



Original Article

## Training, Practices and Difficulties of Dentists in the Care of Children and Adolescents with Special Needs in the Primary Health Care

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### Abstract

**Objective:** To know the training, practices and difficulties of Dentists in the care for Patients with Special Needs (PSN), in the Primary Health Care (PHC). **Material and Methods:** This is a Cross-sectional study with 44 Dentists. Some of the variables analyzed through the questionnaire were: dentistry specialty, PSN definition, undergraduate discipline on the subject, accomplishment of PSN care, difficulties, referral and accessibility. Data analysis was performed with the Statistical Package for the Social Sciences and measures of central tendency and dispersion by Fisher's Exact Test ( $p < 0.05$ ). **Results:** Only one professional investigated presented PSN Specialization. About 82.5% of professionals had graduation time of over 10 years, where 75% of professionals did not have Curricular Component ( $P=0.006$ ) or training to deal with PSN (85.0%), despite working in primary care for more than 10 years (60%). The care of PSN in the Primary Health Care was performed by 77.5% of professionals, in which lack of care was justified mainly because dentists did not feel prepared to perform it (37.5%), and the main difficulty found in care, refers to the lack of cooperation of these patients (27.5%). All professionals reported to refer patients to reference services, but 12.5% did not perform a previous clinical examination in the PHC. The reference service most reported by professionals was the Dental Specialty Center (82.5%). **Conclusion:** Although the training received by professionals present deficiencies in relation to PSN, the majority reported to attend these patients in Primary Health Care Units, and considered to be able to supply their needs. The greatest difficulties found in the care of Patients with Special Needs are related to their approach. The lack of care of these patients was justified by the fact that Dentists did not feel prepared to perform.

**Keywords:** Dentist-Patient Relationships; Health of the Disabled; Child; Adolescent.

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## Introduction

The World Health Organization reports that more than one billion people worldwide have some form of disability, also called special need [1,2]. The individual with special need in Brazil is defined as having long-term impairments, whether of physical, mental, intellectual or sensory nature, which, in interaction with several barriers, may impair their full and effective participation in society with other people. These needs are classified into physical, auditory, visual, mental and multiple [3-5].

Regarding Dentistry, the Public Policies specifically applied to this group propose strategies that are in line with the Brazilian Policy on the Health of Persons with Disabilities (Ordinance No. 1,060 / 2002), recommending that services should be prepared to provide priority care in the primary health care [3]. However, despite technical-scientific advances in the field of dentistry, studies have shown that the prevalence of oral disorders and alterations is still more evident in patients with special needs compared to the others [6-10]. In this context, it is noteworthy that there are barriers that make it difficult to maintain the oral health care of these patients, among which the lack of qualified professionals interested in this area, thus weakening the resolution of actions and services in the primary health care.

The importance of social inclusion of people with special needs, who need specialized care in all aspects, including health [3], is recognized. Thus, it is necessary to change paradigms to improve the quality of life of these subjects through treatments recommended by conventional Dentistry, as well as of multidisciplinary studies developed by other specialties and professionals [11-13].

Therefore, this study aimed to know the training, perceptions, practices and difficulties found by dentists when attending patients with special needs aged 0-18 years.

## Material and Methods

### Study Location and Design

A cross-sectional study was carried out in the Basic Family Health Units (UBSF) of the city of Campina Grande, Brazil, which is characterized as a large population, with Human Development Index (HDI) of 0.720, located in the mesoregion of the "Agreste Paraibano", 112 km from the state Capital, João Pessoa, Northeastern Brazil [14].

### Population

The population was composed of all dentists, with work activities in the Health Units, in the year 2016. Based on information from the Department of Health, the municipality had at the time of the research, 44 professionals in activity in the Oral Health Teams.

### Data Collection

Participants answered a questionnaire that addressed their perceptions, practices and difficulties regarding the care of children and adolescents with special needs in Basic Family Health Units.

The questionnaire was applied in healthcare establishments where professionals performed their work activities, collecting the following data: socio-demographic (gender and age), professional training (having specialty [yes / no], which specialty, graduation time [years] and working time in the public service [years]), related to the theme Patients with Special Needs (PSN) (definition of individuals with special needs, existence of discipline on PSN in the undergraduate course, training or improvement on PSN, care to PSN, difficulties found in providing care to PSN, referral to specialized service [yes / no / which?], performance of clinical examination prior to referral). The following questions were also asked: "How do you analyze the accessibility of UBSF to patients with special needs?" and "What are the limits imposed by the service?"

