THE STRUCTURE OF A PUBLIC EMERGENCY CARE SERVICE, FROM THE WORKERS’ VIEW: PERSPECTIVES ON QUALITY

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ABSTRACT: This qualitative, exploratory-descriptive study was performed with the objective to understand the perception of workers in a public emergency care service regarding the quality of the local structure. Data collection was performed in April of 2010 by means of individual interviews, and then analyzed according to the Thematic Content Analysis method, which permitted the identification of one category supported by the following subcategories: material resources, human resources, physical resources, financial resources, normative instruments, and information systems. The results demonstrated that the subjects made a positive evaluation of the structure, highlighting the availability of material resources, renovations and adjustments that were made, professional qualification and training, the transfer of financial resources according to the institutional goals, protocol-guided services, and supervision of the information using quality indicators. In conclusion, despite the existing weaknesses in the sector, such as high temperature of the environment and a personnel shortage, workers consider that the structure is effective in meeting the principles of quality.


A ESTRUTURA DE UM SERVIÇO DE URGÊNCIA PÚBLICO, NA ÓTICA DOS TRABALHADORES: PERSPECTIVAS DA QUALIDADE

RESUMO: Pesquisa qualitativa, exploratório-descritiva, que objetivou apreender a percepção de trabalhadores de um serviço de urgência público em relação à qualidade da estrutura local. Os dados foram coletados em abril de 2010, por meio de dez entrevistas individuais e tratados conforme o método Análise de Contúdo Temático, que possibilitou a identificação de uma categoria, amparada nas subcategorias: recursos materiais, recursos humanos, recursos físicos, recursos financeiros, instrumentos normativos e sistemas de informação. Os resultados demonstraram que os entrevistados avaliaram positivamente a estrutura, destacando a disponibilidade de recursos materiais, reformas e adequações realizadas, qualificação e capacitação profissional, repasse de recursos financeiros conforme metas institucionais, direcionamento do atendimento por meio de protocolos, e monitoramento das informações através de indicadores de qualidade. Concluiu-se que, apesar de haver certas fragilidades no setor, como alta temperatura do ambiente e déficit de recursos humanos, os trabalhadores consideram que a estrutura atende satisfatoriamente aos preceitos da qualidade.


ESTRUCTURA DE UN SERVICIO PÚBLICO DE URGENCIAS EN LA VISIÓN DE LOS TRABAJADORES: PERSPECTIVAS DE CALIDAD

RESUMEN: Investigación cualitativa, exploratoria-descriptiva, que objetivó entender la percepción de trabajadores de un servicio público de urgencias en relación a la calidad de la estructura local. Datos recolectados en abril de 2010, mediante entrevistas individuales y tratados según el Análisis de Contenido Temático, lo que posibilitó identificar una categoría, amparada en las subcategorías: recursos materiales, recursos humanos, recursos físicos, recursos financieros, instrumentos normativos y sistemas de información. Los resultados demostraron que los entrevistados evaluaron positivamente la estructura, destacando la disponibilidad de recursos materiales, reformas y adecuaciones realizadas, calificación y capacitación profesional, captación de recursos en sintonía con las metas institucionales, direccionamiento de la atención mediante protocolos, y monitoreo de información por medio de indicadores de calidad. Se concluyó que, a pesar de existir ciertas fragilidades en el sector, como alta temperatura ambiental y déficit de recursos humanos, los trabajadores consideran que la estructura cumple satisfactoriamente los preceptos de la calidad.

INTRODUCTION

Contemporary society has undergone changes in social relationships and production processes, which have increased the concerns regarding the quality of the services.

In the hospital context, which is permeated with specificities and complexities, emergency care units are challenged to incorporate quality into their management, aiming at assuring an adequate service, provided as quickly as possible, avoiding or minimizing complications and other health hazards to patients and workers.1

Aiming to improve the quality of healthcare services, in 2006 the Ministry of Health, through ordinance 3125,2 implemented the Program for the Qualification of Hospital Emergency Care in the National Health System (QualiSus). This ordinance presents several proposals, including: providing patients a service with greater comfort, service provided according to the level of risk, more effective care by healthcare professionals, and reducing the length of hospital stay.

