RESEARCH

USER EMBRACEMENT WITH RISK RATING: EVALUATION OF THE STRUCTURE, PROCESS, AND RESULT

ACOLHIMENTO COM CLASSIFICAÇÃO DE RISCO: AVALIAÇÃO DA ESTRUTURA, PROCESSO E RESULTADO

ACOGIDA CON CLASIFICACIÓN DE RIESGO: EVALUACIÓN DE LA ESTRUCTURA, DEL PROCESO Y DE LOS RESULTADOS

Kelly Cristina Inoue [1]
Ana Cláudia Yassuko Murassaki [2]
José Aparecido Bellucci Júnior [3]
Robson Marcelo Rossi [4]
Yolanda Dora Évora Martinez [5]
Laura Misue Matsuda [6]

[1] RN. PhD. in Nursing. Professor of the Ingá College. Maringá, PR – Brazil.
[2] RN. MS. in Nursing. Santa Casa de Misericórdia Hospital – Maringá. Maringá, PR – Brazil.
[3] RN. MS. in Nursing. Professor of the Nursing Sector of the State University of the North of Paraná. Bandeirantes, PR – Brazil.
[4] Mathematician. PhD. in Animal Sciences. Professor of the Department of Statistics. State University of Maringá – UEM. Maringá, PR – Brazil.
[5] RN. PhD. Full Professor. Ribeirão Preto Nursing School of the University of São Paulo. Ribeirão Preto, SP – Brazil.
[6] RN. PhD. in Fundamental Nursing. Professor of the Nursing Department – UEM. Maringá, PR – Brazil.

Corresponding Author: Kelly Cristina Inoue. E-mail: kellyelais@hotmail.com
Submitted on: 2013/11/26 Approved on: 2015/02/23

ABSTRACT

The present work is a descriptive and exploratory study, with a quantitative approach, conducted between August and November 2011, aimed at, from the workers' perspective, assessing the Structure, Process, and Result of implementing the Reception with Risk Rating (RRR) instrument. This study included 314 professionals of different professional categories from four Emergency Hospital Services (EHS). The "Instrument to Assess Reception with Risk Rating" was used for data collection. Among the subjects, most were women (63.7 %), from the Nursing field (56.7 %), with an average experience of 7.2±7.6 years in the sector. Although there is a prioritizing of serious cases, care for mild cases, information about the probable waiting time, and user reception by the professionals who work in this system, it was found that, overall, the RRR was considered *precarious*. The main aggravating factors included: lack of physical space, problems in relationships within the multidisciplinary staff, and difficulty in putting the defined conduct into effect. It could therefore be concluded that, although the essential conduct proposed by RRR was in fact implemented in the investigated emergency services, there is still a need to make this system fully operational.

Keywords: User Embracement; Humanization of Assistance; Emergency Service, Hospital; Health Evaluation; Nursing Care.

RESUMO

Estudo descritivo-exploratório, com abordagem quantitativa, realizado entre agosto e novembro/2011, com o objetivo de avaliar sob a ótica dos trabalhadores a estrutura, o processo e o resultado da implantação do acolhimento com classificação de risco (ACCR). Participaram 314 profissionais de quatro serviços hospitalares de emergência (SHE) de diferentes categorias profissionais. Para a coleta de dados foi usado o "Instrumento para Avaliação do Acolhimento com Classificação de Risco". Entre os sujeitos, a maioria era mulher (63,7%); da área de Enfermagem (56,7%); com experiência média de 7,2±7,6 anos no setor. Apesar de haver priorização dos casos graves; atendimento aos casos não graves; informação sobre o tempo provável de espera; e acolhimento do usuário pelos profissionais que atuam nesse sistema, constatou-se que no cômputo geral o acolhimento com classificação de risco foi avaliado como precário. Como principais agravantes detectaram-se: falta de espaço físico; problemas no relacionamento da equipe multiprofissional; e dificuldade na operacionalização das condutas estabelecidas. Concluiu-se que, apesar de nos serviços de emergência investigados as condutas fundamentais propostas pelo ACCR serem realizadas, há necessidade da operacionalização integral desse sistema.

