusion

Taking these results into consideration, it is concluded that the action of the nutrition professional in the clinical area is urgent and necessary and it is a consensus that preventive medicine has social-environmental and even political importance, being the nutritionist key point in this process.

Combining this new reality of the therapeutic process with the practices made possible and experienced during this period of experience in the field, it becomes possible to understand how broad the mission of nutritional care is to improve the general condition of the patient.

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