Simultaneous with the legislative determinations, many hospitals and their respective emergency care services, in order to maintain a competitive setting and updated technology, have strived to innovate their managerial system by adopting Quality Programs, integrating, among other aspects, humanism and the satisfaction of internal and external clients.3 Quality-driven management is also concerned with the continuous improvement at all levels of the organization, generating a need for the use of evaluation systems.3

Regarding healthcare evaluation, many services have used methods founded on the triad proposed by Donabedian: structure, process and outcome.4 In this approach, structure relates to human, physical, material and financial resources, and normative instruments; process comprises activities involving healthcare professionals and patients, based on specific standards; and the outcome consists of the final product of care; hence it assesses health status and the fulfillment of standards and expectations.5

The following facts motivated the development of the present study: Donabedian’s triad permits the performance of a systematic analysis of healthcare service quality.5 Despite the advancement in emergency care service in Brazil, services in this area, particularly public services, remain overcrowded and operate under critical conditions; and human resources, particularly nursing personnel, comprise a large part of health services personnel.7

Furthermore, it is recognized that, although nursing work is considered important and necessary in every health care segment, especially in emergency care services, there is a scarcity of qualitative studies aimed at evaluating these specific services. In this view, this study was performed with the objective to identify the perception that workers from a public emergency care service have regarding the quality of the local structure.

METHODOLOGICAL APPROACH

This descriptive-exploratory study used a qualitative approach and was performed at the emergency care service of a public university hospital (267 beds), located in an eastern São Paulo state. The hospital is maintained exclusively by The Unified Health System (SUS) and is a referral center for emergency care for five cities in that microregion.

The hospital was chosen based on the following factors: 1) it adopted the Quality Culture over five years ago; and 2) it is a public emergency care service.

Since 2006, the studied hospital has maintained the highest level of quality certification (level 3 – Accreditation with Excellence), evaluated by the Organização Nacional de Acreditação (national accreditation organization).

Data collection was performed in April 2010. The participants were ten workers of the multi-professional team who worked in the emergency service and met the following criteria: time of employment in the sector of at least six months and availability to attend the interviews. In addition, the researchers prioritized workers who have worked at the service since its opening and have thus experienced the changes in the quality management system since then. The interviews were conducted until the data saturation was reached, considering the study objective.

Individual interviews were performed during the participants’ regular work hours, in a private room at the hospital. The following guiding question was used: “Tell me about your experience regarding quality management at the emergency care service”. The interviews were recorded using three digital recorders. A field diary was also used, in which the researcher, after the interviews were...
completed, would take note of her perceptions and
the participants’ reactions that were not captured
by the recorders, such as: facial expressions, pos-
tures and gesticulation.

The methodological framework used for data
treatment was Thematic Content Analysis.8

After conducting the interviews and tran-
scribing them entirely, the following stages
were performed: pre-analysis, exploration of the
material, and data treatment.8 Therefore, first a
careful reading of the statements was performed,
then specific parts were highlighted according to
the study objective. In the second stage, words
(codes) were written next to the statements that
expressed the content of the interview. Based on
this process, it was possible to identify the category
and subcategories. The notes (codes), along with
the observations, helped to make inferences and
interpretations regarding the collected data.

It should be highlighted that the participants’
statements were analyzed and discussed, primar-
ily, based on the references that address Quality
Management, Emergency Care Services, and Health
Evaluation considering Donabedian’s triad.5

In order to preserve the participants’ privacy
and differentiate them, they were identified with
the letter “I” as in “Interviewee”, followed by a
numeral corresponding to the order in which the
interview occurred.

With the purpose of facilitating the interpreta-
tion of the data, some excerpts were adjusted/cor-
rected without changing their respective contents.

In compliance with Resolution 196/96 of the
Brazilian National Health Council,9 this study was
approved by the Maringá State University Hu-
man Research Ethics Committee (review number
013/2010). Before being interviewed, the subjects
were informed about the study objectives and
assured their right to refuse to participate, as
well as the anonymity of their participation. All
subjects read and signed the Free and Informed
Consent Form.

PRESENTING AND DISCUSSING THE
RESULTS

Analyzing the profile of the 10 participants,
it was observed that most are female (8), aged
between 25 and 47 years. Regarding education,
five subjects had a graduate degree, two had
completed secondary education, one completed
primary education and one had an incomplete
primary education level.

