# APPLICABILITY OF THE CLINICAL NUTRITION INTERVENTIONS CLASSIFICATION AND ACTIVITIES IN A HOSPITAL UNIT: PILOT STUDY<sup>1</sup>

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### **ABSTRACT**

This study aimed to evaluate the feasibility of using a classification of interventions/activities performed by nutritionists at the hospital and to describe the work process of these professionals. This is a transversal, descriptive, observational study, performed in a public hospital, in the city of São Paulo. Two nutritionists from the surgical clinical unit have participated. The applied instrument contemplated the list of interventions/activities developed by nutritionists in Brazil. The time spent by nutritionists was obtained by direct and continuous observation of the interventions/activities carried out during the workday, through the technique of time and motion. For data analysis, descriptive statistics were applied. The instrument tested allowed to identify all the interventions/activities carried out by the nutritionists, without the necessity of alteration. We observed 68.8% (22) of the interventions/activities. The total time observed corresponded to 1920 minutes. Nutritionists spent most of their time on direct and indirect care interventions (1406 minutes, 55.9%), waiting (358 minutes, 18.6%), personal activities (206.4 minutes, 10.8%) and displacement (205.4 minutes, 10.7%). The use of this instrument showed potential to be applied in Brazilian hospitals and provided preliminary data on the professional practice of the nutritionists observed.

Keywords: Time and motion studies. Nutritionists. Nutrition Personnel. Food Service, Hospital...

### INTRODUCTION

The actual conditions of care delivery and their impact on the effectiveness of care practices have been a focus of interest in the health field. Consequently, studies have been carried out to understand how the production and consumption of health services have occurred, to identify patterns of good practices and to produce objective recommendations for decision-making professionals and managers<sup>(1,2)</sup>. In addition, the identification of patterns of average time spent in care delivery has contributed to the human resource dimensioning process, since it is the most difficult variable to obtain<sup>(3)</sup>.

In Brazil, the dimensioning of nutritionists in hospital units is supported by Resolution CFN n°. 380/2005<sup>(4)</sup>, which establishes reference numerical parameters based on the proportion of patients per nutritionist. However, it is worth noting the lack of a theoretical basis for these parameters<sup>(4)</sup>. According to Machado and Poz<sup>(5)</sup>, sizing proposals obtained from the ratio between professionals and population, which disregard the existence of local variables and the needs of patients, have proved insufficient to overcome the difficulties involved in the process of quantitative planning of health professionals.

In this direction, scientific research points to insufficient clinical nutritionists<sup>(6)</sup> and high prevalence of hospital malnutrition in Brazil<sup>(7)</sup>. Factors related to the disease<sup>(8)</sup>, scarcity of material resources that support the development of basic nutrition assistance activities<sup>(9)</sup> and generalization of care<sup>(10)</sup> are recognized as major contributors to hospital malnutrition and constitute major challenges for the health team, although there are not studies that correlate these variables to the quantitative of professionals.

Given the centrality of the role of food and nutrition in the outcomes of patient care<sup>(10,11,12)</sup>, the present study aimed to evaluate the applicability of a classification of interventions/activities performed by nutritionists who work in hospital institutions and to describe the time, frequency and duration of interventions and activities performed by these professionals. The importance of this research is due to the need to test this instrument and, thus, to help the data collection of a broader study that had as objective to propose parameters to dimension the quantitative of clinical nutritionists from the reality of the these professionals' work.

#### **METHOD**

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The work was developed in August 2014 in a special hospital autarchy linked to the Government of the State of São Paulo and certified by the Joint Commission International (JCI)<sup>(13)</sup>. The hospital unit was classified as a specialized and highly complex, received funding exclusively from the Unified Health System, had 512 beds in operation and daily coverage of the 24-hour Clinical Nutrition sector. The nutritionists had a daily workload of eight hours per day, and 40 hours a week, distributed over three periods of work.

The food production of the Food and Nutrition Unit was outsourced, there was a hospital information system integrated to the system of the nutrition sector, as well as the materials and equipment needed to achieve the dietary assistance. The distribution of nutritionists in the hospitalization units considered the level of complexity of the patients, number of beds, medical specialty and work shift.

The choice of the institution took into account its recognition as a quality institution in the provision of care, the ease of access by the researcher responsible for data collection and the acceptance of the Clinical Nutrition Sector to participate in this research.