Palavras-chave: *Acolhimento; Humanização da Assistência; Serviço Hospitalar de Emergência; Avaliação em Saúde; Cuidados de Enfermagem.*

RESUMEN

Estudio exploratorio descriptivo con enfoque cuantitativo realizado entre agosto y noviembre/2011 con el objetivo de evaluar la estructura, el proceso y el resultado de la implantación de la Acogida con Clasificación de Riesgos (ACCR) desde la perspectiva de los trabajadores. Participaron 314 profesionales de cuatro servicios de urgencias hospitalarias (SUH) de diferentes categorías profesionales. Para la recogida de datos se utilizó el "Instrumento para Evaluación de la Acogida con Clasificación de Riesgos". La mayoría eran mujeres (63,7%); del área de enfermería (56,7 %); con experiencia media de 7.2±7.6 años en dicho sector. A pesar de haber prioridad para los casos graves; atención de casos no graves; información sobre el tiempo probable de espera y acogida del usuario por los profesionales que trabajan en este sistema, se constató que, en general, la Acogida con Clasificación de Riesgos fue evaluada como Precaria. Los principales agravantes detectados fueron: falta de espacio físico, problemas en la relación entre el equipo multidisciplinario y dificultad para poner en práctica las conductas establecidas. Se concluye que, aunque en los Servicios de Urgencia investigados se cumplan las conductas fundamentales propuestas por la ACCR, este sistema debe ponerse en práctica de forma integral.

Palabras clave*: Acogimiento; Humanización de la Atención; Servicio de Urgencia en Hospital; Evaluación en Salud; Atención de Enfermería.*

INTRODUCTION

The concern over the quality of healthcare services and the legitimation of the Brazilian Unified Health System (SUS), at different levels of the medical care provided in Brazil, has led to institutional changes brought about by the implementation of strategies and actions proposed by healthcare policies. In this context, special attention has been allotted to the emergency hospital services (EHS), also known as healthcare clinics, which are represented by healthcare establishments that provide medical services for critically ill patients who require priority care.[1] It is well-known that these establishments have a long history of lengthy waiting lines, overcrowding, and a lack of infrastructural conditions that have led to precariousness in the providing of healthcare serves carried out, to a great extent, at these Brazilian EHS. This fact has been aggravated by the delay in scheduling doctor's visits, restricted working hours, and reduced access to medications in Basic Healthcare Clinics, which have in turn led to a greater demand for medical services in emergency hospitals (EHs)[2], even when the cases are neither urgent nor an emergency.

In addition to the medical support provided by EHS being more effective than other healthcare services, the increase in the quantity of patients attended to in this type of service is also related to the population's lack of knowledge regarding their true functions.[3] In this light, when these institutions offer medical services on a first come first served basis, critically ill patients suffer with this extensive waiting period.

It known worldwide that critically ill patients must face unacceptable delays in receiving medical services at an EHS due to the lack or improper classification of risk, which entails even greater difficulty in controlling the illness, with a consequent extension in hospitalization time and more limited prognoses. Moreover, in an attempt to solve these problems, the healthcare systems from different countries have created different forms of screening via risk classifications.[4]

Screening by risk classification in Brazilian EHS has existed since 2002,[5] but, as of 2004, witnessed an expansion and revision of its fundamental concept as regards the perspective of humanization, giving rise to user embracement by means of the Reception with Risk Rating (RRR) instrument,[6] which consists of one of the forms of intervention intended to reorganize the access to urgency care as well as the production and implementation of a healthcare network, based on qualified listening to patient needs, the construction of links, the guarantee of access with accountability, the problem-solving capability of the healthcare services, as well as the prioritizing of more severe cases.[6] In this manner, it is hoped that the actions of the embracement of both users and their families will be provided by the healthcare professionals throughout the entire healthcare services network. Furthermore, it is hoped that the risk classification, based on protocols with severity levels indicated by colors, will be performed by the nurse.[6]

Brazilian EHS have been gradually implementing the RRR assessment. For this reason, it has become important to conduct research geared towards the analysis and/or evaluation of changes resulting from its use, for the identification of healthcare flaws and the establishment of improvement strategies that ensure more efficiency and efficacy when providing both urgency and emergency medical care.

Considering the importance of and need for studies that assess the implementation of the RRR in Brazil, one main question arises: How do EHS employees themselves assess the RRR? This study was proposed to answer this question and has the core aim of assessing, from the workers' perspective, the structure, process, and result of the implementation of the RRR in three EHS institutions.

METHOD

The present work is a descriptive and exploratory study, with a quantitative approach, conducted between August and November 2011 in four EHSs, classified as: EHS I, EHS II, EHS III, and EHS IV.