### Statistical Analysis

Data were processed using SPSS software version 17.0 (Statistical Package for the Social Sciences, Chicago, USA). The measures of central tendency and dispersion were calculated, also obtaining absolute and percentage distributions. Fisher's exact test was used, with significance level of 5.0%.

### Ethical Aspects

This study was approved by the Ethics Committee of the State University of Paraíba (Protocol No. 35509814.5.0000.5187) and followed the ethical principles contained in Resolution 466/2012 of the National Health Council. All participants signed the Informed Consent Form.

### Results

A total of 40 professionals answered the questionnaire (90.9% response rate). Among non-respondents, 03 were not located after three consecutive attempts and 01 refused to participate in the study.

Participants were predominantly female (85%), had average age of 45 years ( $\pm 10.01$ ), mean graduation time of 20.85 years ( $\pm 10.90$ ), and mean time of activity in public service of 15.35 years ( $\pm 12.50$ ). All dentists had at least one specialization degree (Table 1).

The association between providing or not care to patients with special needs by professionals and graduation time, as well as their contact with the subject during the graduation period was investigated. It was observed that the care was or is performed by 77.5% of professionals, with a significant association with the variable "contact with the content on the subject" ( $p = 0.006$ ), which was performed mainly by professionals who reported no have had access to information on this type of care (Table 2).

**Table 1. Distribution of professionals according to age, graduation time and time of activity in the public service, gender and specialty.**

Variables	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Age (years)	45.00	42.50	10.01	27.00	66.00
Graduation Time (years)	20.85	18.50	10.90	2.00	45.00
Time of Activity (years)	15.35	12.50	10.44	2.00	44.00
<b>Gender</b>		<b>n</b>			<b>%</b>
Male		6			15.0
Female		34			85.0
<b>Specialization Area</b>					
Collective Health		23			57.5
Dental Clinic		8			20.0
Collective Health and Dental Clinic		8			20.0
PSN		1			2.5

Table 2 shows the relationship between the clinical examination of patients with special needs and variables graduation time and contact with the content on the subject, with 87.5% of professionals performing this examination, but without significant association with the variables investigated ( $p > 0.05$ ).

**Table 2. Association between graduation time, contact with content on the topic; and PSN care, as well as clinical examination.**

When as clinical examination.														
Variables	Graduation Time						p-value	PNE Content on Undergraduate Course						p-value
	≤ 10 years		> 10 years		Total			Yes		No		Total		
	n	%	n	%	n	%		n	%	n	%	n	%	
Performs or have performed dental care to PSN at UBSF														
Yes	5	12.5	26	65.0	31	77.5	0.64*	1	2.5	30	75.0	31	77.5	0.006*(1)
No	2	5.0	7	17.5	9	22.5		4	10.0	5	12.5	9	22.5	
Total	7	17.5	33	82.5	40	100.0								
Before referral performs or have performed clinical examination to PSN at UBSF														
Yes	6	15.0	29	72.5	35	87.5	1.00*	3	7.5	32	80.0	35	87.5	0.10*
No	1	2.5	4	10.0	5	12.5		2	5.0	3	7.5	5	12.5	
Total	7	17.5	33	82.5	40	100.0		5	12.5	35	87.5	40	100.0	

PSN = Patients with Special Needs; \*Fisher's Exact Test; (1)Significant at 5% level.

Table 3 shows measures of association between providing or not to care PSN, performance of clinical examination and variables time of service in Primary Care and professional training for this type of care. There was no significant association at the 5% level for any of the variables.

**Table 3. Association between time of service in Primary Care, access to training on the care of patients with special needs; and PSN care, as well as clinical examination.**

Patients with special needs, and PSN care, as well as clinical examination														
Variables	Time of service in Primary Health Care								Training for PSN care					
	≤ 10 years		> 10 years		Total		p-value	Yes		No		Total		p-value
	n	%	n	%	n	%		n	%	n	%	n	%	
Performs or have performed dental care to PSN at UBSF														
Yes	11	27.5	20	50.0	31	77.5	0.44*	5	12.5	26	65.0	31	77.5	1.00*
No	5	12.5	4	10.0	9	22.5		1	2.5	8	20.0	9	22.5	
Total	16	40.0	24	60.0	40	100.0								

Before referral performs or have performed clinical examination to PSN at UBSF

Yes	13	32.5	22	55.0	35	87.5	0.37*	6	15.0	29	72.5	35	87.5	1.00*
No	3	7.5	2	5.0	5	12.5		0	0.0	5	12.5	5	12.5	
Total	16	40.0	24	60.0	40	100.0		6	15.0	34	85.0	40	100.0	

\*Fisher's Exact Test.

