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# Perception of Quality of Care Among Adult Patients in a University Hospital in Asunción, Paraguay \*

Percepción de la calidad de la atención de pacientes adultos en un hospital-escuela de Asunción, Paraguay

Percepção da qualidade do atendimento em pacientes adultos em um hospital universitário de Assunção, Paraguai

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#### **ABSTRACT**

**Background**: The present document constitutes a study on the perception of the quality of care among adult users in the outpatient and emergency services of a hospital located in the metropolitan area of the city of Asunción, Paraguay, during the period from November to December 2014. It is worth noting that this evaluation took place before the reform of the corresponding spaces, specifically in the emergency and outpatient services for adults. **Purpose:** To describe the perception of users (patients) regarding the quality of health care and identify processes that may require adjustments to improve the quality of care in the emergency and outpatient services for adults, from the perspective of users who used these services daily in the year 2014. **Methods**: Descriptive cross-sectional study with a quantitative approach through a CQC questionnaire. **Results**: 99.2 % of emergency users and 99.6 % of outpatient users would recommend the hospital's service. These data reflect the overall satisfaction of users with the services provided by this prominent national hospital, demonstrating their willingness to return on future occasions, with percentages of 99.4 % and 99.3 % in emergency and outpatient users, respectively. **Conclusion**: it is relevant to emphasize the high satisfaction experienced by respondents regarding the medical care received during the analyzed period.

**Keywords:** health care access and evaluation; health care management; health sciences and services; human resources training in health; identification of health problems; quality of health care; quality of health services

#### **RESUMEN**

Antecedentes: El presente documento corresponde a un estudio acerca de la percepción de la calidad de atención de usuarios adultos en los servicios de consulta externa y urgencias de un hospital ubicado en la zona metropolitana de la Ciudad de Asunción durante el período de noviembre a diciembre de 2014. Cabe resaltar que esta evaluación se llevó a cabo antes de la reforma de los espacios correspondientes, específicamente en urgencias y consulta externa para adultos. Objetivo: Describir la percepción de los usuarios (pacientes) sobre la calidad de la atención en salud e identificar procesos que requieran ajustes para mejorar la calidad de la atención en los servicios de urgencias y consulta externa para adultos, según la perspectiva de los usuarios que utilizan diariamente dichos servicios en el año 2014. Métodos: Estudio descriptivo-transversal con un enfoque cuantitativo a través de un cuestionario CQC. Resultados: 99,2 % de los usuarios de urgencias y el 99,6 % de los usuarios de consulta externa recomendarían el servicio del hospital. Estos datos reflejan la satisfacción general de los usuarios con los servicios proporcionados por este destacado hospital nacional, evidenciando su disposición a volver en futuras ocasiones, con porcentajes del 99,4 % y 99,3 % en los usuarios de urgencias y consulta externa, respectivamente. Conclusión: Es relevante subrayar la alta satisfacción experimentada por los encuestados en cuanto a la atención médica recibida durante el periodo analizado.

Palabras clave: acceso y evaluación de la atención médica; administración en salud; calidad de la atención de salud; calidad de los servicios de salud; ciencias y servicios de la salud; formación de recursos humanos en salud; identificación de problemas de salud

### **RESUMO**

Antecedentes: Este documento constitui um estudo sobre a percepção da qualidade do atendimento aos usuários adultos nos serviços ambulatoriais e de emergência de um hospital localizado na região metropolitana da cidade de Assunção durante o período de novembro a dezembro de 2014. Ressalta-se que esta avaliação foi realizada antes da reforma dos espaços correspondentes, especificamente nas urgências e consultas ambulatórias de adultos. Objetivo: Descrever a percepção dos usuários (pacientes) sobre a qualidade da assistência à saúde e identificar processos que necessitam de adequações para melhorar a qualidade do atendimento em serviços de urgência e ambulatório para adultos, segundo a perspectiva dos usuários que utilizam esses serviços diariamente em 2014. Métodos: Descritivo-transversal, com abordagem quantitativa, através de um questionário CQC. Resultados: 99,2 % dos usuários emergenciais e 99,6 % dos usuários ambulatoriais recomendariam o serviço hospitalar. Estes dados refletem a satisfação geral dos utentes com os serviços prestados por este destacado hospital nacional, evidenciando a sua disponibilidade para regressar em ocasiões futuras, com percentagens de 99,4 % e 99,3 % em utentes de urgência e consultas externas, respetivamente. Conclusões: É relevante destacar a elevada satisfação vivenciada pelos entrevistados em relação ao atendimento médico recebido no período analisado.