EHS I pertains to a public hospital in Maringá, Paraná, Brazil, with an operational capacity of 20 hospital beds, and provides medical services at a demand of an average of 5,400 patients per year; the implementation of RRR occurred in 2008. By contrast, EHS II is also located in Maringá, but this service pertains to a public university hospital, with an operational capacity of 31 hospital beds, and provides medical services to approximately 47,000 patients per year; the RRR was implemented here in December 2010. As regards EHS III, this service is part of another public university hospital located in Londrina, Paraná, Brazil, with an operational capacity of 50 hospital beds, and provides medical services to an average of 40,000 patients per year; the implementation of RRR occurred in 2007. Finally, EHS IV is located in a philanthropic hospital in Ourinhos, São Paulo, Brazil, which counts on an operational capacity of 25 hospital beds and provides medical services to approximately 100,000 patients per year; the RRR was also implemented here in 2007.

This study formulated its participant inclusion criteria by considering ongoing activities within the EHSs over a period of equal to or more than three months. Beginning with a list of staff from the hospital services of Social Welfare, Nursing, Doctors, Reception, Security, and Maintenance, who were made available from each institution, a stratified random sample of proportional allocation, considering 60% of the professionals who work in each sector, was produced. When the professional refused to participate or if he/she could not be located after three consecutive attempts to contact the person, the subse-

quent name on the list was selected, and so forth, until reaching the end of the list or until having enrolled at least 60% of the workers in each sector.

To collect the data, after having defined the participants through a random drawing, an individual interview was conducted in a private environment, at the workplace, using an instrument comprised of two parts. Part I contained information regarding the characterization of the interviewees, while part II consisted of the "Instrument to Assess the RRR".[7]

It should be emphasized that part II of the instrument contained 21 items in a Likert scale of five levels, which were grouped and founded on three Donabedian dimensions of the assessment of health,[8] which are: (1) structure, items 1 to 7; (2) process, items 8 to 14; (3) result, items 15 to 21.

The data were compiled and treated in electronic spreadsheets in the *Microsoft Office Excel*® program and later imported to the EpiInfo 3.5.3 program. To reach the results from part I, a descriptive statistical analysis (frequency, average, standard deviation, as well as minimum and maximum variation) was performed, while for part II, the scoring for each item was verified and the statistical inference was performed by median tests (Kruskal-Wallis Test and Mann-Whitney Test), considering a significance level of 5%.

Initially, in part II, the values of the items that correspond to the negative side of the scale (items 3, 4, 5, 7, 10, 14, 16, 19, and 20) were inverted (positivized) to count the general scores, required for statistical analysis. Next, the weighted average of each item, as well as of the dimensions, adding the product of the value of each Likert scale level according to its respective number of participants and dividing this result by the total number of participants. As of the weighted average, the items were categorized in assessments that disagreed (values of less than three points) and those that agreed (above three points).[7]

In the data analysis, the overall scoring of the instrument and its dimensions were compared to the categories and scores according to the assessment instrument for healthcare centers and clinics,[9] in which, for an overall assessment, the following final representativeness were considered according to the average points and score (%), respectively: *excellent*, from 94.5 to 105 points (90 to 100%); *satisfactory*, from 78.7 to 94.4 points (75 to 89.9%); *precarious*, from 52.5 to 78.6 points (50 to 74.9%); and *insufficient*, from 1 to 52.4 points (0 to 49.9%). For the assessment of each dimension, the final representativeness, according to the average points and score (%), respectively, were: *excellent*, from 31.5 to 35 points (90 to 100%); *satisfactory*, from 26.2 to 31.4 points (75 to 89.9%); *precarious*, from 17.5 to 26.1 points (50 to 74.9%); and *insufficient*, from 7 to 17.4 points (0 to 49.9%).[7]

When considering the minimum value of each item, this instrument has a minimum number of points of 21 and a maximum of 105, with a total range of 84 points, whereas in the assessment of each dimension (structure, process, and result), the minimum amount of points that one can receive is 35, with a total range of 28 points.[7]

This study met all ethical and legal requirements, and its original proposal is registered with the Permanent Committee of Ethics in Research Involving Human Beings (COPEP) from the State University of Maringá (UEM), under protocol number 325/2011.

RESULTS

Characterization of professionals that work in EHS

This studied counted on the participation of 314 professionals, of which 114 (36.3%) were men and 200 (63.7%) were women. The age of the subjects varied from 22 to 67 years, with an average of 40.5±10.5 years. As regards the participants' education level, 15 (4.8%) had studied up to elementary school, 162 (51.7%) up to high school, 67 (21.3%) up to university – undergraduate studies, 62 (19.7%) had concluded post-graduate specialization courses, and 8 had completed their graduate studies (M.S./Ph.D.).

The time worked within the institution ranged from three months to 35 years (average = 8.6±8.4 years). Likewise, the time worked in an EHS also varied from three months to 35 years (average = 7.2±7.6 years). The participants' professions are distributed according to the EHS in Table 1.

