Evaluation of the quality of services in a dental school clinic from the point of view of academics

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ABSTRACT

The objective of the present study was to evaluate the perception of academics of Dentistry regarding the quality of services provided within the clinic of a private university in Northeast Brazil. It is a quantitative, evaluative, cross-sectional study developed with 201 students registered from the 4th to the 10th semester of the course that provided clinical care to patients. Data collection was carried out from April to September 2019 through a questionnaire containing 35 objective questions, divided into three blocks related to infrastructure, quality of clinical care, and managerial actions. Concerning infrastructure, of the 201 participants, 187 (93%) indicated adequate conditions of use, 198 (98.5%) indicated good cleaning conditions, and 188 (93.5%) stated that the clinic facilities guarantee accessibility conditions and mobility. Regarding the quality of care, 102 (50.7%) participants said there was guidance to the patient after treatment, but 200 (99.5%) stated that referral is carried out between clinics when necessary to complete the treatment. For managerial aspects, 95 (47.3%) indicated that communication channels are available to patients, and 156 (77.6%) stated a democratic and cooperative relationship with the coordination. The quality aspects related to the scope of the school clinic were considered satisfactory. However, there is a need for a more in-depth analysis of the communication process and monitoring of actions for continuous quality improvement.

Descriptors: Dentistry. Dental Clinics. Quality control.

1 INTRODUCTION

The general education of dentists in an ethical, humanized, and the technical way is the basis of Dentistry undergraduate courses, where academic training activities aim at comprehensive health care, laboratory training, and student[1].

University clinics provide students with possibilities of interacting between the theory seen in the classroom and clinical[2]. Even with a different profile of the type of care provided by public health services, school clinics also allow the population to reach greater access to oral health services, seeking patient satisfaction to solve their needs[3,4].

Since the Unified Health System (SUS) implementation, satisfaction studies with health services have begun in Brazil, with social participation in the planning and evaluation of these services. The vision of those involved is an essential tool for diagnosing reality, with the possibility of intervention to improve quality

care. It is necessary to verify the quality of health services through an evaluation process, which proves a continuous improvement of the services provided[5,6].

When analyzing the health area quality, the initial step is to choose indicators based on users, professionals, and the health service itself[7]. In a teaching clinic, evaluating is relevant to maintain the quality of care provided by academics to the population, directing strategies, and functioning as an indicator of improvement[8].

In this sense, operative techniques and manual skills are not the only aspects of the evaluation regarding the quality of the functioning of the school clinic and the procedures performed. Several fields of competence are considered, such as communication, structure, equipment, instruments, and supplies present and or used in the dental clinic, as well as the organization of services, care for the user, and satisfaction and perception of those involved regarding the services performed[9].

Considering the importance of services in dental school clinics, their impact on the teaching-learning process, and the fact that few studies have included the scholars' view in the quality assessment, it is necessary to identify whether it meets the minimum infrastructure parameters, process work, and management aspects. In this context, this study aimed to evaluate dental students' perception regarding the quality of services provided within the clinic of a private university in the Brazilian Northeast.

2 METHOD

It is a quantitative, evaluative, and cross-sectional study developed in a private university in Fortaleza/CE.

According to the ranking prepared by the Times Higher Education Young University in 2020, the university is among the best in the world when considering teaching, research, citation, internationalization, and technology transfer criteria. The Dentistry course, implemented in 1995, has 100 complete offices distributed in two school clinics, a 24-hour sterilization center, and an instrument loan to students by the university for clinical care, radiology area, pre-clinical laboratories, and class[10].

The study universe consisted of students from the Dentistry course, from the 4th to the 10th semester, who had already performed at least one patient care in a dental clinics. Sample calculation performed has a confidence level of 95%, resulting in a sample of 201 participants. There was no distinction on the gender, age, or participants' academic semester. Recruitment took place randomly, face-to-face, and individually. At this moment, the research presents its objectives and procedures.

The researchers collected the data from April to September 2019 in the school clinics, classrooms, and other facilities in the Dentistry block. They used a printed questionnaire as a collection instrument, which contained questions referring to three aspects of quality assessment: infrastructure, work process (service and satisfaction), and managerial aspects carried out by the course coordinator. For each question, the participant indicated whether factor evaluated was satisfactory or unsatisfactory.