Professionals who do not provide care for patients with special needs were able to highlight the reasons why they do not, and the main reason was "because they do not feel prepared" (37.5%). On the other hand, professionals who performed the care reported that they did not meet the demands of patients with special needs "because they did not have adequate training" (44.5%). The referral of these patients was made mainly to the Dental Specialties Center of the municipality (82.5%) (Table 4).

**Table 4. Distribution of professionals according to the reasons for not providing care to PSN and the impossibility of meeting the demands according to the referral of patients with special needs.**

Variables	n	%
<b>Reasons for not providing the care [8]</b>		
For not feeling prepared	3	37.5
Prefer to refer to the specialized service	2	25.0
Did not justify	2	25.0
There is no equipment required for procedures in UBSF	1	12.5
<b>Reasons why they did not meet the needs of PSN [9]</b>		
Does not have adequate training	4	44.5
Could not finish dental care	2	22.2
There are not adequate resources and structure	2	22.2
Patient did not cooperate	1	11.1
<b>Referral Reference Service [40]</b>		
CEO	33	82.5
University Hospital	4	10.0
Depends on Case	2	5.0
University Clinic	1	2.5

Participants pointed out that the care of patients with special needs should be performed by a specialized professional (31.2%), reporting as main difficulties the patient's approach and cooperation (27.5%). On the other hand, most of them considered that the accessibility of these patients to BFHU is good (36.9%) (Table 5).

**Table 5. Answers of professionals to questions related to PSN care.**

Variables	n	%
<b>PNE Care should be</b>		
Performed by specialized professional	15	31.2
Humanized and welcoming	10	20.8
Adequate structure (physical structure, schedule, materials)	8	16.6
Performed in Specialized Service	6	12.5
As for any patient	6	12.5
With scheduling prior to consultation	3	6.4
Total	48	100.0
<b>What are the Difficulties for PSN Care?</b>		

Patient approach / Patient cooperation	16	27.5
Lack of updating offered by the service / Lack of professional training	12	20.6
Unfavorable / Unadapted physical structure	11	18.9
Lack of resources (material / equipment)	8	13.7
Accessibility of the patient to the service	7	12.0
Lack of communication with caregivers / Lack of cooperation of caregivers	3	5.1
Lack of specialized service	1	2.2
Total	58	100.0

#### Analysis of the Accessibility of PSN to UBSF

Good or optimal accessibility	17	36.9
Lack of equipment for the specific service	6	13.0
Difficulty in referencing to specialized services	5	10.8
Unadapted physical structure (there are no ramps, handrails, doors are narrow, unadapted bathrooms)	5	10.8
Positive initial listening at UBSF / Resolving initial care / Committed team	4	8.6
Lack of professional training	4	8.6
Lack of transport to UBSF	2	4.3
No Scheduling	2	4.3
Lack of resolution	1	2.7
Total	46	100.0

## Discussion

All participants have one or more dental specialties; however, only one of them had specialization in patients with special needs (PSN). Reflecting on the possibility of these professionals having adequate training in PSN is an important aspect, because although primary care professionals have to present, mainly, a general education; having this type of training would contribute to a more secure and decisive service, responding to the strategy of the Brazilian government through the National Policy of Health for Persons with Disabilities (Ordinance No. 1.060 / 2002); which recommends that services should be organized to provide priority care in health services.

Professionals also reported that no curricular components were offered during their undergraduate course addressing the care of this group of patients, corroborating the findings described in another study [15]. In this perspective, previous research analyzed the training provided to the care of patients with special needs in 221 Brazilian Dentistry Schools and found that only 27.8% offered the PSN discipline [16]. However, among the educational institutions that offered the PSN discipline, 60.7% offered the discipline in the compulsory modality and 25% in the elective modality. The authors emphasize that the number of Dentistry Schools that contemplate the discipline do not meet the demand of Brazil, in addition to the fact that it is not compulsory in the content of the Political Pedagogical Projects of the Courses in the majority of higher education institutions, favoring the formation of unprepared and insecure professionals for the care of patients with special needs.