**Palavras-chave:** acesso e avaliação dos cuidados de saúde; ciências e serviços de saúde; formação de recursos humanos em saúde; gestão em saúde; identificação de problemas de saúde; qualidade dos cuidados de saúde; qualidade dos serviços de saúde

### INTRODUCTION

Service evaluation emerges as a fundamental mechanism to drive continuous improvement, while reinforcing institutional transparency by considering and disseminating relevant data to the community. The literature specialized in the quality of medical care has compiled information and systematized experiences in order to establish standards in the provision of health services. Therefore, there is a wide variety of literature with diverse theoretical frameworks that support the development of questionnaires aimed at measuring both the quality of the care process and its administrative procedures, as well as user perception (1–4).

The theoretical framework that enjoys the greatest consensus is the quality assessment model developed by Dr. Avedis Donabedian, which defines its main components in terms of structure, process and result, covering technical, interpersonal and amenities dimensions (5,6). The effective implementation of quality requires theoretical-practical intervention approaches, as well as the establishment of standards at a national or continental level, using methodologies such as: Kaisen, EPQI, Six Sigma, Lean, Quality Circles and Quality Assurance, among others (7-14).

Although, according to Edward Deming's perspective, "quality development is not a pudding, over the decades various cooperation and support agencies, both nationally and internationally, have worked on developing strategies for its These strategies include models, criteria, standards, experiences, literature for raising awareness, clinical guidelines, among others (1,9,12-18). All this intellectual, operational and experiential development has been perfected with the objective of promoting quality improvement in the provision of health care services. Such efforts have arisen from various perspectives and initiatives but have remained within health services and/or health research entities, including the entity in charge of evaluating and regulating the provision of services (11,20–22).

In 2008, in England, the Care Quality Commission (CQC) emerged as a result of citizen advocacy (13,22–24). This entity operates independently to evaluate the health services of the NHS (National Health Service). In this sense, the CQC systematically carries out the measurement, systematization and certification of entities providing health and well-being services in the NHS system. This process is carried out considering both the perception of users and the information collected by the internal supervisory staff of the citizen's rights ombudsman (25).

The CQC focuses on measuring several key aspects from the users' perspective, assessing whether services are safe, effective, responsive to users' needs and well targeted. This evaluation is based on a theoretical framework that covers four dimensions, where questions are grouped into categories such as infrastructure and cleanliness, care process, patient safety and dignified treatment. Consequently, measurements aim to determine whether the services provided are safe, effective, show concern for patient care, are well managed and meet people's needs (19-20).

In the context of the quality assessment of the study hospital-school, the Donabedian assessment model (5,6,26) and its scope of analysis were found to be limited compared to the CQC approach. The latter incorporated components such as dignified treatment and patient safety, not only as a paradigm, but also with technical instrumentation for its study. At that time, media pressure on tense situations in the relationship between users and service delivery teams was evident. Given this situation, the board requested more comprehensive information to analyze and strengthen the connection through informed decisions with its users (3.16).

The relevance of the quality assessment reflects a significant maturity in the management of the service provider. Assuming control and responsibility for quality represents an avant-garde and objective proposal in the evaluation of the management of health and well-being services. Carrying out this type of evaluation promotes a new management approach in the field of health, worthy of recognition and applause from citizens (2).

The research question posed was: What is the perception of users of Emergency and Adult services in a hospital in the metropolitan area of the City of Asunción? It was approached with the intention of identifying processes that need adjustments to improve the user experience, from the perspective of the beneficiaries of these services. In 2014 and 2015, the period of this project, the National Health Quality Policy did not exist in Paraguay, which was published in 2017 (27). At that time, there were only incipient experiences in this area, with quality assessment data collected at the national level, generated by Cabañas Duarte, *et al.*, Amarilla, *et al.*, and Swasgo and Vera (20,21,28), which were scattered in the technical documentation of 2014.

Therefore, this study is part of the evaluation carried out in a hospital in the metropolitan area of the City of Asunción, serving as a baseline for the improvement process established in 2015 in the previously mentioned areas. Given the extensive information collected during the study, this document has been prepared with the purpose of providing documentation on the most relevant aspects of the process carried out in the consultancy carried out in the corresponding year (29). The general objective of the study was: To describe the perception of users (patients) about the quality of care in adult emergency services and adult outpatient clinics, who used the aforementioned services during 2014.