The surgical hospitalization units had a total of 150 beds in operation and occupancy rate of 81%. Two nutritionists were on shift A (7am to 4pm) and a nutritionist on shift B (11am to 8pm). The selection of surgical hospitalization units considered the development of the nutrition care plan that involved the stages of evaluation, diagnosis, monitoring, guidance and documentation. As criterion of inclusion of the participants, it was considered the experience time (at least one year) and to be allocated in different shifts.

Two nutritionists and four consecutive days of observation were selected, distributed in the different shifts. This number was arbitrarily chosen by realistically reflecting the minimum number of observation days. Due to the small number of nutritionists distributed in the scale of weekends, holidays and night, it was decided to limit the observations to the working days. It should also be pointed out that the activities performed in the intrainnate interval (60 minutes), for resting and feeding, were not computed.

A classification system with 32 interventions/activities developed by nutritionists<sup>(14)</sup> was used to verify their application in the target population (Table 1). Observations occurred in a direct, continuous and non-participatory manner, by

using the technique of time and motion<sup>(15,16)</sup>, in the ratio of an observer to a participant (1:1). A previously nutritionist trained with ten years of experience in the area of clinical hospital nutrition conducted the data collection. The observation of the observer followed the health and safety standards at work

All patients who were attended directly by the clinical nutritionists observed were classified according to the level of nutritional assistance, as established by CFN Resolution no. 380/2005<sup>(4)</sup>. The information related to the results of nutritional risk screening and the need for specific diet therapy, available by clinical nutritionists at the end of each observed work period, served to classify patients at the primary, secondary and tertiary levels<sup>(4)</sup>.

A digital chronometer was used to measure time spent on the interventions/activities, drawing board and standardized sheet for the annotations, which were reviewed at the end of each observation day. The observer stood at a distance that would not interfere with the worker's activities and, at the same time, allows him to see and hear him simultaneously.

The chronometer reading began at the time established in each work shift, being partially interrupted at the end of each intervention/activity performed by the nutritionist. The pauses necessary to meet the observer's physiological needs were timed and considered as unobserved time.

In view of the complexity and dynamics of the work reality, whenever the observer identified the simultaneous occurrence of interventions/activities, it was considered the main one. For example, if the Documentation was performed during Nutrition Screening, the second intervention was considered as the main one.

The data collected were scanned in electronic spreadsheets and double-checked. The time analysis was obtained by averages, relative and absolute frequencies and confidence intervals.

The research project followed the principles of bioethics established in Resolution 466/2012 of the National Commission of Ethics in Research, it was approved by the Committee of Ethics in Research of a public university, opinion no. 561.818, and Certificate of Presentation of Ethical Appreciation no. 26889914.9.0000.5392. As there was no interaction of the observer with patients cared for, relatives, companions and professionals of the institution, only the nutritionists who agreed to participate in the study signed the Informed Consent Term.

Chart 1 - Summary of interventions/activities in the instrument. São Paulo, 2016.

Category	Definition	Examples							
Intervention	Direct care intervention: activity developed by the nutritionist in the presence of the patient and/or family/caregiver.	Nutritional screening; Assessment of nutritional status; Evaluation of nutritional status; Teaching: orientation of diet prescribed; Food and nutritional counseling at discharge and Recreational therapy.							
	Indirect care intervention: an activity developed by the nutritionist, complementary to direct care, which aims to benefit the patient or a group of patients.	Product evaluation; Assessment of nutritional status; Infection control; Employee development; Documentation; Establishment of care protocols; Evaluation of nutritional status; Food and nutritional guidance; Passage on duty; Preceptor: student; Meeting to evaluate multidisciplinary care; Supervision of the distribution of diets in the units and exchange of information on health care.							
Activity	Associated activity: that developed by the nutritionist, but it is not exclusive to this professional category.	To register the patient's companion in the system; To separate identification labels from patient meals and To review patient meal identification labels.							
	Personal activity: pause to attend to the physiological, personal and well- being needs, performed by the nutritionist during the working day.	Accessing computer or mobile devices for personal interest, Feeding, Resting, Smoking, Keeping/withdrawing objects for personal use, Socializing with multidisciplinary team and using toilet.							
Others	Absence: delays and/or early departures of the nutritionist.								
	Displacement: any displacement necessary for the execution of the interventions and activities carried out in the								
	different units/sectors of the hospital, including corridors, ramps, stairs and elevator (waiting or moving through it).								
	Waiting: whenever the nutritionist waits for the patient and/or professional availability to perform an intervention.								
	Participation in administrative meeting: meetings with the leadership, eminently bureaucratic, of individual or collective character.								