Most dentists reported performing care for patients with special needs, which is a relevant fact, since it is known that primary care professionals are those responsible for the first patient care, regardless of their conditions, and only more complex cases should be referred [17]. This aspect had no significant association with the graduation time. On the other hand, although they did not

have contact with the content on the subject during the undergraduate course, care was provided mainly by this group of professionals, with significant association. Therefore, the contact or not to information on the subject during the academic formation perhaps has not been the determinant factor in the motivation of professionals in providing care to this specific group.

Similarly to the findings of this study, other authors observed that in Ontario, Canada, only one in four professionals worked during the undergraduate course with this type of patient; however, most did not report obstacles to the care of patients with special needs [18]. The qualification provided by educational institutions during undergraduate courses may result in professionals who are poorly trained in the management of these patients [19]. This fact raises the need to reflect on how these contents are worked in institutions to be really effective.

The care of patients with special needs was not significantly influenced by the time of service in Primary Care or by the access to training on the subject by these professionals, whose majority have worked in the public service for more than 10 years and reported that they did not have access to PSN care training during the work period. Even though this service is provided, it is necessary to reflect on the demand by the offer of training courses for these professionals, whose knowledge on PSN care should be improved through more specific training. This fact will contribute to the reduction of difficulties in the care for this group of patients through improvements in the technical preparation of these professionals, based on clinical and theoretical motivational experiences that provide knowledge, dexterity, self-confidence and understanding of the human complexity [19].

Regarding the referral of the patient with special needs to the reference service, most professionals declared that they underwent previous clinical examination. There was no association between clinical examination prior to referral to the reference service and variables graduation time, contact with content about the subject during undergraduate course, time of service in basic care, and professional training for this type of care during the working period.

In this perspective, it is worth mentioning that through clinical examination, it is possible to make an early diagnosis of pathologies, as well as immediate treatment, allowing reducing barriers that make it difficult to include people with special needs in health services. Therefore, the success of dental treatment for patients with special needs depends on the dentist's knowledge, which is achieved through detailed anamnesis, a moment at which it will be defined if this patient really needs to be referred or his / her problem can be solved in the Primary health Care [20].

It was observed that among professionals who declared that they do not provide care for patients with special needs, the main justification was that they "did not feel prepared" to do so. It is important to highlight that these individuals are increasingly present in the dentist's practice, mainly due to the increase in their life expectancy. However, many professionals still find it difficult to meet their needs, since they require ergonomic adjustments in the office, specific to each limitation, and technical skills [21]. Therefore, the dentist is faced with the need to learn how to



integrate PSN into the routine clinic and often, due to insecurity, they choose not to perform the service definitively, preferring referral to a specialized service.

Among professionals who did not feel they had met the demands of patients with special needs, the main reason was also related to lack of training. This fact can be explained by the speech of subjects who justify this difficulty by "not having adequate training", demonstrating that the lack of resolution in the service provided may not only be related to gaps inherent to health services or even to the needs of PSN; but rather related to the professionals themselves, with respect to technical, philosophical and psychological aspects, which they face and therefore may not be prepared to perform the procedures [11]. On this subject, Chapter III of the Brazilian Code of Dental Ethics, article 9, item VI, establishes as professional duty: "To maintain professional, technical-scientific and cultural knowledge necessary for the full performance of professional practice" [22], making dentists responsible for being able to perform procedures, making sure that all the needs of patients with special needs are met during care.

Regarding the referral to the reference service, all participants informed to perform the referral. On this aspect, it is necessary to emphasize that before forwarding any patient, including those with special needs to other sectors, it is recommended that dental professionals seek to meet the Primary Health Care needs, as advocated by the Brazilian government's strategy for the National Oral Health Policy [23]. The main reference service to receive these patients, according to professionals' reports, was the Center for Dental Specialties (CEO). The implementation of these centers is a strategy of the National Oral Health Policy to ensure the expansion and qualification of specialized oral health care. These services should be constituted as units of reference for the Primary Health Care, integrated to the process of local-regional planning, offering diverse specialties, including the care of patients with special needs [24]. Thus, it is reinforced that primary care professionals are responsible for the first patient care and only, if necessary, performing referral to specialized centers.