It is important to note that within the strata, it was impossible to reach 60% of the professionals in the following services: EHS I – Doctors (51%) and Maintenance (33%); EHS II – Nurses (51%), Doctors (23%), and Reception (34%); EHS III – Doctors (52%); and EHS IV – Doctors (30%) and Security (50%).

Assessment of RRR in EHS

The overall assessment of RRR, as well as the Donabedian dimensions, are shown in Table 2.

Upon verifying the scoring system for each item of the RRR assessment instrument, the following results were obtained (Figure 1).

Upon comparing the score medians from the Donabedian dimensions and the overall medians from the RRR by institution, the following results were obtained (Table 3).

As regards the professional variables that influence the RRR means of assessment, it could be observed that only the time worked in the institution and in the EHS, as well as the fact of being a university hospital, interfered in the assessment itself, as can be seen in Table 4.

Table 1 - Distribution of professionals that work at an EHS per profession and workplace: Maringá – PR; Londrina – PR; Ourinhos – SP, 2011

EHS Profession	I		II		III		IV		All	
	N	%	N	%	N	%	N	%	N	%
Social Worker	2	3.0	2	2.1	1	0.8	-	-	5	1.6
Nurse	5	7.6	10	10.6	9	7.3	4	12.5	28	8.9
Doctor*	14	21.2	29	30.9	14	11.4	2	6.2	59	18.8
Mid-level Nurse**	31	47.0	26	27.6	76	61.8	18	56.3	150	47.8
Administrative Staff***	12	18.2	6	6.4	10	8.1	4	12.5	32	10.2
Security Guard****	-	-	6	6.4	2	1.6	2	6.2	10	3.1
Operational Staff*****	2	3.0	15	16.0	11	9.0	2	6.2	30	9.6
Total	**66**	**21.0**	**94**	**29.9**	**122**	**38.9**	**32**	**10.2**	**314**	**100**

* Includes staff and residents.** Nurses' Aides and Nursing Technicians. 1 Nursing Assistant was excluded. *** Administrative Assistants, Administrative Technicians, Receptionists, Telephone operators. **** Security Guards and Doormen. ***** Building Managers and Drivers.

Table 2 - Results of the assessment of the RRR by professionals who work at an EHS: Maringá – PR; Londrina – PR; Ourinhos – SP; 2011

Dimension Assessment	Struture	Process	Result	Overall
Insufficient	60 (19.1%)	30 (9.5%)	19 (6.0%)	15 (7.8%)
Precarious	220 (70.1%)	237 (75.5%)	217 (69.1%)	259 (82.5%)
Satisfactory	27 (8.6%)	37 (11.8%)	63 (20.1%)	34 (10.8%)
Excellent	7 (2.2%)	10 (3.2%)	15 (4.8%)	6 (1.9%)
Average points	21.3	22.2	23.7	67.3
Score (%)	60.9	63.4	67.7	64
Representativeness	Precarious	Precarious	Precarious	Precarious

