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# Assessment of the work conditions in hospitals of Natal, Rio Grande do Norte State, Brazil\*

AVALIAÇÃO DAS CONDIÇÕES DE TRABALHO EM HOSPITAIS DE NATAL, RIO GRANDE DO NORTE, BRASIL

EVALUACIÓN DE LAS CONDICIONES DE TRABAJO EN HOSPITALES DE NATAL, RIO GRANDE DO NORTE, BRASIL

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## ABSTRACT

This study identified how health professionals assess work conditions in different hospitals and verified how these conditions affect labor satisfaction. The sample was composed of 213 professionals from several healthcare fields. The analysis of the results indicated a distinct profile among the hospitals when it comes to work conditions. In a general perspective, the study observed low labor quality averages in State-run hospitals, while the highest ones were observed in the philanthropic hospital. This result corroborates the current condition of Brazilian public health. It also significantly associates labor satisfaction with the variables of family income and workplace. Therefore, conflicts in this scenario are considered as inevitable due to the precarious structure of some public health institutions; however, these problems can be foreseen and solved if hospitals create a free, accessible expression channel to all agents.

## KEY WORDS

Working conditions.  
Job satisfaction.  
Personnel, hospital.  
Occupational health.

## RESUMO

Buscou-se identificar como os profissionais de saúde avaliam as condições de trabalho em hospitais de diferentes naturezas, e verificar como estas condições interferem na satisfação laboral. A amostra foi composta por 213 profissionais de diferentes categorias. A análise dos resultados evidenciou um perfil distinto entre os hospitais no tocante as condições de trabalho. De forma geral, apontou as menores médias no hospital estadual, enquanto as maiores foram observadas no hospital filantrópico; resultado que corrobora o atual cenário da saúde pública do País. Ressalta-se ainda, uma associação significativa entre satisfação no trabalho e as variáveis renda familiar e hospital em que o profissional atua. Acredita-se que os conflitos nesse cenário são inevitáveis, frente à precária estrutura de algumas instituições públicas, contudo, são previsíveis e passíveis de solução se o hospital dispuser de um canal de expressão livre e acessível a todos os agentes.

## DESCRIPTORES

Condições de trabalho.  
Satisfação no emprego.  
Recursos humanos em hospital.  
Saúde do trabalhador.

## RESUMEN

Se buscó identificar como los profesionales de la salud evalúan las condiciones de trabajo en hospitales de diferentes naturalezas y verificar como estas condiciones interfieren en la satisfacción laboral. La muestra estuvo compuesta por 213 profesionales de diferentes categorías. El análisis de los resultados evidenció un perfil distinto entre los hospitales en lo que se refiere a las condiciones de trabajo. De forma general, apuntó los menores promedios en el hospital estatal, en cuanto las mayores fueron observadas en el hospital filantrópico; resultado que corrobora el actual escenario de la salud pública del país. También, se resalta una asociación significativa entre la satisfacción en el trabajo y las variables renta familiar y hospital en que el profesional actúa. Se piensa que los conflictos en ese escenario son inevitables, frente a la precaria estructura de algunas instituciones públicas, sin embargo, son previsibles y pasibles de solución si el hospital dispusiese de un canal de expresión libre y accesible a todos los agentes.

## DESCRIPTORES

Condiciones de trabajo.  
Satisfacción en el trabajo.  
Personal de hospital.  
Salud laboral.

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## INTRODUCTION

Nowadays, evaluative actions in health care are regarded as permanently needed, since this is the only way to foresee new paths that should be taken. It must also encompass all individuals involved with the production, provision and consumption of services in this area<sup>(1)</sup>. Therefore, it was possible to turn the spotlight towards the needs and interests of health professionals whose well-being has been long neglected.

Working conditions in the workplace have been considered inadequate because of particularities in the working environment, as well as because of the unsound activities that must be performed<sup>(2)</sup>. The lack of qualified personnel, low salaries, insufficient workforce, higher exposure to health-threatening risks and a multitude of different working shifts generate difficulties for health system management, which has a negative effect on service quality, thus compromising the satisfaction of the professionals involved<sup>(3-4)</sup>.