## MATERIALS AND METHODS

Population and sample: A data collection was carried out in the period from November to December 2014 where the sample size is 2,031 surveys of service users (patients). 858 surveys were conducted in the emergency area and 1,173 in the outpatient consultation area. The sample was calculated from a population universe of 100,000 consultations carried out in adult emergencies and outpatient clinics from November 2013 to November 2014 (the previous year). Having a confidence level of 95 % and a reliability interval of  $\pm 3$ , with random data collection. Data collection was carried out between November and December 2014.

The type of study was an observational, descriptive - cross-sectional study with a quantitative approach, with the use of qualitative variables. All study participants were adults and signed an informed consent and understanding of the indications for participation. The CQC questionnaire and the adaptation carried out in the study did not include personal data to maintain the confidentiality and anonymity of the participants.

Data Collection Instrument: The adaptation of the CQC questionnaire (24) was used, after translation, pilot collection of the instrument for the statistical validation of the items with a result of Cronbach's Alpha 85. The questionnaire had between 30 and 50 questions. (items) related to the main care processes of the emergency care and outpatient consultation units.

Data processing: Data collection was carried out by 6 interviewers, 1 supervisor and a person responsible for verifying the quality of data filling. The questionnaires were designed to be read in a scanner, and through a process called OMR where the responses to data were systematized. The data were then transferred to a database in Excel 2010. The information generated in the database was processed with the SPSS statistical program. For the analysis of results: A descriptive study was carried out with analytical components, in the following analytical dimensions: a) Sociodemographic characteristics, b) Infrastructure and cleanliness, c) care process, d) patient safety and e) dignified treatment, in patients who visited the outpatient services and patients from the Emergency services.

### **RESULTS**

# Sociodemographic profile of service users

The sociodemographic profile of patients seeking health services in the outpatient clinic shows that 41.6 % are men and 58.3 % are women. In the emergency department, 45.6 % are men and 54 % are women. Ages between 30 and 65 predominate, representing 63.29 % in outpatient consultations and 67.64 % in emergencies. Likewise, the majority of the participants' income is distributed in different salary ranges, with 20.4 % being less than one minimum wage and 38.6 % between 1 and 1.5 minimum wages in the emergency area. In outpatient consultation, 18.6 % have incomes less than one minimum wage, 44.2 % between 1 and 1.5 minimum wages and 35.0 % between 1.5 and 2 minimum wages (table 1).

TABLE 1 Socio-demographic profile of patients at a teaching hospital in Asunción City. Emergency Room and Outpatient Department. December 2014 (percentages)

	Emergencies	External consultation
Sex		
Male	45,6	41,6
Female	54,0	58,3
ND*	0,4	0,2
n	855	1167
Age		
Children under 10 years	0,70	0,69
Between 10 to 18 years	1,52	1,21
Between 19 to 30 years	21,22	28,23
Between 30 to 65 years	67,64	63,29
Over 65	8,91	6,58
n	853	1155
Income		
Less than 1 MW**	20.4	18,6
1 An MW less than 1.5 MW**	38.6	44.2
1.5 MW at less than 2 MW**	38.4	35.0
2 MW at less than 2.5 MW**	2.2	1.8
2.5 MW at less than 3 MW**	0.4	0.3
n	847	1162
Assurance		
No	87,3	90,9
Yes	12,7	9,1
n	853	1154
Are you presenting for the first time	me for	
consultation or subsequent?		
1 <sup>st</sup> time	12,3	4,7
Subsequent	87,7	95,3
n	837	1124

\*ND: No Data | MW\*\*: Minimum Wage | Source: This document

Regarding insurance, 90.9 % of outpatient users and 87.3 % of emergency users do not have health insurance. Regarding the type of consultation, 95.3 % of outpatient consultation users were present subsequently, while 4.7 % were for the first time. In emergency departments, 87.7 % were present for the second time, and 12.3 % were first-time patients (table 1).

# Infrastructure. Performance of the Cleaning Team. Admission Process

In relation to item 1, which asks about the cleanliness of the waiting room, it is observed that, in the emergency area, 63.9 % rated it as regular, while, in the outpatient clinic, 69 % evaluated it in the same way. In reference to item 2, which addresses the cleanliness of the bathrooms, it was recorded that 38.9 % considered it average and 44.8 % classified it as bad in the emergency room. In outpatient consultation, 25.1 % rated it as fair, while 58.1 % perceived it as bad (table 2).

Regarding item 3, which evaluates cleanliness in the office or cubicle, in the emergency room 61.9 % considered it regular, while in the outpatient clinic, 22.1 % rated it as good and 61.5 % as regular. For item 4, related to the state of the service facilities, in the emergency room, 61.3 % evaluated it as regular, while, in the outpatient clinic, 23.6 % classified it as good and 61.7 % as regular (table 2).