Considering that the school clinics have similar standards to the Dental Specialty Centers (CEO) of public health services, the researchers adapted and used questions from the External Assessment Instrument of the Quality Assessment Improvement Program (PMAQ). This program, instituted by the Ministry of Health in 2011, has already carried out three evaluation cycles[9,11]. Although it discontinued in 2019, its evaluation instrument has relevant reference criteria for evaluating the quality of

dental service.

The collected data were consolidated and organized in Microsoft Excel software and analyzed by absolute frequency and percentage.

All research participants signed an informed consent form. The Research Ethics Committee of the University of Fortaleza approved the research under number 3,192,914.

3 RESULTS

The results presented demonstrated the perception of Dentistry students regarding the infrastructure, the work process, and the managerial aspects of the school clinics.

Table 1 presents the results regarding infrastructure aspects. Most participants pointed out that the operating conditions of the school clinics are satisfactory in the evaluated items. They stated that there are a sufficient number of chairs for patients in the waiting room (n=160; 79.6%); accessibility and mobility conditions guaranteed for people with disabilities and the elderly (n=188; 93.5%); there is an appropriate building structural conditions of floors, walls, ceilings, hydraulic and electrical installations (n=180; 89.6%), cleanliness (n=198; 98.5%) and with good situations for using the structures (n=187; 93%).

They reported that dental equipment (n=170; 84.6%) and supplies and instruments (n=177; 88.1%) quantity and quality were sufficient. There are maintenance services for physical facilities and equipment (n=169; 84.1%).

Table 1. Infrastructure aspects of teaching clinics

Variables	Satisfactory		Unsatisfactory	
	n	%	n	%
Number of chairs for patients in the waiting room	160	79.6	41	20.4
Accessibility and mobility for the disabled and elderly	188	93.5	13	6.5
Building structure: floors, walls, ceilings, plumbing and electrical	180	89.6	21	10.4
Conditions of use of the facilities	187	93.0	14	7.0
Conditions for cleaning the structure	198	98.5	3	1.5
Dental equipment in sufficient quantity and quality	170	84.6	31	15.4
Supplies and instruments in sufficient quantity and quality	177	88.1	24	11.9
Maintenance services for physical facilities and equipment	169	84.1	32	15.9

Table 2 presents information related to the process of work, in which it is noticeable that the receptionists address the patient by name (n=198; 98.5%), receives humanized attention (n=172; 85.6%) and demonstrates satisfaction with the service at the reception (n=178; 88.6%). The student remembers the procedure performed in the last consultation (n=184; 91.5%) and has already completed some treatment (n=165; 82.1%).

It is noticeable that the responses related to the patient-student relationship were positive, generally above 80%, with exceptions, such as satisfaction with care (n=134; 66.7%); the opportunity to resolve doubts after the service (n=129; 64.2%); and the search to resume care in case of interruption (n=152; 75.6%).

Although the researchers pointed out that the patient receives clarification before the treatment start (n=195; 97%), there was a low number of affirmatives regarding patient orientation after treatment (n=102; 50.7%). The data highlights the care with the continuity of the patient's treatment in case it needs for referral to another clinic (n=200; 99.5%).

Table 2. Aspects of the work process in teaching clinics.

Variables	Yes		No	
	n	%	n	%
The patient is addressed by name	198	98.5	03	1.5
The patient receives humanized care	172	85.6	29	14.4
The patient demonstrates satisfaction with the service at the reception	178	88.6	23	11.4
The patient receives clarification before starting the treatment	195	97.0	06	3.0
The patient is instructed on care after the treatment	102	50.7	99	49.3
The patient demonstrates satisfaction with the care provided at the clinic	134	66.7	67	33.3
The patient has the opportunity to ask questions after treatment	129	64.2	72	35.8
The patient is sought to resume treatment in case of interruption	152	75.6	49	24.4
The student remembers the procedure performed in the last consultation	184	91.5	17	8.5
The student has already completed treatment	165	82.1	36	17.9
The student is referred between clinics when necessary	200	99.5	01	0.5

Table 3 contains questions related to the managerial aspects of coordinating the clinics from the perspective of the investigated students. Those with the lowest rates were responsible for: developing research, analyzing patient satisfaction (n=102; 50.7%), and providing communication channels for patients (n=95; 47.3%).

Participants indicated there are a democratic, cooperative relationship, open to coordination dialogue with students and teachers (n=156; 77.6%), a monitoring of the satisfaction of teachers and students (n=166; 82.6%), and an analysis of the results achieved by the clinic (n=156; 77.6%).