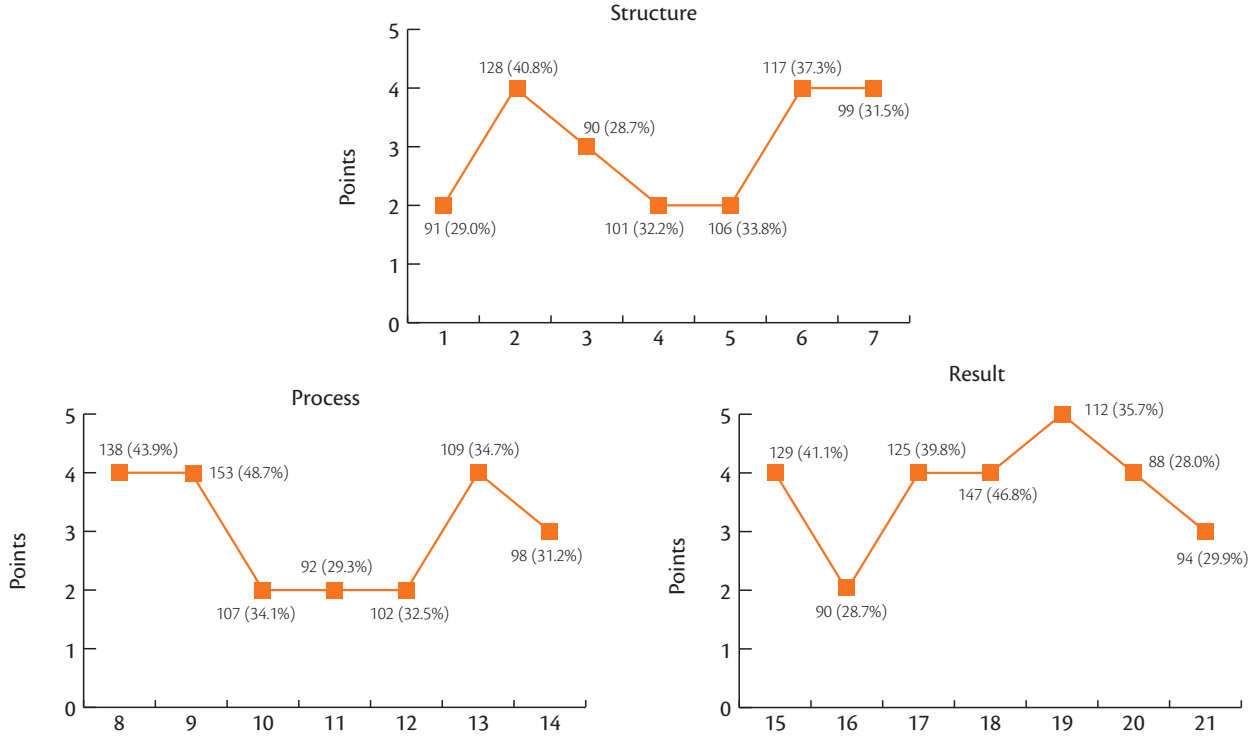

Figure 1 - Scoring system for the items of the RRR assessment, according to the structural dimension, process, and result: Maringá – PR; Londrina – PR; Ourinhos – SP, 2011.

Table 3 - Description of medians of the Donabedian dimensions and the overall medians from the RRR per institution: Maringá – PR; Londrina – PR; Ourinhos – SP, 2011

Institution dimension	EHS I	EHS II	EHS III	EHS IV
Struture	21.0[a]	19.0[b]	22.0[a]	23.0[a]
Process	23.0[ac]	21.0[b]	21.5[ab]	24.0[c]
Result	24.0[a]	23.0[a]	24.0[a]	24.5[a]
Overall	66.5[a]	64.0[b]	66.0[ab]	71.5[a]

a,b,c Distinct letters indicate a 5% significant difference between institutions, obtained through the Kruskal-Wallis test.

Table 4 - Professional variables associated with the RRR assessment among workers from four EHSs: Maringá – PR; Londrina – PR; Ourinhos – SP, 2011

Statistics Variables			Struture		Process		Result		Overall	
	N	%	M*	p**	M*	p**	M*	p**	M*	p**
Time at institution										
< 5 years	144	45.9	22.0	0.055	22.0	0.006	24.0	0.005	69.0	0.001
≥ 5 years	170	54.1	21.0		21.0		23.0		64.0	
Time at EHS										
< 4 years	150	47.8	22.0	0.056	23.0	0.006	24.0	0.080	67.0	0.009
≥ 4 years	164	52.2	21.0		21.0		23.0		65.0	
University hospital										
Yes	216	68.8	21.0	0.003	21.0	0.000	23.0	0.090	65.0	0.000
No	98	31.2	22.0		23.0		24.0		69.0	
Area of work										
Related areas	77	24.5	21.0	0.857	22.0	0.540	24.0	0.060	66.0	0.415
Health	237	75.5	21.0		22.0		23.0		65.0	
Work level										
Technician	222	70.7	21.5	0.134	22.0	0.684	24.0	0.427	65.0	0.371
Upper level	92	29.3	21.0		22.0		23.5		66.0	

38* Median (M), in points.** Level described by the p-value (p) for the Mann-Whitney test.

DISCUSSION

The majority of the professionals were women (63.7%) and more than half (56.7%) belonged to the nursing staff (Table 1). This result was expected, given that the nursing staff is historically made up of a majority of women and because they most commonly make up the main staff that works in hospitals.

Although all of the healthcare professionals, as well as those from related areas, had developed embracement activities, the RRR assessment from nurses is essential. This is especially true because the nurses are responsible for the risk classification procedure[6] and the nursing staff, in general, as they maintain direct contact with the patients and their families during the medical care process.

Another aspect to be highlighted concerning the assessment conducted in this study refers to the professional variables of the participants, which presupposes a more critical and complete assessment upon pinpointing weaknesses and potentials. This is because the subjects had a time of experience within the EHS that was correspondent to their participation during the entire period in which the RRR was implemented in their sector (average of 7.2±7.6 years). Moreover, 92 nursing technicians also have a higher education degree (29.3%), as described above.