Regarding item 5, which focuses on the fee payment service, in the emergency room 51.5 % rated it as regular, and in the outpatient clinic, 62 % evaluated it in the same way. In relation to item 6, which

addresses the speed in assigning a number, in the emergency room, 59.6 % considered it good, 25.0 % considered it fair, 6.8 % considered it bad, and 0.7 % considered it very bad. In outpatient consultation, 62 % rated it as good and 22.8 % as regular (table 2).

Finally, in item 7, which evaluates the work of the admission-reception staff, in the emergency room, 34.9 % considered it regular, while, in the outpatient clinic, 63.1 % classified it as good and 32.2 % as regular (table 2).

TABLE 2
Questions (items) related to infrastructure; performance of the cleaning team and the admission process in which they care for patients in the Emergency Room and Adult Outpatient Consultation of a university hospital in the city of Asunción. December 2014

	% Emergencies n =856							% External consultation n = 1168					
	Excellent	Good	Fair	Bad	Very bad	«ND	Excellent	Good	Fair	Bad	Very bad	*ND	
Items related to: Infrastructure and cleaning													
1. How would you rate the cleanliness of the waiting room?	0.8	23.5	63.9	9.1	2.2	0.5	1.3	16.9	69.0	9.3	2.5	11	
2. How would you rate the cleanliness of the bathrooms?	0.2	12.2	38.9	44.8	3.3	0.6	0.9	11.0	25.1	58.1	3.9	11	
3. How would you rate the cleanliness in the office	0.4	22.1	61.9	10.9	4.2	0.6	0.6	22.1	61.5	10.1	4.8	10	
4. How does the state consider service facilities	0.6	27.7	61.3	7.3	2.7	0.5	0.8	23.6	61.7	9.0	4.1	10	
5. How do you consider the tariff payment service?	3.2	27.9	51.5	14.1	2.9	0.5	1.5	19.8	62.0	11.8	3.9	10	
Items related to: Admission Process													
6. How would you rate the hospital on the speed of assigning appointments?	7.5	59.6	25.0	6.8	0.7	0.5	6.3	62.0	22.8	6.5	1.5	10	
7. How do you consider the work of the admission-reception staff	1.8	61.2	34.9	1.6	0.1	0.5	1.4	63.1	32.2	2.4	0	10	

# Perception of the Care Provided by Medical and Auxiliary Personnel

In item 8, which asks about the general perception of the hospital service, it is observed that, in the emergency area, 37 % considered it excellent and 39.3 % considered it good. In the outpatient clinic, 39.4 % classified it as excellent and 36.6 % as good. In item 9, which addresses the doctor's care, in the emergency room 42.1 % considered it excellent and 36.1 % considered it good. In outpatient consultation, 37.9 % classified it as excellent and 29.2 % as good (table 3).

Regarding item 10, which focuses on nursing care, in the emergency room 33.9 % considered it excellent and 40.4 % considered it good. In outpatient consultation, 38.9 % rated it as excellent and 38.2 % as good. For item 11, which evaluates the performance of the orderlies, in the emergency room 53.6 % considered it good and 42.3 % considered it regular. In outpatient consultation, 44.5% classified it as good and 49.7 % as regular (table 3).

In item 11, which refers to the work of social work personnel, in the emergency room 51.1 % considered it good and 42.4 % considered it fair. In outpatient consultation, 46.4 % classified it as good and 46.3% as fair. In item 12, which evaluates the work of the X-ray personnel, in the emergency room 66.3 % considered it good and 28.2 % considered it average. In outpatient consultation, 68.2 % classified it as good and 25.2 % as regular (table 3).

In item 13, which focuses on the work of laboratory personnel, in the emergency department 3.1 % considered it excellent, 69.4 % as good, 23.9 % as average, 3.0 % as bad and 0.1% as very bad. In outpatient consultation, 1.1 % classified it as excellent, 70.8 % as good, 23.9 % as average, 3.2 % as bad and 0.2 % as very bad (table 3).