Regarding the professional category and the
time employed at the hospital, the workers were
distributed as follows: Social Worker (1), work-
ing at the hospital for eight years and six months;
Administrative Clerk (1), nine months; Janitor (1),
three years; Nurse (1), four years and six months;
Physiotherapist (1), three years; Physician (2), both
working in the hospital for nine years; Receptionist
(1), eight years; Security guard (1), 10 years; and
Nursing Technician (1), 10 years.

The category that emerged from the state-
ments and that will be discussed herein is entitled
“An examination of the structure of the emergency
sector”, supported by the subcategories: material
resources, human resources, physical resources,
financial resources, normative instruments, and
information systems.

An examination of the structure of the
emergency sector

The material resources in the emergency care
service

Materials refer to “supplies or product,
physical in nature and with a limited durability,
used in the care procedures/activities provided to
inpatients”,10:556-7 and can be classified as permanent
or consumption material. When managing hospital
materials, it is important to determine the resources
considered necessary for the care or support activi-
ties, considering the quantitative and qualitative as-
pects, as revealed in the workers’ statements: [...] the
material are good, there’s no shortage, there’s everything
(...) (E1); [...] we always receive good quality material
and when something new is about to arrive, it comes to
us to test first. That means that if we don’t approve it, it
doesn’t stay. So, it’s not only private hospitals that have
good things; here we do too and we test it first (E2); [...] here we have the available material and equipment and
work to try to improve them (E5).

Based on the statements, it is clear that the
material is available in the appropriate quantity
and quality for the professionals. This fact is im-
portant, as it permits workers to carry out their ac-
tivities safely and continuously. In the emergency
sector, greater importance is given to material
adequacy, considering that time is a determining
factor in providing care, and that lack of supplies
can cause irreversible damage to the patient.

The chance to test the material before pur-
chasing it, as reported by the subjects, reinforces
the institution’s commitment towards the quality and refining of hospital management. In addition, a participative management, one that respects the worker’s opinion regarding a product or equipment, results in professional fulfillment and workers’ commitment/accountability towards achieving excellence.11

Opposing the reality observed in the present study, many public hospitals in Brazil suffer a shortage of material resources and are thus forced to adapt and improvise, which often implies the unsafe use of materials and resources. Situations such as these cause physical and psychological burdening among workers, which is even more aggravating in the emergency care setting, when there should be no interference or interruption in the service.12

On the other hand, excessive material resources can lead to waste, thus reducing its availability in the service and the acquisition of new products. In this sense, to achieve quality, it is also important to consider the optimization of resources and the financial cost of care,5 so that unnecessary expenses do not become barriers to providing quality service.

The physical resources in the emergency care service

When a person arrives at an emergency care service, their first impression is usually related to the physical structure, which is often in unsatisfactory condition. Although this is the reality of many institutions, the subjects’ statements point out that a different situation is seen in the studied service: [...] I think it has improved a lot, there was an issue with the critical conditions of the restrooms, but now they are pretty good. [...] I think it’s good now (E7); the physical structure improved 100%. [...] Our patients used to stay out in the aisles, on stretchers. Now, with the renovation [...] they aren’t all crowded together. [...] each patient has a spot (E2).

It was observed that the subjects had a positive opinion of the environment and physical structure of the emergency care service. Through facial expressions and gestures of satisfaction, the participants reported the renovation and adjustments that were made to meet the demands of clients and workers. In healthcare, these types of data are important because the evaluation of a structure is founded on the premise that the facilities are adequate and this tends to result in a more qualified process.5 On the other hand, it is believed that inappropriate physical resources can cause harm to the processes and result in undesirable outcomes.

Despite not being highly visible and measurable, the physical resources exert a positive or negative influence on the people cared for in hospitals. A patient who arrives at an emergency service is obviously distressed and in pain, and does not deserve to be submitted to additional discomforts stemming from an inadequate physical structure.