As regards the RRR assessment, the representativeness of the assessment was precarious in all of the Donabedian dimensions and, consequently, repeated this result in the overall outlook, as can be seen in Table 2. This shows the existence of weaknesses in the RRR that need to be reviewed, reanalyzed, and reconstructed by the professionals from healthcare services in an attempt to reach the aims proposed by the use of this guideline, aimed at improving the quality of the medical services offered at EHS institutions.

What also calls attention is the fact that the extremely negative assessments (insufficient) were more common than positive extremes (excellent) in all of the assessed dimensions (Table 2). This result is worrisome, as extreme and/or repeti-

tively negative assessments can make both professionals and patients distrust the medical services model, in turn limiting the actions related to improvements in the quality of medical services, sought by the National Policy of Humanization, even concerning RRR perspectives themselves. It can therefore be concluded that there is an evident need to rethink and implement improvements linked to structure, process, and results from the RRR in the EHSs studied here, coupled with the monitoring of the professional activities connected to the established RRR protocol, an institutional instrument aimed at providing physical and material resources. In addition, periodic and systematic training sessions are needed to overcome the lack of knowledge and enhance professional practices.

The RRR is a strategy that has an impact on the working process to make the environment more receptive, in turn producing higher quality in healthcare services. Nevertheless, one study that endeavored to understand and analyze how nursing professional from an EHS assess the RRR demonstrated that, as a consequence of the lack of available resources for basic medical care, it is actually difficult for the workers to implement this structure, thus negatively impacting the quality of medical care rendered.[10]

Figure 1 illustrates a high degree of disagreement among the professionals from the four EHSs (answer=2 points), especially concerning the physical space necessary to receive the patient's family (item 5); knowledge from all who work in the service about the conduct defined in the RRR guidelines (item 10); and that the medical services flowchart is discussed with the team and assessed periodically as regards its clarity and objectivity (item 12).

As regards the physical space, one can see that the inadequate physical layout of the space for patients and professionals may well be a reflection of the lack of regulations within the Brazilian context.[11] In fact, although the RRR allows for the referral of non-urgent cases to other less complex healthcare services, these users continue to seek medical care at EHSs.[2,3] Even in services that have implemented this strategy, the risk is not always classified for each case. This is evident in research that has characterized the medical care provided through RRR assessment in the EHS of Pelotas, RS, which determined that, among the 5,629 medical records, 39% were not classified according to the color system, reflecting an incomplete implementation of the RRR protocol, especially in the afternoon shifts.[12]

It is important to remember that the RRR has an interface with other devices from the National Policy of Humanization, including that related to the environment and the rights of the patient's family. In this light, it is necessary to create spaces that favor the rights of the patient's family, with meeting rooms, dialogs, and entertainment capable of receiving and accommodating them in the diverse environments of the healthcare units, including the EHS.[6]

Regarding the knowledge of all those who work in the EHSs investigated in this study about the implemented RRR protocol, as well as the discussion and periodic assessment of the medical care flow chart among the staff, it is imperative that greater interaction and dialog occur between the superiors and their subordinates in the diverse areas of hospital activities in an attempt to involve the entire healthcare staff, given that all of the professionals are responsible for the embracement of both patients and their family.

Add to the previous affirmation the fact that the lack of understanding about the RRR protocol and the medical care flow chart can lead to incorrect impressions among the healthcare professionals themselves in the sense that embracement practices are limited to the risk classification procedures. As an example of this, one study conducted at an EHS in Porto Alegre, Brazil, which sought to understand the interaction among the nursing staff as regards the RRR, affirmed that many professionals, despite having prior knowledge of the RRR proposal, demonstrated that they did not understand its comprehensiveness and were only able to identify it as a part of the hospital's medical services, geared toward a specific location.[13,14]

In a recent publication that analyzed the impact of the implementation of the RRR in the workplace of healthcare professionals at a Basic Healthcare Clinic in Mossoró, Brazil, both structural and personal deficiencies could be identified, leading to the conclusion that the entire staff of the institution should be more directly engaged in the RRR procedures, respecting its guidelines and routines.[15]

Upon identifying that there is a tendency toward neutrality (answer = 3 points) (Figure 1), the occurrence of meetings and periodic trainings for professionals who work with the RRR (item 3) and that the professionals allotted to this sector feel that they are well-received by their superiors when they have doubts and difficulties regarding the RRR medical procedures (item 21), it can be inferred that the communication among the EHS professionals has been damaged. This therefore demands attention on the part of the upper management in the sense of promoting more meetings and/or means of more efficient communication.