TABLE 3

Questions related to the perception of the care of white-collar staff and assistants who care for patients in the Emergency Room and Adult Outpatient Clinic of a university hospital in the city of Asunción

	% Emergencies n =856							% External consultation n = 1168					
	Excellent	Good	Fair	Bad	Very bad	*ND		Excellent	Good	Fair	Bad	Very bad	«ND
Items related to: Care of white-collar personne	l and h	ealth a	ssistan	ts									
8. How do you consider the hospital service in general?	37.0	39.3	18	4.6	.7	.5	39	.4	36.6	18.4	4.3	.4	.9
9. How do you consider the care of the doctor who treated you?	42.1	36.1	19.4	1.5	.5	.5	37	.9	29.2	28.5	2.3	1.3	.9
10. How do you consider the nursing care that treated you?	33.9	40.4	23.0	1.9	.4	.5	38	.9	38.2	18.6	2.0	1.3	1.0
11. How do you consider the job of the orderlies who attended you?	2.1	53.6	42.3	1.4	.1	.5	1.	7	44.5	49.7	3.2	0	.9
12. How do you consider the job of social work personnel	3.5	51.1	42.4	2.5	.1	.5	2	9	46.4	46.3	3.4	.1	.9
13. How do you consider the job of the X-ray personnel who treated you	18	66.3	28.2	2.9	0	.5	1	4	68.2	25.2	4.3	0	0
14. How do you consider the job of the laboratory staff who treated you?	3.1	69.4	23.9	3.0	.1	.5	1.	1	70.8	23.9	3.2	.2	.9

# **Patient Care and Safety Process**

In relation to item 15, which asks about creating an emergency medical record in the emergency room, 43.4 % perceived that it was yes, while 56.3 % perceived that it was not. In item 16, which addresses the waiting time of 30 minutes or more to be attended to, 10.5 % perceived yes, and 89.1 % perceived no (table 4).

In item 17, related to blood pressure control, in the emergency room 81.7 % perceived yes, while 18.0 % perceived no. In outpatient consultation, 55.7 % perceived yes, while 44.0 % perceived no. In item 18, which focuses on weight control, in the emergency room 69.2 % perceived yes, while 30.5 % perceived no. In outpatient consultation, 46.7 % perceived yes, while 52.8 % perceived no (table 4).

For item 19, which addresses height control, in the emergency room 50.6 % perceived yes, while 49.0 % perceived no. In outpatient consultation, 49.4 % perceived yes, while 49.0 % perceived no. In item 20, which refers to temperature control, in the emergency room 59.3 % perceived yes, while 40.2 % perceived no. In outpatient consultation, 35.8 % perceived yes, while 63.7 % perceived no (table 4).

In item 21, which asks if the doctor performed a review, in the emergency room 85.2% perceived that it was, while 14.4 % perceived that it was not. In outpatient consultation, 35.8 % perceived yes, while 63.7 % perceived no. For item 22, which focuses on whether the doctor laid the patient on a stretcher and listened to his heart and lungs, in the emergency room 53.3 % perceived yes, while 46.0 % perceived no. In outpatient consultation, 37.3 % perceived yes, while 61.1 % perceived no (table 4).

TABLE 4

Questions (items) related to the patient care and safety process in the Emergency Room and Adult
Outpatient Consultation of a university hospital in the city of Asunción. December 2014

	%	Emer	gencie	es	% F	% External consult					
	Yes	No	*ND	n	Yes	No	*ND	n			
Items related to the Care process											
15. Was an emergency medical record performed?	43,4	56.3	.4	846							
16. If you had to wait 30 minutes or more to be attended to	10,5	89.1	.4	856		Does not apply					
17. Did they check your blood pressure?	81.7	18.0	.4	856	55,7	44	.3	1165			
18. Did they check your weight?	69.2	30.5	.4	856	46.7	52.8	.5	1163			
19. Did they check your size?	50.6	49.0	.4	857	49.4	49.0	1.3	1166			
20. Did you have your temperature checked?	59.3	40.2	.4	857	35,8	63.7	.4	1166			
21. Did the doctor check you up?	85.2	14.4	.4	857	92.2	6.9	.9	1166			
22.If he laid you down on a stretcher, did I listen to your heart and lungs?	53.3	46.0	.5	854	37.3	61.1	.6	1173			
Items related to patient safety											
23. Do you know if you have a clinical record (Clinical File)?	93.5	6.1	.5	858	95.6	4.1	.3	1173			
24. Did they tell you in which cases you should go to the service as soon as possible?	86.9	12.6	.5	857	92.7	7.1	.3	1159			
25. Did you get the medications at the hospital pharmacy?	88.6	12.5	.5	827	94.9	2.5	2.5	1173			
26. Did you receive intravenous serum?	24.3	75,7	-	858	2.8	97,1	-	1173			
27. If Yes: Have you ever run out of intravenous (IV) fluids?	14,9	85,1	-	208	21,2	78,8	-	33			

\*ND: No Data | Source: This document

In item 23, which addresses whether the patient knows if he has a clinical record (medical history), in the emergency room 93.5 % perceived that he did, while 6.1% perceived that he did not. In outpatient consultation, 95.6 % perceived yes, while 4.1% perceived no. For item 23, which evaluates whether you were told in which cases you should go to the service as soon as possible, in the emergency room 86.9 % perceived yes, while 12.6 % perceived no. In outpatient consultation, 94.9 % perceived yes, while 2.5 % perceived no (table 4).