Source: Adapted from Oliveira<sup>(14)</sup>.

# **RESULTS**

The participants of this research are women, 26 and 27 years-old and had experience in the institution and in the unit over one year. Altogether, 35 direct visits were made to hospitalized patients, from them 20 (57%) were classified in the primary level, 13 (37%) in secondary and two (6%) in the tertiary. The average number of visits performed per shift was 8.8 patients. Table 1 shows the frequency and duration of time required by nutritionists in the execution of interventions/activities.

All interventions/activities observed were included in the classification system (Chart 1). From the interventions/activities proposed, there were 11 interventions and 11 activities, which represented 68.7%. More than half of the work time of nutritionists (1073 minutes, 55.9%) were used in direct and indirect care interventions. Despite this, the time distribution was not proportional, with the predominance of indirect care (Table 1).

Nutritional screening and Evaluation of nutritional status were the most frequent direct care interventions and also those who spent the most time. It was observed that the average time spent in direct care interventions increased according to the complexity of the level of nutrition care.

In the group of direct care interventions, it was observed that Nutritional Screening was performed at the time of admission, while the frequency of monitoring of nutritional evolution followed a protocol defined by the Nutrition Service. Patients at nutritional risk received a daily visit, while the others were visited on alternate days, unless there was intercurrence. All patients underwent nutritional status evaluation within the first 48 hours after admission to the unit.

Among indirect care interventions, documentation and exchange of information on health care have spent more time at work for nutritionists. In contrast, less time was used in infection control (Table 1).

The total time used by nutritionists in the shift change, information exchange on health care and meeting for Evaluation of multidisciplinary care was 217.17 minutes (11.3%). It was also verified that the average time spent in meetings for Evaluation of multiprofessional care and Documentation surpassed the other indirect care interventions.

Associated activities had reduced frequency and duration, while the Waiting time represented 18.6% (358 minutes) of working time. The Personal activities and the Displacement totaled 411.8 minutes, or 21.4% of the time spent in the work day. Less than 1% of the nutritionists' work time was not observed (Table 1).

In general, the average times observed on the four days were within the respective confidence intervals, despite the differences found in the standard deviations.

**Table 1.** Distribution of frequencies, mean, median, standard deviation and confidence interval of the interventions/activities in the pilot study conducted in August 2014. São Paulo, 2016.