Satisfaction in the workplace is a theme of intricate complexity and difficult definition. After analyzing innumerable possible definitions and conceptions found within the current scientific literature, it was chosen to define it in this present study, as a result of the evaluation which the individual has about his or her job or about the personal fulfillment that is achieved through this activity, resulting in the person's well-being<sup>(5)</sup>. Such a personal and subjective state can vary from person to person, depends on the circumstances involved, and changes through life. Furthermore, it is subject to internal and external forces to the workplace<sup>(6)</sup>.

One study<sup>(7)</sup> has showed that some aspects of professional identity are altered under different hospital environmental contexts, which will ultimately be reflected as professional conduct variations when dealing with the health system user. Therefore, the relationship that is established in the hospital scenario is circumscribed to an institutionalized context, since the latter composes the rules, norms and conventions which orient a great deal of supportive practices, determining limits and possibilities for health group actions.

For that reason, anyone who attempts to describe the hospital as an institution whose sole purpose is treating the body will make a huge mistake. Despite the emphasis

on curative processes, these institutions maintain their condition as a social product for intersubjective exchange<sup>(8)</sup>.

Health institutions in Brazil work with high complexity levels, which generates even more demanding solutions for the health teams. Professionals also are at the risk of developing physical and mental pathologies due to the poor working conditions. These two factors, in addition to the *labor satisfaction* theme being useful to analyze the performance and productivity at work and develop more effective strategies for workforce health promotion, encouraged the development of the present study, which could identify how health professionals evaluate working conditions in the hospitals they work and verify how these working conditions interfere with their satisfaction.

## METHOD

This is a descriptive study carried out in four hospitals in the city of Natal, capital of Rio Grande do Norte state, in the Northeast region of Brazil, between September 2006 and December 2007. The initial selection criterion for the hospitals was their institutional type: state, philanthropic, university and private. The other criterion was the accessibility for the research team.

The chosen hospitals were of small and large scale and, together, offer in the State of Rio Grande do Norte, services of low, medium and high complexity. It was observed that during the data collection period, the chosen private hospital was experiencing financial difficulties and the pediatrics and maternity wards, as well as a large number of beds from other wards had been deactivated.

A total 213 individuals were pooled together in this study, pertaining to the following professions: Nursing Auxiliaries/Technicians (n=115), Nurses (n=31), Physicians (n=47); Social Workers and Psychologists were grouped under *Others* (n=20). Table 1 presents health professionals according to their professional category and type of hospital. Choosing these professionals took in consideration the direct contact they have with hospital end-users, thus favoring the evaluation of the variables used in this study. The study sample was defined through stratified proportional method with a confidence interval of 95%. The sample loss was of 24 individuals.

**Table 1** - Health care professionals according to professional category and type of hospital - Natal - 2007

Professional Category	Type of Hospital			
	State	Philanthropic	Private	University-Based
Nursing Auxiliaries/Technicians	65	20	23	07
Nurses	18	05	05	03
Physicians	29	11	02	05
Others	13	03	02	02
<b>Total</b>	<b>125</b>	<b>39</b>	<b>32</b>	<b>17</b>

All professionals that participated in the survey were not identified in the questionnaires, which allowed them to be kept completely anonymous. This study was conducted in compliance with Resolution 196/1996 of the National Health Committee. Data collection started after authorization from the Research Ethics Committee at Federal University of Rio Grande do Norte (protocol 052/06). Participants were approached at their workplace. The responsible researcher and/or Psychology undergraduates informed them about the study and clarified any doubts they had. After providing written consent, the participants received the questionnaires.

### Collection Instrument

Data collection was performed using a semi-structured, self-administered questionnaire that had been previously tested in a pilot program. In the present study, only the two first parts of the questionnaire were used: Part 01 – Sociodemographic and Professional Background Characteristics; Part 02 – Made up of 22 items (Chart 1) referring to Health Service Quality Indexes<sup>(9)</sup>. It must be noted that, for this study, only the Indexes from 1 to 12 were used, which directly evaluate health professionals' working conditions.