In item 25, which refers to whether they obtained the medications in the hospital pharmacy, in the emergency room 88.6 % commented yes, while 12.6 % commented no. In outpatient consultation, 92.7 % commented yes, while 7.1 % commented no. In item 26, which addresses whether they received intravenous serum, in the emergency room 24.24 % commented yes, while 75.7 % commented no. In outpatient consultation, 2.81 % commented yes, while 97.1 % commented no (table 4).

In relation to people who received intravenous fluids and/or medications, in item 27 they were asked if they ever ran out of intravenous fluids. In the emergency room, only 14.9 % mentioned yes and 85.1 % said no. While, in external consultation, only 21.2 % mentioned yes and 78.8 % said no (table 4).

# **Care Outcomes and Dignified Treatment in the Wards**

In item 28, which evaluates whether the doctor explained what the disease consists of, in the emergency area 85.5 % commented yes, while 14.1 % commented no. In outpatient consultation, 79.6 % commented yes, while 20.1 % commented no. In item 29, which addresses whether they received a

prescription, in the emergency room 96.6 % commented yes, while 3.2 % commented no. In external consultation, 97.8 % commented yes, while 2.0 % commented no (table 5).

In item 30, which asks if they understood what medication they need to take, in the emergency room 97.2 % commented yes, while 2.3 % commented no. In outpatient consultation, 97.8 % commented yes, while 2.0% commented no. In item 31, related to whether diagnostic studies were indicated, in the emergency room 86.3 % commented yes, while 13.2 % commented no. In outpatient consultation, 79.1 % commented yes, while 20.3 % commented no (table 5).

In item 32, which refers to whether they would recommend the hospital service, in the emergency room 99.2 % commented yes, while 0.7 % commented no. In outpatient consultation, 99.6 % commented yes, while 0.1 % commented no. In item 33, which evaluates whether I would return another time, in the emergency room 99.4 % commented yes, while 0.5 % commented no. In external consultation, 99.3 % commented yes, while 0.3 % commented no (table 5).

In item 34, which addresses whether they were asked if they agreed before receiving any inspection, review, treatment and/or procedure, in the emergency room 97.4 % commented yes, while 2.5 % commented no. In outpatient consultation, 97.8 % commented yes, while 1.9% commented no. In item 35, related to whether the hospital staff respected their way of thinking and/or their customs, in the emergency room 96.5 % commented yes, while 3.3 % commented no. In external consultation, 94.3 % commented yes, while 5.4 % commented no (table 5).

In item 36, which asks if the doctor was concerned about their situation, in the emergency room 99.2 % commented yes, while 0.7 % commented no. In external consultation, 98.6 % commented yes, while 1.0 % commented no (table 5).

TABLE 5

Questions (items) related to the results of care in the Emergency Room and Adult Outpatient Clinic of a university hospital in the city of Asunción, December 2014

	%	Eme	rgenci	ies	% External consultation					
	Yes	No	*ND	n	Yes	No	*ND	n		
Items related to: Outcomes of Care										
28. Did you explain what your illness consists of?	85,5	14,1	0,2	850	79,6	20,1	0,3	1162		
29. Did they give you a prescription?	96,6	3,2	0,2	856	97,8	2,0	0,3	1161		
30. Did you understand what medicine you need to take?	97,2	2,3	0,5	858	95,3	4,3	0,4	1163		
31. Were you prescribed diagnostic studies (analysis, x-rays, studies)?	86,3	13,2	0,5	847	79,1	20,3	0,5	1160		
32. Would you recommend the hospital's service to anyone?	99,2	0,7	0,5	854	99,6	0,1	0,3	1168		
33. Would you come back another time?	99,4	0,5	0,5	854	99,3	0,3	0,3	1168		
Items related to: Dignified treatment										
34. Before receiving any inspection-revision, treatment and/or procedure, were you asked if you agreed?	97,4	2,5	0,1	856	97,8	1,9	0,3	1169		
35. Did the hospital staff respect your way of thinking and/or your customs?	96,5	3,3	0,1	856	94,3	5,4	0,3	1169		
36. Was the doctor concerned about your situation?	99,2	0,7	0,1	854	98,6	1,0	0,3	1168		

\*ND: No Data | Source: This document

### DISCUSSION

The documentation generated for this project in 2014 is aligned with the patient safety paradigm established by the National Health Quality Policy, published in 2017. It focuses on the axes of governance and institutional development, specifically in the line of action that establishes the

mechanisms for follow-up, monitoring and evaluation of the implementation of the National Health Quality Policy. In addition, it is linked to the patient safety axis and its line of action related to the promotion of research in Patient Safety. (27).