By contrast, in Figure 1, one can also see that the participants agree (answer = 4 points) that the patients who are not critically ill, but who are seeking medical care, are assessed by the RRR procedure (item 9); that the user who does not require immediate care, as well as his/her family, is informed of the probable waiting time for medical care (item 18); and that the professionals who work directly with the RRR contribute in such a way that the user feels safe and comfortable (item 8). Others fully agree (answer = 5 points) that, in the RRR procedure, critically ill patients should receive priority medical care (item 19). Based on this finding, it is clear that the fundamental

characteristics of the RRR guidelines[6] have been performed in the institutions investigated in this study.

It is a well-known fact that the lack of access to medical care, as it promotes distrust and disrepute among users, is one of the parameters that produces a negative influence in the assessment of healthcare services.[16] In this sense, the users that do not require immediate healthcare should pass through the RRR procedure, be duly received, and subsequently receive a referral to a Basic Healthcare Clinic, specified as soon as the patient is first attended to at an EHS.[15] In this process, the user should be accompanied by a family member and, if necessary, counter-referenced within an integrated medical care model.

The EHS is still characterized as the population's entrance door to the healthcare network because, despite the advancements in the reorganization of the healthcare model, as explained above, the primary healthcare services have been insufficient and inefficient in attending to the population's healthcare needs.[2,3] In fact, different from the primary care services, the EHS is open 24-hours a day, with doctors from a wide range of specialties available at all hours of the day, and performs laboratory and imaging exams at any time, with the delivery of the results in a timely manner for the proper definition of medical treatment.[17]

Based on that presented in the present study, although the EHSs still receive a steady influx of users who are not critically ill, the RRR seems to allow for a reorganization of the waiting lines by priority, which provides a greater chance of therapeutic intervention in a timely manner and less harm the customer and society as a whole.

The prioritizing of cases according to severity, as a premise of RRR, has led to both organizational changes as well as subsequent changes in the staff activities. As an example of this, an investigation carried out by an EHS in the state of Santa Catarina, Brazil, obtained results that run in line with RRR procedures, since the participants recognized the RRR as a means through which to more swiftly provide medical care for those who were critically ill and who required immediate medical and nursing care intervention.[10]

As regards the comparison of the medians by institution, the results from Table 3 reveal that statistically significant differences exist in the RRR assessment, both in that which refers to the Donabedian dimensions as well as to the overall assessment among the studied institutions. It thus becomes important to analyze the specific aspects of each EHS that may have influenced the results and, in this manner, implement strategies for their improvement and continued surveillance in order to verify the efficiency and efficacy of the RRR procedures.

Concerning Table 4, this study identified better results from the RRR assessment among those who have been working for a shorter time within a healthcare institution or EHS, while the worst results were found in the university hospitals. As regards the best assessments among those who had less experience, it could be inferred that this may well be related to the low level of maturity and/or less negative experiences with previous changes processes, which may explain the optimism found regarding new strategies and methods of rendering healthcare services.

As regards the more negative assessments in university hospitals (Table 4), especially in those related to the structure (p=0.003) and to the process (p-value=0.000), it is believed that these results may have suffered interference from the association between the medical care and didactic activities that characterize these locations.

It is well-known that university hospitals provide the most complex healthcare resources of the entire Brazilian Unified Health System (SUS) and that they execute procedures that are more costly to the public coffers without, however, refusing to attend to any and all patients, without failing to assess different technologies to improve the health conditions of the general population, and continuing to be the main field of education and research for the education of professionals in health and other related fields.[18] Based on this, it can be inferred that the services that privilege teaching tend to overload the students due to the heavy demand of activities resulting from their jobs, which demands better infrastructural conditions that, when they are not provided, can result in negative assessments from the workers.

For future studies, the investigated sample should be expanded, both in quantitative terms as well as in those referent to professional training. In addition, managerial and educational activities should be implemented for all categories of professionals who work in EHSs in an attempt to engage the professionals in this new technology, which has the objective of the reorganization of the services, of humanization, and of the effectiveness of the medical care rendered.

CONCLUSION

The assessment of the RRR was performed by professionals from different professional categories, especially by nurses (56.7%), workers with experience in EHS (average of 7.2±7.6 years), and education levels that can be considered high (43.5%), given that many who occupy positions in the mid-level have a post-graduate degree.

Room for improvement was found in all Donabedian dimensions, based on the results from the overall assessment of the investigated medical services. This is because, despite complying with some of the fundamental aspects, such as the prioritization of severe cases, the RRR in these EHSs is still in need of a physical space for the patient's family and the establishment or strengthening of interactive relationships within the multidisciplinary staff.

