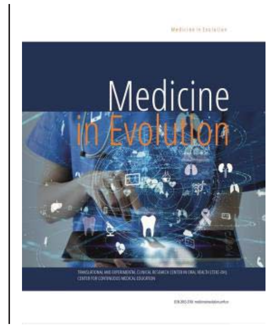
Parents’ Perspective on Their Children’s Dental Treatments Covered by Public Health Insurance in Romania – a Pilot Study



Georgescu R.-Ș.[1], Hură L. A.[2], Mihai C.[3], Oancea R.[4], Pantea M.[5*], Sfeatcu R.[6]

[1]Pediatric Dental Specialist, Private Clinic, Bucharest, Romania
[2]General dentist, Bucharest, Romania
[3]Preventive Dentistry Department, Faculty of Dentistry, “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania
[4]Preventive, Community Dentistry and Oral Health Department, “Victor Babeş” University of Medicine and Pharmacy, Timişoara, Romania
[5]Prosthodontics Department, Faculty of Dentistry, “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania
[6]Oral Health and Community Dentistry Department, Faculty of Dentistry, “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

Correspondence to:
Name: Pantea Mihaela
Address: Barajul Iezeru Street, No. 8, district 3, Bucharest
Phone: +40 722387969
E-mail address: mihaela.pantea@umfcd.ro

Received: 4 December 2023; Accepted: 23 February 2024; Published: 31 March 2024

Abstract

Aim and objectives: This study evaluates Romanian parents' attitudes and behaviors concerning their children's dental treatments covered by public health insurance. Material and methods: A cross-sectional survey involving 40 parents whose children received dental care reimbursed by the National Health Insurance was conducted. Participants provided data through a 14-question questionnaire on oral hygiene, dental treatment history, and sociodemographic information. Results: The majority of treatments were reactive rather than preventive, with fillings being the most common procedure. Despite limited budgets, satisfaction with the quality of treatments and the treatment environment was high among parents. Conclusions: Although dental care was often sought only in emergencies, the overall satisfaction with the services provided suggests a positive acceptance of the current insurance system. The findings underscore the need for policies that encourage preventive dental care practices for children.

Keywords: dental health insurance; parental perspectives; community dentistry; dental treatment satisfaction; Romania

INTRODUCTION

Oral diseases are the highest noncommunicable disease, affecting approximately 3.5 billion people worldwide [1]. They range from dental caries and periodontal disease to oral cancer and congenital disease such as cleft lip. Most of the oral disease are dental caries affecting both deciduous and permanent teeth and the majority of them are left untreated, with 2 billion cases affecting permanent teeth and 510 million cases affecting deciduous teeth [1]. The main reason why they are left untreated is because they are expensive to treat. In 2015, dental diseases were the third most expensive health condition to treat, surpassed only by diabetes mellitus and cardio-vascular diseases [2]. Left untreated, oral disease and its complication lead to disabilities that affect the quality of life [3].

The oral disease is not uniformly distributed across population and it can be seen to affect the most vulnerable and disadvantages groups across societies [3]. The connection between socio-economic status and oral diseases is well known, meaning that the low income countries are more affected by oral disease, and the access to dental services is limited because the treatments have to be sustained out-of-the-pocket [4,5]. The expenditures of oral health are very unequal both globally and across regions and countries, and the level of expenditure is not necessarily corelated to better or worse oral health status. Out of the pocket costs can be major barriers for better access to oral care. On average, out-of-pocket expenditure for oral health care within the 28 countries of the European Union was more than 60% of the treatment costs, and in some Member States, it was close to 100% due to complete exclusion of oral health care from health coverage [4].