Similar studies carried out in the Paraguayan context during the same years include that of Cabañas-Duarte *et al.*, which evaluated the quality of care services in Child Health establishments with the participation of 317 people. In addition, Amarilla and collaborators carried out a study with 300 users who consulted at the family health unit of Capitán Miranda, Itapúa, Paraguay.

Also, the study by Swasgo & Vera presents the greatest similarity with the context, with 54 participants in the Family Medicine service of a university hospital (20,21,28).

According to Amarilla *et al.*, 98.33 % indicated they were satisfied with the shift assignment mechanism, while in the present study it is observed that the speed in assigning numbers is evaluated as good by 59.6 %, fair by 25% in emergencies and good by 62 % and fair by 22.8 % in outpatient consultation. (21).

The Swasgo & Vera article addresses the problem related to the comfort of the Family Medicine Service waiting room, highlighting that the old building was not in optimal conditions. This contrasts with the findings reported by Amarilla and collaborators, who indicated that the structure dimension presented an overall performance of 88.64 %. In the present study, it is observed that the facilities in the emergency department were evaluated as good in 59.6 % and average in 25%, while in the outpatient clinic they were considered good in 62 % and average in 22.8 %. (21,28).

In the study by Amarilla *et al.* it was reported that 97.67 % of the participants showed compliance with the cleanliness of the bathroom. However, in the present study, the perception of cleanliness in the emergency room was characterized as fair in 38.9 % and as poor in 44.8 %. Regarding the outpatient consultation, it was evaluated as fair in 25.1 % and as poor in 58.1 % (21).

In the present study, the rating of the office or cubicle ranges between good (22.1 %) and average (61.9 %) in the emergency room, and in the outpatient clinic, it is in a range from good (22.1 %) to regular (61.5 %). In contrast, in the study by Amarilla *et al.*, it is reported that 100% of those interviewed stated that the office provides privacy. Furthermore, 97.33 % perceived the office where they were treated as comfortable (21).

The study by Swasgo & Vera presents the greatest similarity with the context of the present study (hospital-school), with 54 participants. In this study, 90 % of respondents expressed being very satisfied with the Family Medicine service. In comparison, Cabañas-Duarte *et al* evaluated the perception of users, finding that 73.8 % considered it good to acceptable (20.28). In the present study, users evaluated the hospital's emergency service, being rated between excellent (37 %) and good (39 %). In outpatient consultation, the grades were also between excellent (39.4 %) and good (36.6 %).

Unlike Swasgo & Vera, who described that 81% of the participants considered that the consultation time provided by the doctor is always sufficient (28), in the present study the doctor's attention was evaluated. In the emergency room, it was rated as excellent (37 %) and average (39.3 %), while in the outpatient clinic it was rated as excellent (39.4 %) and good (36.6 %).

Swasgo & Vera mention that 87 % of respondents considered that nursing services were adequate. Cabañas Duarte, in relation to the experience with the nursing service, reported that 80.8 % rated it as acceptable to very good. On the other hand, Amarilla *et al.* Pointed out that 82 % of those interviewed were completely satisfied with the care received from the nurses. In the present study, in the emergency and outpatient departments, it was evaluated as excellent to good, with 33.9 % to 40.4 % and 38.9 % to 38.2 %, respectively. (20,28,30).

In relation to the treatment provided by the doctor, 76 % of those surveyed stated that they always understood the treatment offered. In this research, a similar question was asked: "Did you understand what medication you needed to take...?" The results indicated that 97.2 % attended the outpatient clinic and 95.3 % attended the emergency room. According to Amarilla *et al.* 99.67% of the participants received information about their diagnosis, 92 % received an explanation that their condition is curable,

97.99% received guidance on how to take their medication, and 99.33 % received information about their diagnosis. He stated that he was prescribed treatment. (21,28).

The study by Swasgo & Vera presents the greatest similarity with the context of the present study (university hospital), with 54 participants. In this study, 90 % of respondents expressed being very satisfied with the Family Medicine service. In contrast, Cabañas-Duarte, et al. evaluated the perception of users, finding that 73.8 % considered it good to acceptable (20,28). In the present study, users evaluated the hospital's emergency service, being rated between excellent (37 %) and good (39 %). In outpatient consultation, ratings were also between excellent (39.4%) and good (36.6 %).