Concerning humanized care, the students realized that there are guidelines provided, so the service delivered is humanized (n=187; 93%).

Table 3. Management aspects of the coordination of the university dental clinic

Variables	Yes		No	
	n	%	n	%
Research and analysis of patient satisfaction are carried out	102	50.7	99	49.3
Communication channels are made available to patients	95	47.3	106	52.7
There is a democratic, cooperative, and open relationship to the coordination dialogue with students and teachers	156	77.6	45	22.4
Guidance is provided so that the service is provided in a humanized way	187	93.0	14	7.0
Satisfaction monitoring is carried out of professors and students	166	82.6	35	17.4
Analysis of the results achieved	156	77.6	45	22.4

4 DISCUSSION

The research arose because of a scientific gap regarding the students' perception on the Dentistry course of a private university in the Northeast region of Brazil. The aspects observed concern to the functioning of the clinics where they work. In general, most students declared having satisfactory experiences or positive aspects related to structural issues, the work process, and the managerial aspects of coordination.

It is possible to measure the quality of care in a university dental clinic through evaluations that consider various aspects and perceptions of those who use them. However, in the literature, analyses that consider the opinion of

patients[6,12,13] than the opinions of university students are more common.

In this sense, studies need to cover both parties involved, patient and professional, concerning the quality of service for the actions development aiming at improving dental care[8]. The student's self-analysis about the care provided can enable a general view through a Dentistry course coordination about the management and service provided[14].

As for infrastructure aspects, most participants in the present study considered satisfactory the eight assessed items. The building structure (89.6%), the conditions of use (93%), accessibility (93.5%), and the cleanliness of the clinics' environment (98.5%) stand out, which are considered essential aspects for a quality service provision. A study pointed out the importance of the physical structure, cleanliness, and equipment availability as palpable aspects for achieving quality in a health service. As there is a growing expansion of access to patients with some disability, structural issues reinforce that clinics include the accessibility component provided for in the Care Network for Persons with Disabilities[16].

The availability of equipment (84.6%) and supplies/instruments (88.1%) were considered satisfactory in the current survey. It is necessary considering these aspects of structure in the evaluation, as there is a scenario of high costs for the acquisition of consumables and heavy technology in dentistry[17]. One positive element of the clinics evaluated is that students do not need to spend financial resources to acquire these items since the course adopts a policy of lending instruments to students[10]. Although the course's monthly fee might receive these amounts, this practice can make it possible for those in less favorable economic conditions to achieve it[18].

Of all participants, 160 (79.6%) reported that the number of chairs for patients in the waiting room of the clinics was sufficient. Because of the other aspects evaluated in terms of infrastructure, this result may indicate a need for the clinic management to look at a possible increase in seats or reorganization of appointments to avoid people standing and crowds at the reception. That element relates to the importance of creating a pleasent environment and promoting healthy, comfortable, welcoming spaces that respect the privacy of patients awaiting dental care[19,20].

In the aspects related to the work process, the investigation evaluated questions about the relationship between students and patients, showed a positive relationship for the realization of humanized care, care integrality, and conditions that allow a differentiated look at care in search of continuity of treatment, in agreement with the findings of other studies[9,4].

The research identified a high percentage difference regarding the guidelines conditions before and after the care. That shows the need to improve the communication process with the patient. Although 97% pointed out that patients receive clarification before the start of treatment, only 50.7% indicated that they received guidance after dental treatment and 64.2% had the opportunity to ask questions after the treatment. It is important to note that the information provision must be translucent, regardless of the procedure complexity, as it will allow for better preservation and maintenance of the quality of the dental treatment performed and reduce the patient's anxiety[21,2].

For the study's participants, 66.7% of the patients demonstrated satisfaction with the care provided at the clinic. It is relevant to qualitatively identify the reasons that lead to patient dissatisfaction with the services the students perform since factors related to

absenteeism and reduced adherence to treatment can be recognized[22]. A study developed at a state university in Montes Claros pointed out that patients adhere to treatment within the university clinic because they trust appropriate quality service[3].

Compared to the infrastructure aspects and the work process, the managerial aspects, which include the actions of the coordination of the course and the management of the clinics, were the ones that had the highest number of negative responses in this research. In this evaluative aspect, the lack of availability of communication channels with the user presented a low percentage (52.7%). The study also indicates elements that require greater attention. For example, 49.3% said that the patients did not take satisfaction surveys, and 22.4% showed there was no democratic relationship of coordination with students and professors of the clinic.