**Chart 1** - Health quality service indexes - Natal - 2007

- 1 - Opportunity to discuss the work with your superiors
- 2 - Opportunity to make suggestions for improvement
- 3 - Communication quality among health professionals
- 4 - Cooperation among professionals
- 5 - Work appreciation from superiors in the hospital
- 6 - Worker satisfaction in the workplace
- 7 - Comfort offered to the professionals at the hospital
- 8 - Safety against occupational health risks
- 9 - Hospital interest in workers' development and improvement
- 10 - Benefits offered to professionals
- 11 - Equipment and working material quality
- 12 - Salary
- 13 - Information quality offered to health system users
- 14 - Opportunities given to health system users to formalize complaints
- 15 - Health professionals' work quality
- 16 - Hospital attendance efficiency
- 17 - Health professional punctuality
- 18 - Attendance quality for the user
- 19 - User satisfaction
- 20 - Relationship between the user and health professionals
- 21 - Respect and privacy for the user
- 22 - Attention given to the user

Data from the second part of the questionnaire were organized as follows: in one column, health service quality indexes were presented and in the four next columns the

type of the investigated hospitals was presented (State, Philanthropic, Private and University). The participants were asked to score each index from zero to five (higher values indicated better evaluation of the indicator) only considering the type of the institution where they worked.

### Collection Procedures

The questionnaires were administered individually and/or collectively. The participants were selected from the morning, afternoon and night shifts by convenience in the referred institutions. Data collection was also assisted by Psychology graduates from Federal University of Rio Grande do Norte properly trained by the researcher in charge.

It is imperative to note that data collection in the State hospital was hampered for approximately a month due to health professionals being on strike.

### Data Analysis

The collected data was stored in a databank and analyzed using *Statistic 6.0*. At first, analysis of variance was used to verify if there were any statistical differences between the hospitals in terms of scores attributed to worker satisfaction in the workplace. In order to verify the relationship between hospital type and worker satisfaction, Tukey Test was used. Multiple Linear Regression Analysis was used to identify which variable influenced the referred satisfaction. Finally, Chi-Square Test was performed to verify the possibility of association between the categorical variables.

## RESULTS

The socioeconomic profile showed that most health care professionals were women (72.77%), with age between 31 and 40 years (36.15%), and most have secondary education (54.46%). Among these professionals, 54.46% are nursing auxiliaries/technicians and have a total family income of 1 to 5 Brazilian minimum salaries, 52.11% work more than 40 hours a week and 32.86% have been in this area for 11 to 20 years.

Table 2 shows Mean Values (M) and Standard Deviation (SD) for the scores given by all interviewed health professionals considering the hospitals where they work. The lowest scores in the public hospital were given to: Comfort offered to the professionals at the hospital – 1.54 (SD 1.39); Benefits offered to professionals – 1.77 (SD 1.45); Salary – 1.95 (SD 1.33). In the university hospital they were: Comfort offered to the professionals at the hospital – 1.7 (SD 1.1). The highest mean values were observed mainly in the philanthropic hospital and were: Hospital interest in its workers' development and improvement – 4.33 (SD 0.7); Safety against occupational health risks – 4.23 (SD 0.74); Cooperation among professionals – 4.18 (SD 0.76).

**Table 2** - Mean Values (M) and Standard Deviation (SD) for the scores attributed by health care professionals considering the institution where they work - Natal - 2007

Indexes	State (N = 125)		Philanthropic (N = 39)		Private (N = 32)		University (N = 17)	
	M	DP	M	DP	M	DP	M	DP
Opportunity to discuss work with superiors	2.78	1.69	4.15	1.04	3.03	1.53	4.05	1.02
Opportunity to make suggestions for improvement	2.18	1.70	3.87	1.15	3.03	1.53	3.47	1.17
Communication quality among health professionals	2.94	1.35	4.03	0.93	3.78	1.07	3.64	0.86
Cooperation among professionals	2.81	1.40	4.18	0.76	3.81	1.23	3.00	1.22
Work appreciation from superiors in the hospital institution	2.71	1.48	4.13	0.80	3.23	1.26	3.76	0.83
Worker satisfaction in the workplace	2.50	1.45	3.97	0.96	3.28	1.14	3.11	0.92
Comfort offered to the professionals at the hospital	1.54	1.39	2.87	1.30	3.28	1.44	1.70	1.10
Safety against occupational health risks	1.78	1.51	4.23	0.74	3.53	1.24	2.64	1.69
Hospital interest in its workers' development and improvement	2.16	1.62	4.33	0.70	2.69	1.45	3.35	1.32
Benefits offered to professionals	1.77	1.45	3.77	1.04	2.66	1.33	2.35	1.53
Equipment and working material quality	2.20	1.40	3.82	0.97	4.16	0.99	2.58	1.69
Salary	1.95	1.33	3.44	1.14	2.75	1.19	2.76	1.14