Therefore, comfort and well-being should be high priorities in emergency rooms, allying with the Ministry of Health National Humanization Policy (NHP). Among other aspects, the NHP addresses the concept of hospital ambience, which refers to the “[...] treatment given to the physical area understood as a social and professional environment of interpersonal relationships that should promote welcoming, humane and problem-solving care [...]”13,5, focused on the privacy and individuality of the subjects involved. The elements of the environment that interact with man (color, odor, noise, lighting, morphology) are highlighted with the purpose of guaranteeing the comfort of workers, patients and their social network.

The relationship between the physical environment and health/disease has been considered an important aspect in hospital planning, which, in addition to the prevention of infection, addresses the influence of the environment on the therapeutic process of patients by measuring ventilation, privacy and lighting.14

It should be reinforced that the construction plan of a hospital does not always consider the physical structure/environmental needs of patients and workers. Therefore, the problems are only seen after the construction has been completed and in the workers’ daily practice, as revealed in the following statement: our worst problem is the temperature. Sometimes it affects patients directly. They get irritated, sometimes with low blood pressure. [...] the service area is very hot (E6).

The multiprofessional health team plays an important role in managing the hospital’s physical resources, because from recognition of the healthcare needs, it is possible to program, execute and evaluate the architectonic project, considering the current legislation.15

In the aforementioned scope, the nurse category is highlighted because it plays the role of the leader and manager of hospital units, including emergency care. Therefore, nurses are able to associate the activities developed by the professionals...
with the physical structure, in order to plan a safe and comfortable environment.\textsuperscript{5,6}

According to the participants’ statements regarding the studied institution, although the physical area is adequate, there is a need to improve the temperature of the environment considering that this factor affects the comfort of patients and professionals, and, consequently, the quality of the service provided. Within this perspective, Donabedian\textsuperscript{5} uses the term “amenities” as being one of the properties of quality, referring to the conditions, comfort and esthetics of healthcare service facilities and equipment.

**Human resources in the emergency care service**

Technological innovations have gained more and more space in hospital institutions. However, in the area of health care, human resources remain at the center of production processes because human beings are the raw material, just as the execution of work depends on the people.\textsuperscript{7}

One of the aspects related to human resources, stated by the subjects, refers to the need for an appropriate number of professionals according to the number of cases, as observed in the following excerpts: *I think that the number of professionals depends on the demand of the patients, and we also have to consider the demand of the hospital [...]. The more patients, and the higher the complexity, the stronger the need for a greater number of professionals (E6); [...] the number of workers [...] increased and I still think there should be a few more because some days it gets crowded here. The hospital here does not only serve patients who are referred here- there are also walk-in patients (E2).*

According to the participants, human resource needs at the emergency care service are estimated based on the number and complexity of the services that are offered, which are neither fixed nor predictable. This unstable climate is a marked feature of this particular healthcare service and makes the staffing in this sector a challenging task that demands constant revisions.

In addition to the aforementioned facts, workers cope on a daily basis with the growing demand of walk-in patients in emergency care services, caused, among other factors, by the increasing urban violence and poor problem-solving character of primary and secondary healthcare services of the health system, which worsen the problem related to the personnel available for the number of individuals assisted.\textsuperscript{1}

Considering the health quality approach, human resources are considered a preponderant factor, in both qualitative and quantitative terms, because it is only through the commitment and accountability of the people involved in healthcare that it is possible to achieve an organizational culture aimed at improving quality, in which development is one of the major critical issues faced by health quality management.\textsuperscript{16}

It is emphasized that the shortage of human resources triggers an increased work rhythm and a consequent overload on workers, who must complete more tasks in less time. This situation is a factor causing stress among workers and has a detrimental effect on the quality of the service.\textsuperscript{17}

The routine in the emergency care sector, considering its already mentioned particularities, demands workers to develop technical and cognitive skills in order to become capable of dealing with the unexpected, showing agility and security in their performance. In this view, it is important to qualify and update the knowledge of these workers, as observed in the following statements: *[...] you have skilled people here. So, you aren’t stressed by other things besides the patient’s critical condition itself. You become worried about the patient, but you know you’ll offer them good support, good service (E4); [...] we have to study to do better, better every time. You can’t get behind in time; you have to think about evolution in order to provide good service (E2).*

It is observed in these statements that the studied workers seek professional qualification and training, associating these with the quality of service provided. This idea is in agreement with the present study framework,\textsuperscript{5} which states there is a direct relationship between continuous education/professional training and health quality.