Interventions and activities		1st day – shift A		2 <sup>1</sup>	2 <sup>nd</sup> day – shift A			3rd day – shift B			4th day – shift B			Total		
		Time	Time (minutes)		Time	(minutes)		Time (minutes)		Fı*	Time (minutes)		т.	Time (minutes)		
		Total	Average	- F <sub>I</sub> *	Total	Average	- F <sub>I</sub> *	Total	Average	F <sub>I</sub> *	Total	Average	F <sub>I</sub> *	Total	Average	
Direct Care Interventions																
Assessment of nutritional status (N1)		0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	
Assessment of nutritional status (N2)		0,0	-	0	0,0	-	0	0,0	-	3	17,8	5,9	3	17,8	5,9	
Assessment of nutritional status (N3)		0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	
Teaching: prescribed diet (N1)		1,0	0,5	1	0,5	0,5	0	0,0	-	0	0,0	-	3	1,5	0,5	
Teaching: prescribed diet (N2)	0	0,0	-	3	8,0	2,7	0	0,0	-	1	6,4	6,4	4	14,4	3,6	
Teaching: prescribed diet (N3)		0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	0	0,0	-	
Evaluation of nutritional status (N1)		5,0	2,5	0	0,0	-	0	0,0	-	4	11,2	2,8	6	16,2	2,7	
Evaluation of nutritional status (N2)		2,8	2,8	0	0,0	-	0	0,0	-	0	0,0	_	1	2,8	2,8	
Evaluation of nutritional status (N3)		0,0	-	0	0,0	-	1	5,5	5,5	1	8,3	8,3	2	13,8	6,9	
Nutritional screening (N1)		0,0	-	5	10,7	2,1	4	25,2	6,3	2	3,0	1,5	11	38,9	3,5	
Nutritional screening (N2)	3	9,2	3,1	1	8,1	8,1	1	8,1	8,1	0	0,0	_	5	25,4	5,1	
Nutritional screening (N3)		0.0	-	0	0.0	-	0	0.0	-	0	0.0	_	0	0.0	-	
Subtotal		18	-	10	27,3	-	6	38,8	_	11	46,7	_	35	130,8	3,7	
Indirect Care Interventions					- ,-						-,-				- /-	
Assessment of nutritional status	1	5,8	5,8	10	15.2	1,5	2	5,6	2,8	3	33,0	11,0	16	59,6	3,7	
Infection control	2	1.7	0.9	2	1.0	0.5	6	4,2	0.7	2	2.4	1.2	12	9.3	0,8	
Documentation	22	133.1	6.1	33	118,1	3,6	26	154.5	5,9	26	178.8	6.9	107	584,5	5,5	
Evaluation of nutritional status	10	36.0	3.6	2	3,7	1,9	7	31.4	4,5	0	0.0	-	19	71,1	3,7	
Passage on duty	2	2,7	1,4	2	0,9	0,5	5	17,1	3,4	6	21,6	3,6	15	42,3	2,8	
Meeting for evaluation of multidisciplinary care	1	24,9	24,9	1	3,5	3,5	0	0.0	_	0	0.0	_	2	28,4	14,2	
Exchanging information about patient care	22	38,8	1,8	30	25,1	0,8	28	51,6	1,8	34	31,5	0,9	114	147,0	1,3	
Subtotal	60	243	-,-	80	167.5	-	74	264,4	-	71	267.3	23,6	315	942,2	0,3	
Activities associated					,-			,				- /-		. ,	- /-	
Registering patient's companion in the system	1	0.3	0,3	0	0,0	_	0,0	0,0	-	0,0	0.0	-	1,0	0,3	0,3	
Personal activities			,					,			,			,	,	
Accessing computer/mobile devices	0	0,0	-	3	10,3	3,4	0,0	0,0	-	0,0	0,0	-	3,0	10,3	3,4	
Feeding	3	20,4	6,8	2	25,9	13,0	0,0	0,0	-	0,0	0,0	-	5,0	46,3	9,3	
Stowing/withdrawing personal objects	4	4,4	1.1	3	5,2	1,7	1,0	2,6	2,6	1,0	2,6	2,6	9.0	14,8	1,6	
Hydrating	1	0.8	0.8	1	3,9	3,9	1,0	3,3	3,3	0.0	0.0	_	3.0	8.0	2,7	
Socializing with the multidisciplinary team	6	6.2	1,0	8	28.1	3,5	8.0	12.4	1.6	7.0	39,2	5,6	29.0	85.9	3,0	
Using the restroom	3	14,2	4,7	4	13,4	3,4	2,0	7,2	3,6	2,0	6,3	3,2	11,0	41.1	3,7	
Subtotal	17	46	-	21	86,8	-	12	25,5	-	10	48.1	-,-	50	206,4	-	
Others					,-			,_			,-			,		
Absence	0	0,0	_	1	22,0	22,0	0,0	0,0	-	0,0	0,0	_	1,0	22,0	22,0	
Displacement	24	50.8	2.1	18	24.9	1.4	22.0	53.1	2.4	35.0	76.6	2.2	99.0	205.4	2.1	
Waiting	15	120.7	8.0	18	146.3	8,1	13.0	50.4	3.9	14.0	40,6	2,9	60,0	358.0	6,0	
Participation in administrative meeting	0	0,0	-	0	0,0	-	1,0	37,8	-	0,0	0,0	-,,	1,0	37,8	37.8	
Time that was not observed	_	1.2	_	-	5.2	_	-,-	10.0	_	-	0.7	_	-,-	17.1	17,1	
Total	125	480	-	148	480	-	128	480	-	141	480	-	542	1920		
Median	125	400	2,5	140	400	3,0	120	400	3,4	171	700	3,2	342	1720	3,5	
Mean			3,8			3,2			3,8			3,4			3,5	
Standard deviation			5,5			5,2			2,0			2,9			4,7	
Confidence interval of 95%			1,2			0,8			2,6			1,8			1,6	
			6,5			5,7			4,9			5,0			5,5	

N1: level of primary nutrition care; N2: level of secondary nutrition care; N3: level of tertiary nutrition care.

Shift A: 7h to 16h; Shift B: 11h to 20h. Li: Inferior limit; Ls: Superior limit.

Source: Oliveira<sup>(14)</sup>.

# **DISCUSSION**

The classification system tested has showed remarkable comprehensiveness when contemplated all the interventions and activities performed by the participants, without needing to change them. Despite this, some interventions and activities were not observed. Considering that the frequency of activities/interventions may vary according to the guidelines established by the Nutrition Service or the profile and dynamics of the hospitalization unit, it is suggested to carry out more extensive research to confirm these findings.