In the Multiple Linear Regression analysis, the item *Worker satisfaction in the workplace* was considered as a dependent variable. Table 3 shows the variables that

had a significant influence on the scores attributed to the dependent variable considering the investigated hospital categories.

**Table 3** - Variables that influenced the dependent variable *Worker satisfaction in the workplace* according to Stepwise Multiple Linear Regression, according to type of hospital - Natal - 2007

Independent Variables	Hospital Category	R <sup>2</sup>	b <sub>j</sub>	p-value
Opportunity to discuss the work with your superiors	State	53.23%	0.32	0.000002
Cooperation among professionals	State	—	0.31	0.000029
Salary	State	—	0.35	0.000002
Communication quality among health professionals	Philanthropic	97.35%	0.59	<0.000001
Benefits offered to professionals	Philanthropic	—	0.42	0.000091
Opportunity to make suggestions for improvement	Private	71.52%	0.28	0.001906
Equipment and working material quality	Private	—	0.57	<0.000001
Equipment and working material quality	University	61.90%	0.43	0.000179

Table 4 shows that only the variables Family Income ( $p=0.00676$ ) and Type of Hospital ( $p=0.00000$ ) are associated with the dependent variable.

**Table 4** - Chi-Square Test between the dependent variable *Worker satisfaction in the workplace* and the categorical variables with a significance level of 5% - Natal - 2007

Categorical Variables	p-value
Gender	0.26563
Level of Education	0.05568
Profession	0.16895
Family Income	0.00676*
Type of Hospital	0.00000*

\* Significant association with the dependent variable

## DISCUSSION

According to the results, most participants were women and work as nursing auxiliaries/technicians, a situation that was also observed in a previous study<sup>(10)</sup>. It has been observed that most health care professionals are women. Such professions include nursing, nutrition, psychology and social work. One possible reason for this fact is the existence of stereotypes about these particular areas. Professions that deal with taking care, helping and comforting, imply, according to stereotypes, a condition of femininity. As for the medicine area, in 2004, 69.8% of Brazilian physicians were men. However specific medical areas where caring is more pronounced, such as pediatrics and gynecology, most practitioners were women<sup>(11)</sup>.

The aforementioned data lead to another gender issue: the twofold work journey faced by women. In addition to being a health professional, many also play family roles as wives, mothers and/or housewives. These situations can overburden her work load, which can also significantly compromise her professional performance, since this increase in activities, added to the overwhelming hospital routine,

could cause several mental and psychological pathologies, including stress, depression, burnout, and cumulative trauma disorders.

As for work conditions, the four investigated hospitals presented distinct profiles. According to table 2, it could be noted that the highest scores were attributed to the philanthropic hospital, followed by the private and university hospitals. The lowest scores were associated to the state hospital, making it evident that such health institution faces innumerable deficiencies, mainly concerning: comfort offered to health professionals, safety against health risks, benefits offered to hospital professionals, equipment and material quality and salary.

Although hospital humanization is a broadly discussed topic, with several studies<sup>(9,12)</sup> addressing this issue with the purpose to contribute to improving the working conditions of hospital personnel, it is observed there is great disrespect with hospital professionals and poor work conditions at state hospitals. It should be emphasized that strikes and movements for better salaries and work infra-structure are frequent in these institutions, which causes further loss to service quality.

The present study results corroborate with our health care system's current panorama in Brazil, which is suffering from a lack of resources, and this situation gets worse as the country's problems increase<sup>(13)</sup>. As resources run thinner and thinner, social differences arise and so does the need for care services, which will ultimately pose a serious challenge in terms of quality health care, since the professionals in this area will find themselves surrounded by an environment that is diametrically opposed to what one may call an ideal scenario<sup>(14)</sup>.