Asked about how should be the care of patients with special needs, most participants reported that it should be "done by a specialist." Outpatient care should always be performed by a trained professional, usually with PSN specialization [25]. However, the care provided to this group of patients does not need to be done by a specialist, because the dental technique itself does not differ; however, management and care tend to be differentiated for PSN [11,26].

Concerning the difficulties faced by dentists in PSN care, many reported that the "approach to patients and their cooperation" are the most difficult aspects. Previous research also found this aspect, observing that care was more difficult for patients with little collaborative behavior [11]. In this context, other authors have stated that one of the greatest challenges in the dental treatment for PSN is actually behavior management [27]. Resistance to care can be seen in people with intellectual disabilities and in those with physical disabilities. However, such behavior, while requiring more from the dentist, can be controlled in the office with the assistance of parents or guardians and with physical containment techniques if traditional management techniques are not



effective. On the other hand, these difficulties may also be related to the predilection for the care of patients with more collaborative behavior by the dentist, without interference.

Regarding accessibility for this group of patients, most professionals considered it to be optimal, corroborating another study carried out in the city of Campina Grande, Brazil [28]. However, other responses called attention, demonstrating the demand for resolving measures to remedy them, as explained in the following speeches: "Difficulty of referencing to specialized services"; "Unadapted physical structure (there are no ramps, handrails, doors are narrow, unadapted bathrooms)"; "Lack of professional training"; "Lack of transportation to UBSF". According to this reality, other authors have reported that PSN present oral problems that greatly interfere with their quality of life and, therefore, they face numerous difficulties in finding services that are appropriate to their demands, such as, among others, architectural barriers, financial limitations, fear, ignorance or negligence regarding oral health, in addition to the shortage of professionals qualified and interested in treating such patients [2,11,26,29].

The simple fact that the fundamental right of coming and going is guaranteed to all, present in item 5 of the Brazilian Federal Constitution [30], can already be considered sufficient to ensure that necessary measures are taken to enable persons with disabilities to exercise their rights. The Federal Constitution is clearly inspired by principles that aim at social inclusion. In addition to guaranteeing the right to equality and non-discrimination, it elects the construction of a free, fair and solidarity society as a fundamental objective of the Federative Republic of Brazil (Article 3); ensuring national development; reducing social inequalities and promoting the good of all, without prejudice.

In addition, specifically in relation to PSN, the Federal Constitution provides in its article 23, incisive II, which is the competence of the Union, States, the Federal District and Municipalities, to take care of health and public assistance, the protection and guarantee of PSN care. Emphasizing in its article 227, the Public Power should promote programs of comprehensive assistance to the health of children and adolescents, which include the facilitation of access to collective goods and services, eliminating prejudices and architectural obstacles for people with disabilities, and no specific type of transportation that facilitates the access of patients with special needs to dental services has been verified.

To a certain extent, it can be considered that dentists, not in their entirety, seem unable to provide care for people with special needs, who have expectations regarding the treatment and bring with them fears and desires regarding the dental care. Perhaps this gap can be filled, improving the training of students since undergraduate course, where it would be possible to recognize in practice the social, psychological and philosophical issues that permeate PSN care. The data obtained in this research raise the need for recognition that measures are necessary with regard to available public health services, so that they become effective in the care of patients with special needs, also allowing health actions to achieve the inclusive process of these people. The evaluation of the experience of dentists working in basic public health services in the city of

Campina Grande allows obtaining a profile of the oral health care provided to PSN, and offers subsidies for the organization of services aimed at this population.

## Conclusion

All participants presented one or more dental specialties; however, only one professional reported having specialization focused on patients with special needs care. Furthermore, a considerable number of dentists reported not having any curricular component in the undergraduate period, or any training or course addressing the care for these patients.

Patients with special needs care at BFHU was performed by most professionals, who reported they were able to meet the patients' needs. The lack of care for these patients at BFHU was justified mainly because dentists do not feel prepared to perform it. The referral of patients with special needs to reference services, mainly to the Center of Dental Specialties, is performed by all dentists, but most do not perform clinical examination prior to referral.

The investigated professionals pointed out some difficulties in relation to patients with special needs care, such as lack of adequate training or lack of resources and adequate structure, thus making problem solving difficult.

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