The subjects’ statements also suggest a relationship with the guidelines of the Program for the Qualification of Emergency Hospital Care,\textsuperscript{2} which emphasizes the need to train professionals with higher technical and education levels, and recommends the implementation of Emergency Education Centers (*Núcleos de Educação em Urgências*) in every city in Brazil, with the objective of creating spaces for institutional knowledge regarding education and qualification for emergency care personnel at all levels of the health system.

It is, therefore, understood that it is the emergency care sector, which is the entrance to the hospital, that must have the greatest number of experienced and skilled professionals, considering
that this is where workers face the need to care for the most diverse patients, make quick decisions, and perform their activities with safety, using different levels of competencies.

**The financial resources in the emergency care service**

In the hospital setting, emergency care units use physical, material and human resources to offer services in life-threatening situations. This whole apparatus has a cost, and this was addressed by one of the subjects: *I can make a difference in my unit, but this also depends on the budget. We have a budget within the Health Department, and it’s a fixed budget. If we achieve the goals, we receive the money. If not, we receive less (E5).*

The statement above refers to one of the changes that has taken place in the Brazilian health sector; i.e., the emphasis on municipal administration, which started with the implementation of the SUS. This has granted the Municipal Health Departments more autonomy and, thus, they have become accountable for providing healthcare services and, consequently, for managing their financial resources.18

The cities, which have become budget administrators for health care, supervise the activities that are developed with the purpose of ensuring they are in agreement with what has been planned, identifying situations that require correction or intervention. To do this, goals are established and financial resources are transferred based on the achievement of those goals. Under this methodology, the goals are always modified, and this translates into the continuous process of seeking to improve and qualify emergency care services.18

Working towards health quality also means working within a budget. Donabedian16 defines health service quality based on seven components, with special emphasis on efficiency, which relates to measuring the cost of one specific improvement in health that is achieved. Therefore, if two healthcare strategies are equally efficient and effective, the most efficient is that which has the lowest cost.

It must also be highlighted that it is possible to reach a specific point in which adding new costs will not change the level of improvement already achieved.16 Therefore, there is no use in increasing the financial resources in health if there is no competent management, able to plan and equitably distribute the available resources, thus avoiding waste.

Regarding the increase in costs and waste in health care, one must consider the risks that may result from excessive investments that do not produce benefits for the patients. Thus, the rational use of supplies, provided no harm is caused to healthcare, should be the focus of attention among the professionals.16

The subjects’ aforementioned experiences demonstrate that achieving the desired quality must be balanced with the availability of money that, because of its public nature, assigns administrators and workers the social responsibility and ethics regarding its utilization.

**The normative instruments in the emergency care service**

The statements evidence that the subjects, in their evaluation of the emergency care service, value the existence of normative instruments and protocols: [...] we managed to organize the work when the institutional protocols were implemented. We established routines and standardized conducts, for instance, regarding sedation, drug dilution [...] The protocols were great advancements in emergency care and have provided greater integration between professionals of this sector and other sectors of the hospital (E4); With the implementation of emergency care services, we identified which patients we would serve and elaborated some protocols according to the proposal for a service with quality and humanization [...] (E7).

Because time is a crucial factor in emergency care, it is important and necessary to organize the service, as observed in the statements. Hence, it is observed that it is possible to guide emergency care activities by first identifying the profile of the population that will be served, so that their needs are met. Furthermore, the activity of planning the actions to be performed and their operationalization should involve each and every professional from the unit, from patient admission to discharge, thus requiring the creation of a space for discussions and reflections that will definitely result in quality actions.

For some people, emergency care is synonymous with disorganization and improvisation, and this makes establishing norms and guidelines more difficult. Nevertheless, because emergency care involves human life and health, some believe that health institutions must have formal instruments,19 for the purpose of standardizing actions and organizing the environment/service according to the workers’ needs. In this perspective, the authors recommend that common sense
and prudence should be prerequisites to avoid establishing fixed decisions.