A completely different situation was observed in the philanthropic hospital. Such fact may be associated, mainly, to a quality program developed by the hospital trying not only to improve attendance quality for the patients, but also to implement a system for the workers and professionals to speak their minds and be heard.

The professionals from the private hospital, despite the financial difficulties experienced during the data collection period, showed scores from 2.66 to 4.16, which were rea-



sonably good when compared to those given to the public institution. It is believed that such result might have been influenced by the feeling of work instability and the fear of losing their position.

When it comes to the item *Worker satisfaction in the workplace* (a dependent variable in the present study), a similar situation is observed in relation to the given scores: the philanthropic hospital had the highest score, the private hospital came in second, followed by the university hospital, all the state hospital came in last. Apparently, most professionals who are unsatisfied with their work are currently in the state hospital. Once again, this gives evidence of the precarious conditions of many state hospitals in Brazil. When faced by strenuous financial conditions, it is observed in these institutions, mainly public hospitals, that workers are submitted to long and exhausting work shifts, high exposition to chemical and physical risk-factors, lack of proper professional knowledge, among many other stressful occupational agents inherent to the job. This eventually affects their satisfaction towards work and will later compromise service quality<sup>(15)</sup>. A study performed in 2005<sup>(16)</sup> obtained a similar result, showing that professionals from a public hospital presented a lower level of satisfaction compared to workers of a private hospital.

The variables that most significantly influenced the item *Worker satisfaction in the workplace* were as follows: in the public hospital, with 53.23% of variability: Opportunity to discuss the work with your superiors, Cooperation among professionals and Salaries; in the philanthropic hospital, with 97.35% of variability: Communication quality among health professionals, Benefits offered to professionals; in the private hospital, with 71.52% of variability: Opportunity to make suggestions for improvement, Equipment and working material quality; finally, in the university hospital, with 61.90% of variability: Equipment and working material quality.

Even though socioeconomic data had no significant effect on the Multiple Linear Regression, when concerning the dependent variable, it was verified in the Chi-Square test (Table 4) that there was a significant association of this particular variable with Family Income and with the Type of Hospital. An opposite situation was found in a previous study<sup>(12)</sup>, which found a significant association among the variables Age, Level of Education and Employment Status (Public or Private), thus verifying an increase in satisfaction with age and a decrease with education.

The present study results show there are very distinct situations among different hospitals. Such situations range from material needs to human needs, which are here repre-

sented by the substandard communication quality within the institution. It is, therefore, concluded that the subjects of this quality-lacking environment behave themselves according to the particular environment that surrounds them. This shows the existence of an organizational culture which needs to be carefully considered for a proper understanding of the results, because, this situation, besides possessing a political aspect, as it expresses symbolic elements capable of assigning order and meaning, also acts as an element of communication and consensus as well as concealing the relationships of domination within these institutions<sup>(17)</sup>.

Another element to be considered is the fact that the present study gives evidence of the situation in hospitals located in Rio Grande do Norte, in the Northeast region of Brazil; a state permeated by innumerable social hardships<sup>(18)</sup> which have a significant effect on public health organization management.

## FINAL CONSIDERATIONS

The present study has a few limitations. First, the descriptive analysis only permitted to study associations between variables, with no possibility of establishing causality. Another point to be noted is the reduced potential of generalization, because for such purpose a larger study group would be necessary. It must also be taken into account that unique differences between individuals, as well as the particular organizational situation of each health institution, although not evaluated in this study, are components that may affect the study.

Based on the data presented and discussed, as well as previous studies on the same topic, there is an urgent need for further studies, since precarious working conditions may lead to major work dissatisfaction, which, in turn, can cause intense somatic suffering and many other diseases triggered by mental distress.

Because of the growing level of complexity demanded by health services, it is clear that conflicts are inevitable, because, besides being subjected to low salaries, poor working conditions and excessive demand, this professional activity is, by itself, highly anxiogenic, due to the constant contact of these professionals with pain and suffering. This produces a significant level of psychic distress and consequent professional dissatisfaction. However, these conflicts are predictable and solvable when the hospital allows its workers to voice their concerns and preoccupations through an impartial and effective means that ought to be accessible to everyone.

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