Comparing the distribution of time spent on interventions and activities, it was found that more than half of the time spent by nutritionists was related to interventions (55.9%), corroborating findings from an international study<sup>(2)</sup>, which found 58.8% %.

Regarding the time spent on interventions, there was lower use in indirect care interventions (6.8%), a result lower than that found in Australia (18.3%)<sup>(2)</sup>. The time standards that were considered satisfactory for nutritional care interventions were not found in the literature. Despite this, there is a recommendation that suggests that 55% of the work time for direct care and 20% for indirect care should be considered<sup>(18)</sup>. Therefore, it is necessary to investigate the effects of time spent on direct and indirect care interventions in the results achieved.

Within the group of direct care interventions, the findings of the present study showed higher frequency and duration of work time in the execution of Nutritional screening and Evaluation of nutritional status. The average time required for the application of Nutritional screening, which lasted no more than 5 minutes (Table 1), made it possible to quickly identify patients requiring dietary attention and to systematize nutrition care<sup>(17)</sup> at the time of admission. This approach reveals the rational use of working time in response to patient demands and contributes to the achievement of better results.

The average time spent in the screening of patients classified at the secondary level was higher than the primary ones. Such differences can be attributed to the greater demand of patients/relatives/companions for information at the time of first care.

The assessment of the nutritional status, subsequent to the screening, is of great clinical importance for the nutritional diagnosis. However, the time spent in this direct care intervention may vary according to the level of consciousness and cognition of the patient and the presence of the caregiver, degree of dependence on activities of daily living (restricted to the bed or not) and availability of equipment/materials. Because of the reduced number of patients observed and the greater occurrence of the primary level, it was not possible to compare the time spent in the Assessment of Nutritional Status at each level of care.

The average times used in Evaluation of nutritional status of patients at tertiary level compensate the others. Despite the reduced number of visits, this conclusion points to a greater demand for care of these patients and reinforces the need to identify the level of complexity.

When analyzing the distribution of time spent in indirect care interventions, it was verified that most of the time was used in Documentation (584.5 minutes, 30.4%). A study conducted in Australia<sup>(2)</sup> has found only 17.7%. In view of the existence of a computerized system and equipment in sufficient quantity to meet the nutritionist's needs, it is necessary to analyze the aspects related to the way the records are made and the presence of the elements essential to the nutrition care process, excluding unnecessary data.

The high turnover rate observed in the surgical hospitalization units, with the larger number of patients classified at the primary level, may have contributed to the reduced frequency and length of time spent in indirect care interventions such as Assessment of Nutrition Status and Evaluation of nutritional status.

When analyzing the total and average times spent in the shift, in the Meeting for the evaluation of multiprofessional care and in the Exchange of information on health care, it is possible to perceive that the practice of communication is present in the daily routine of the care provided by nutritionists<sup>(19)</sup>, while that the shorter time spent in Infection control was related to the time spent on hand washing and the use of personal protective equipment (gloves, mask, apron and cap).

With regard to the long duration of waiting time, it was observed in practice that the patient's length of stay in the surgical center and delays in the release of the medical prescription of patients in the postoperative period have influenced strongly in this result. In order to reduce the time spent in waiting, it is necessary to interact with the surgical medical department, so that discharge from the surgical center is accompanied by prescription.

Another strategy that seems effective in reducing waiting time is to identify the possible indirect care interventions to be performed anywhere, so that time is used for the benefit of other patients.

The reduced frequency and length of time used in Associated Activities and Participation in an administrative meeting may reflect the degree of involvement of nutritionists with main activities and managerial concern with worker productivity gains and organizational efficiency.

It was verified that the time used in Personal activities totaled 206.4 minutes (10.8%), but there is no recommendation that establish the standard time for this activity. Nevertheless, Cruz and Gadzinski<sup>(20)</sup>, in a study carried out with nursing workers, pointed out that the measure of the time spent in this activity is important because of its influence on the levels of productivity of the professionals. The Absence of the worker at work is not foreseen and should be avoided because of the damages related to the assistance and, consequently, to the worker's productivity losses<sup>(3)</sup>.

As for the differences between the standard deviations found in this investigation, it is necessary to carry out more extensive research involving a greater number of institutions, professionals and patients, so that it is possible to infer if the worker profile and/or work shift influenced this result.

The actual effect of the observer training could be evidenced by the duration of unobserved time (17 minutes), which represented less than 1% of the working time. However, according to Bonfim et al.<sup>(3)</sup>, to avoid sample losses due to the absence of the observer and possible oscillations in its productivity, a supervisor is recommended<sup>(3)</sup>.