It is noteworthy that a planning process constituted in a democratic way and with a wide capture of the perception of those involved facilitates the identification of needs for improvement in the work process, in addition to allowing a better alignment of needs[23,2]. In this aspect, monitoring becomes essential since any failures in the communication process can generate a negative evaluation that does not always portray the reality of the service's daily life. The result may also represent a lack of knowledge on the part of students regarding the existence of channels of communication between clinics directly with the patients treated at them.

According to the findings of this research, it was evident that the coordination makes articulations so that the services provided are humanized (93%). The academic construction of the dental surgeon contextualizes the real needs of the population, which corresponds to professional training that involves more than technical skills. Humanized care considers all those involved in oral health promotion since they establish the necessary bonds among themselves for the success of the care process[24,25,4]. In addition, humanized care is provided for in the curriculum guidelines for Dentistry, aiming at training a professional closer to the patient and with greater empathy[1,26].

According to the participants of the research in question, there is the monitoring of their satisfaction and the teachers' (82.6%). However, the percentage that points to an analysis of the results is lower (77.6%). The assessment contributes to construction and improvement and must be permanent, systematic, dynamic, and articulated to the actions implemented and in the search for the identification of difficulties, the orientation of strategies, and the organization of health services. Monitoring constitutes an indispensable tool for the qualification of actions[27,28].

The authors recognize that the study had limitations, including the use of the evaluation instrument used developed for the evaluation of public services; wide variation in response time for filling out among participants; and the absence of a significant number of studies focused on the quality of teaching clinics from the student' perception, which could allow comparative analyzes in the discussion.

Knowing the students' perception concerning the quality of the service provided is necessary for the realization of transformations, both on the part of the course management to improve strategies and on the part of the students, who, realizing the importance of the quality of patient care, will be better able to meet their expectations[2].

In this sense, the study suggests carrying

out more research to evaluate university dental clinics in the perception of academics since they work directly with the patients treated in them and can identify aspects for continuous quality improvement.

5 CONCLUSION

Those involved in dental care inclusion at the school clinic provided a different point of view about the quality offered in the evaluated course. According to the participants' perception, the quality aspects related to the infrastructure, the work process, and the management actions of the services provided within the clinic, in general, were considered satisfactory.

However, aspects have been identified that signal the need for a more in-depth analysis of the clinic's management processes, especially regarding the communication process and the need to carry out internal monitoring actions for continuous quality improvement.

RESUMO

Avaliação da qualidade de serviços em clínica escola odontológica na visão dos acadêmicos
O objetivo do presente estudo foi avaliar a percepção de acadêmicos de Odontologia quanto à qualidade dos serviços prestados no âmbito da clínica de uma universidade privada do Nordeste brasileiro. Trata-se de uma pesquisa quantitativa, de caráter avaliativo e corte transversal realizada com 201 estudantes matriculados do 4º ao 10º semestre de graduação, que prestaram atendimento clínico aos pacientes. Realizou-se a coleta de dados no período de abril a setembro de 2019, por meio da aplicação de um questionário contendo 35 questões objetivas, dividido em três blocos relacionados a: infraestrutura; qualidade do atendimento clínico; e ações gerenciais. Dos 201 participantes, em quesitos relacionados à infraestrutura, 187 (93%) apontaram adequadas condições de uso, 198 (98,5%) boas condições de limpeza e 188 (93,5%) afirmaram que as instalações da clínica garantem condições de acessibilidade e mobilidade. Em relação à qualidade do atendimento, 102 (50,7%) participantes apontaram que houve orientação ao paciente após o tratamento, porém 200 (99,5%) afirmaram que é realizado o encaminhamento entre as clínicas quando necessário para completar o tratamento. Para os aspectos gerenciais, 95 (47,3%) indicaram que são disponibilizados canais de comunicação aos pacientes, e 156 (77,6%) afirmaram que existe uma relação democrática e cooperativa com a coordenação. Os aspectos da qualidade relacionados ao âmbito da clínica escola foram considerados satisfatórios, contudo, existe a necessidade de uma análise mais aprofundada no processo de comunicação e monitoramento das ações para contínua melhoria da qualidade.
Descritores: Odontologia. Clínicas Odontológicas. Controle de Qualidade.

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