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In relation to the treatment provided by the doctor, 76 % of respondents stated that they always understood the treatment offered. In this study, a similar question asked, "Did you understand what medication you needed to take...?" 97.2% understood it in the outpatient clinic and 95.3% in the emergency room. According to Amarilla, *et al.*, 99.67 % of the participants received information about their diagnosis, 92 % were explained about the curability of their illness, 97.99 % received guidance on how to take their medication, and 99. 33 % stated that treatment was indicated (21,28).

In the study by Amarilla, *et al.*, it was reported that 63.33 % of users underwent a physical examination, 85% had their blood pressure measured, 80.67 % were weighed, and 70 % were not laid down. stretcher for inspection, while 86 % indicated that the affected region was evaluated. In this current study, in the emergency department, the doctor examined 53.3 % of the patients, and in the outpatient clinic, 92 % (21).

In this current study, the doctor's care in the emergency room was rated between excellent (42.1 %) and good (36.1%), while in the outpatient clinic it was rated between excellent (39.4 %) and good (36 %). In the study by Amarilla, *et al.*, 80 % expressed being completely satisfied with the medical care and 97.67 % trusted the doctors in the service (21).

In the study by Cabañas-Duarte, *et al.*, 92 % expressed satisfaction with the care received, expressed their intention to request care in this service again and would recommend other people do so. Amarilla *et al.*, reported that 100 % of those surveyed stated that they would consult this service again and the same percentage would recommend it to other people. In the present study, 86 % of the patients surveyed indicated that they would recommend the service, while, in the emergency room and outpatient clinic, this percentage was 99.2 % and 99.3 %, respectively. (20)

### CONCLUSIONS

The gender distribution of service users was similar in the emergency areas (45.6 % male and 54 % female) and in the outpatient areas (41.6 % male and 58.3 % female). The greatest influx to emergency services was observed in people between 30 and 65 years old, representing 67.6 %, while, in outpatient services, 63.2 % corresponded to this same age group.

Regarding the income profile of users, 20.4 % have less than one minimum wage and 38.6 % earn between 1 and 1.5 minimum wages. 90.9 % of outpatient clinic users do not have health insurance, and

87.3 % of emergency room users lack health insurance. These data indicate that the majority of users have limited financial resources for medical care and lack private insurance, social security or other coverage.

In relation to the infrastructure, the performance of the cleaning team was fair to good, according to the perception of users in outpatient clinics and emergencies. The admission process showed good to fair performance. It is suggested to strengthen administrative management to improve these dimensions.

Regarding the care of white staff, medical care was considered excellent by 42.1 % and good by 36.1% in the emergency area, and excellent by 37.9 % and good by 29.2 % in the external consultation area. The nursing team received ratings of 33.9 % excellent and 40.4 % good in the emergency department, and 38.9 % excellent and 38.2 % good in the outpatient clinic.

The teams of orderlies, social work, x-ray and laboratory personnel obtained ratings mostly between good and fair in both services. It is suggested to work with the authorities to improve the quality of care in these teams.

In relation to the care process, mostly good performance was observed in most routine activities, but reinforcement is required to maintain or improve the quality of care. The items related to patient safety were executed with good percentages in both services.

Regarding the result of care and dignified treatment, the majority of users considered that the doctor cared about their situation, with 99.2 % in the emergency room and 98.6 % in the outpatient clinic.

In summary, users rated the hospital's emergency services as excellent by 37 % and good by 39.3 %. Similarly, 39.4 % considered the outpatient services as excellent and 36.6 % as good. 99.2 % of emergency users and 99.6 % of outpatient users would recommend the hospital service. In general, users expressed satisfaction with the hospital service and expressed their intention to return another time.

### RECOMMENDATIONS

It is relevant to note that the current evaluation was carried out before the implementation of reforms in the specific areas (emergency and adult outpatient consultation). Therefore, it is considered as a preliminary exercise carried out before the improvements implemented in the years after 2014. Hospital authorities are urged to continue technical efforts to document the structural improvements made, as well as the experiences and interventions intended to improve the quality of services. Furthermore, it is suggested to consider future interventions and certifications for the benefit of users.

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### **Conflict of Interest**

There is still fear of punitive evaluations, political biases, and/or internal conflict due to evaluations of large hospitals. Therefore, the authors maintain confidentiality about the hospital this study is about. This publication provides documentation on the capabilities of the research team to conduct this type of projects.

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