The lack of national publications and the difficulties of comparing the results of this research with international studies, due to the lack of a validated

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instrument for this type of research in nutrition, were limitations for discussion of this article, besides those related to the technique employed (change in the worker's behavior due to the presence of the observer) and the pilot character of the study (reduced number of nutritionists and patients attended).

# **CONCLUSION**

The present study contributed to the knowledge of the work process of nutritionists and provided preliminary data about the time, frequency and duration of interventions/activities developed by them in the hospital environment. To confirm the potential of use, as well as to evaluate the reproducibility of the classification of interventions/activities of nutrition in hospital units, it is suggested the application in different Brazilian institutions.

# APLICABILIDADE DA CLASSIFICAÇÃO DAS INTERVENÇÕES E ATIVIDADES DE NUTRIÇÃO CLÍNICA EM UNIDADE HOSPITALAR: ESTUDO PILOTO

#### RESUMO

Este estudo teve como objetivo avaliar a viabilidade do uso de uma classificação de intervenções/atividades executadas por nutricionistas no ambiente hospitalar e descrever o processo de trabalho destes profissionais. Pesquisa transversal, descritiva, observacional, realizada em um hospital público, no município de São Paulo. Participaram duas nutricionistas da unidade de internação cirúrgica. O instrumento aplicado contemplava o elenco de intervenções/atividades desenvolvidas pelos nutricionistas no Brasil. O tempo despendido pelos nutricionistas foi obtido pela observação direta e contínua das intervenções/atividades realizadas durante jornada de trabalho, por meio da técnica de tempo e movimento. Para análise dos dados, aplicou-se a estatística descritiva. O instrumento testado permitiu identificar todas as intervenções/atividades realizadas pelos nutricionistas, sem necessidade de alteração. Foram observadas 68,8% (22) intervenções/atividades. O tempo total observado correspondeu 1920 minutos. As nutricionistas despenderam a maior parte do tempo de trabalho em intervenções de cuidados diretos e indiretos (1406 minutos; 55,9%), espera (358 minutos; 18,6%), atividades pessoais (206,4 minutos; 10,8%) e deslocamento (205,4 minutos; 10,7%). O uso desse instrumento mostrou potencial para ser aplicado em unidades hospitalares brasileiras e forneceu dados preliminares sobre a prática profissional dos nutricionistas observados.

Palavras-chave: Estudos de tempo e movimento. Nutricionistas. Recursos humanos em Nutrição. Serviço hospitalar de nutrição.

# APLICABILIDAD DE LA CLASIFICACIÓN DE LAS INTERVENCIONES Y ACTIVIDADES DE NUTRICIÓN CLÍNICA EN UNIDAD HOSPITALARIA: ESTUDIO PILOTO

# **RESUMEN**

Este estudio tuvo como objetivo evaluar la viabilidad del uso de una clasificación de intervenciones/actividades ejecutadas por nutricionistas en el ambiente hospitalario y describir el proceso de trabajo de estos profesionales. Investigación transversal, descriptiva, observacional, realizada en un hospital público, en el municipio de São Paulo. Participaron dos nutricionistas de la unidad de internación quirúrgica. El instrumento aplicado contemplaba el elenco de las intervenciones/actividades desarrolladas por los nutricionistas en Brasil. El tiempo destinado por los nutricionistas fue obtenido por la observación directa y continua de las intervenciones/actividades realizadas durante jornada de trabajo, por medio de la técnica de tiempo y movimiento. Para análisis de los datos, se aplicó la estadística descriptiva. El instrumento examinado permitió identificar todas las intervenciones/actividades realizadas pelos nutricionistas, sin la necesidad de alteración. Fueron observadas 68,8% (22) intervenciones/actividades. El tiempo total observado correspondió a 1920 minutos. Las nutricionistas destinaron la mayor parte del tiempo de trabajo en intervenciones de cuidados directos e indirectos (1406 minutos; 55,9%), espera (358 minutos; 18,6%), actividades personales (206,4 minutos; 10,8%) y traslado (205,4 minutos; 10,7%). El uso de este instrumento mostró potencial para ser aplicado en unidades hospitalarias brasileñas y proporcionó datos preliminares sobre la práctica profesional de los nutricionistas observados.

Palabras clave: Estudios de tiempo y movimiento. Nutricionistas. Recursos humanos en Nutrición. Servicio hospitalario de nutrición.

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