A limitation of this study is the low percentage of professionals who were interviewed in some strata and the limited number of services actually assessed. It can therefore be concluded that, in the EHSs investigated in this study, the proposal of the RRR procedure being used as a guideline and institutional strategy is still in need of further investments, mainly because the physical space is inadequate and the multidisciplinary team is still not fully aware of these guidelines.

REFERENCES

1. Brasil. Ministério da Saúde. Terminologia básica em saúde. 2ª ed. Brasília: Ministério da Saúde; 1985.
2. Souza MF, Pinto IC, Figueiredo LA. Análise da utilização do serviço de pronto-socorro na percepção do usuário. Ciênc Cuid Saúde. 2010; 9(1):13-20.
3. Bittencourt RJ, Hortale VA. Intervenções para solucionar a superlotação nos serviços de emergência hospitalar: uma revisão sistemática. Cad Saúde Pública. 2009; 25(7): 1439-54. [Cited 2013 Feb. 20]. Available from: http://www.scielo.br/pdf/ csp/v25n7/02.pdf.
4. Schuetz P, Hausfater P, Amin D, Haubitz S, Fässler L, Grolimund E, *et al*. Optimizing triage and hospitalization in adult general medical emergency patients: the triage project. BMC Emerg Med. 2013; 13:12. [Cited 2013 June 22]. Available from: http://www.biomedcentral.com/1471-227X/13/12.
5. Brasil. Ministério da Saúde. Portaria n.º 2048/GM, de 5 de novembro de 2002. Brasília: Ministério da Saúde; 2002.
6. Brasil. Acolhimento e classificação de risco nos serviços de urgência. Brasília: Ministério da Saúde; 2009.
7. Bellucci Júnior JA, Matsuda LM. Construção e validação de instrumento para avaliação do Acolhimento com Classificação de Risco. Rev Bras Enferm. 2012; 65(5):751-7.
8. Donabedian A. Basic approaches to assessment: structure, process and outcome. In: Donabedian A. Explorations in Quality Assessment and Monitoring. Michigan: Health Administration Press; 1980. p. 77-125.
9. Brasil. Ministério da Saúde. Instrumento de avaliação para centros e postos de saúde. Brasília: Centro de Documentação do Ministério da Saúde; 1985.
10. Nascimento ERP, Hilsendeger BR, Neth C, Belaver GM, Bertoncello KCG. Acolhimento com classificação de risco: avaliação dos profissionais de enfermagem de um serviço de emergência. Rev Eletrônica Enferm. 2011; 13(4):597-603. [Cited 2013 June 13]. Available from: http://www.fen.ufg.br/revista/v13/n4/v13n4a02.htm.
11. Ohara R, Melo MRAC, Laus AM. Caracterização do perfil assistencial dos pacientes adultos de um pronto socorro. Rev Bras Enferm. 2010; 63(5):749-54.
12. Tomberg JO, Cantarelli KJ, Guanilo MEE, Dal Pai D. Acolhimento com avaliação e classificação de risco no pronto socorro: caracterização dos atendimentos. Ciênc Cuid Saúde. 2013; 12(1):80-7.
13. Zanelatto DM, Dal Pai D. Práticas de acolhimento no serviço de emergência: a perspectiva dos profissionais de enfermagem. Ciênc Cuid Saúde. 2010; 9(2):358-65.
14. Dall Pai D, Lautert L. Sofrimento no trabalho de enfermagem: reflexos do "discurso vazio" no acolhimento com classificação de risco. Esc Anna Nery Rev Enferm. 2011; 15(3):524-30.
15. Oliveira KKD, Amorim KKPS, Fernandes APNL, Monteiro AI. Impact of the implementation of patient engagement with risk classification for professional work of one urgent care unit. REME Rev Min Enferm. 2013; 17(1):157-64.
16. Souza ACC, Moreira TMM, Silva MRF, Almeida PC. Acesso ao serviço de emergência pelos usuários com crise hipertensiva em um hospital de Fortaleza, CE, Brasil. Rev Bras Enferm. 2009; 62(4):535-9.
17. Barros DM, Sa MC. O processo de trabalho em saúde e a produção do cuidado em uma unidade de saúde da família: limites ao acolhimento e reflexos no serviço de emergência. Ciênc Saúde Coletiva. 2010; 15(5):2473-82.
18. Barata IRB, Mendes JDV, Bittar OJNV. Hospitais de ensino e o Sistema Único de Saúde. RAS. 2010; 12(46):7-14.