In addition to what has been stated above in terms of standardization, the Quality Management approach establishes a continuous improvement of actions. Therefore, the protocols and guidelines must be systematically reviewed and readjusted, considering that the search for excellence in organizations through processes or ordering and organizing healthcare is dynamic and continuous.20

Another important factor in the management of quality programs is the effective participation of all professionals involved in the healthcare process. One study performed in an orthopedics and trauma unit of a university hospital showed that the implementation of protocols developed in systematic meetings and discussions with workers improved the percentage of some quality indicators, such as: reduced length of stay, mean time of surgery and the mean waiting time for surgery. In addition to benefiting the patients, these results also promote reductions in all costs directly associated with hospitalization.20

For an emergency care service, being in line with the other hospital sectors is not enough; it is also necessary to establish an appropriate relationship with the health system as a whole. The activity of organizing and guiding the relationship established between services was addressed in the following statement: We have protocols for everything, and everything is standardized. So, we are not stressed with new patients, because the SAMU does not call the “zero vacancy” policy on us. Why? Because they already know which patients must be referred here. Everyone knows (E4).

The Ministry of Health Ordinance 2048/200221 addressed hospital admissions under the policy of “zero vacancy”, which has to do with transferring patients without the existence of an available bed. This situation, despite being an attempt to guarantee accessibility to health care, can cause overcrowding and disorganization in the emergency care service, with consequent stress among workers. This setting of possible dissatisfaction is also characterized by the imbalance in relationships between workers of the emergency care sector, who feel overwhelmed and disrespected, as well as between them and professionals from other services, such as the Mobile Emergency Service (SAMU), who must transfer patients quickly so that their care is not interrupted.

The subject’s statement, however, evidences a setting that reveals there is integration between the emergency care sector and extra-hospital services. This is admirable because emergency care that is guided by normative instruments tends to support decision-making that results in more time for the patient and better quality care within the service.

**The information system in the emergency care service**

In today’s globalized world, information has gained more and more importance in the production chain. In this context, emergency care services, which have also been affected by this phenomenon, produce a surfeit of data that can be transformed into information that supports the management of care, as verified in the following statements: with the computer system [...] it’s possible to generate a code according to each patient’s case. [...] In this way, we are able to obtain the statistics of the individual services (E8); we track the service time in the emergency rooms, we rank the risk, the waiting time for an electrocardiogram, tomography. We track how long the patient stays in the sector. They aren’t supposed to stay long. [...] why is the patient staying so long? (E10).

For some institutions, achieving a satisfactory standard in emergency care is, often, utopic-a desire distant from reality. Nevertheless, the workers’ statements reveal that, based on the information updated on the computerized system, it is possible to code the patients’ profile and analyze if they are in line with the mission of the institution.

Furthermore, when healthcare indicators such as length of stay are used, quality is no longer an abstract and totally subjective aspiration, because it allows for an evaluation of the service, and, most of all, it permits workers to make improvements.16 In addition, using a statistical instrument, as stated by the subjects, permits the use of concrete data to make a quick analysis of the situation, which, in turn, helps workers to make decisions more safely, increasing the chance of achieving quality outcomes.16,22

The evaluation systems using indicators also permits the ability to make a comparative analyses outside of the hospital, from a local, regional, national and international perspective, and to identify the evolution of a specific period of time regarding the service performance. These analyses produce information that supports actions for improvement and are consistent with the philosophy of Quality, which has the continuous improvement of the service based on concrete data as one of its primary principles.3
FINAL CONSIDERATIONS

It is considered that the present study met the proposed objective, as it was revealed that the subjects made a positive evaluation of the structure of the service where they are employed, highlighting the following: the availability of material resources in the appropriate quality and quantity, renovations and adjustments made to the physical structure, professional qualification and training, the transferring of financial resources based on institutional goals, guiding of the service by protocols established with intra- and extra-hospital services, and the tracking of information using quality indicators.

It is important to emphasize that management centered on quality considers the achievement of standards of excellence and the expectations of internal and external clients, which demands boldness in implementing changes in the institution, which often first involve the structural aspects of the services. This occurs due to the fact that the structure dimension, compared to the process and outcome, has more immediate and visual impact because it promotes an ambiance of motivation within the organization and favors the continuous promotion of improvement in the other dimensions.

It is believed that the knowledge produced through this study contributes to the foundation and understanding of the importance of the structure dimension in emergency care services, and by extension public services which, by adjusting their structural aspects to the workers’ and patients’ needs, increase their chances of producing quality service.

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