The Romanian public system is alike many other European systems, granting insurances through the national taxation system. The health insurance is guaranteed to children and adolescents under 18 years old, employees and retired people. It covers access to both public and private medical institutions if they opt to collaborate with the National Health Insurance House (NHIH). The majority of dental care offices are private and some of them opt to collaborate with the National Insurance House, offering the possibility for reimbursement to their patients. The procedures that are offered are fixed such as: preventive treatments (annual examination and professional cleaning (once a year for adults and twice a year for children under 18 y.o.), fissure sealing (one every 2 years), topical fluoridation (for children between 6 y.o. and 14 y.o.), conservative treatments (fillings), endodontic treatments, periodontal treatment (non-surgical), fixed prosthetic treatments (resin/metal-resin crowns), removable prosthetic treatments (acrylic dentures (one every 4 years)), orthodontic treatments (removable, space maintainers, functional appliances), surgical treatments (extractions, splint after traumatic dental lesions, TMJ repositioning), and oral pathology treatments (specific oral mucosa lesions)[4]. Moreover, there are fixed prices established by the NHIH for these dental procedures and the percent of coverage is either 100% for children under 18 years old, students under 26 years old and adults who benefit from special social security rights, or 60% for employed or retired adults [6]. The standard budget offered by the NHIH for dental care services is limited to 4000 Romanian Lei (RON) (approx. 800 EUR, per month per general dentist, a budget that is increased by 50% for a general dentist that works in rural areas, on the one hand, and by 20% for a dentist specialized in a specific field of dentistry. The purpose of the study is to assess the experience of covered dental treatments of a group of Romanian patients as a starting point for establishing the need for favourable public health policies conductive to dental treatments among children using the health insurance system.

Aim and objectives

In the present study, the survey was designed to evaluate the parents' attitude and behaviour regarding previous experiences of their children with dental treatments through the National Health Insurance.

MATERIAL AND METHODS

The present cross-sectional study was conducted by both clinicians and a group of academic staff from two faculties of dentistry, in Romania, during 2023.

The participants of the current survey are parents whom children had treatments provided and reimbursed through the National Health Insurance from Romania. The subjects were selected from a patient pool of dental clinics in Bucharest that provided treatments for children reimbursed through the National Health Insurance from Romania. All participants agreed to participate. The inclusion criteria were adults (>18 years old), parents of children that have had at least one dental procedure that had been covered by the National Health Insurance. The sample consisted of 40 adults, the majority of them (75%, n=40) living in urban areas, with and educational background of either secondary (60%, n=24) or tertiary studies (40%, n=16).

The self-administered anonymous questionnaire consisted of 14 questions, both open-ended or single/multiple choice questions, addressing 3 main aspects: (1) dental attendance pattern, (2) behavior and opinion about their child history of dental treatments covered by the public health insurance and (3) socio-demographic data. The section referring to the previous dental treatments provided to their children and covered by the national health insurance, the questions aimed to evaluate: the type of dental treatments, the reason why they opted to have them through the National Health Insurance, the possible limitations regarding the dental treatment plan or time frame due to conditions required by the public health insurance system and the level of satisfaction regarding the coverage experience. The estimated fill-in time for the questionnaire was 5 minutes.

RESULTS

In the studied group, the majority of the subjects were treatment oriented, 19 (47.5%) were visiting the dental office only when they considered their children needed treatment (when symptoms arise), 17 (42.5%) declared they go with their children a few times a year, 4 (10%) go twice a year (Table 1). None of them were visiting the dentist for the first time. The majority of them (53.5%, n=21) declared that their children were provided regular treatments, a third of them (35%, n=14) were provided emergency treatment and rarely (10%, n=4), they seek regular check-up (Table 2).

Table 1. Frequency of dental visits

Question	N (%)	Urban N (%)	Rural N (%)	Secondary education N (%)	Tertiary education N (%)
Frequency of dental visits					
A few times year	17 (42.5%)	17 (100%)	0 (0%)	8 (47.05%)	9 (52.95%)
Twice/year	4 (10%)	3 (75%)	1 (25%)	1 (25%)	3 (75%)
Once/year	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Based on the need	19 (47.5%)	10 (52.63%)	9 (47.37%)	15 (78.95%)	4 (21.05%)

Table 2. The Main Reason for The Latest Dental Visit

Question	N (%)	Urban N (%)	Rural N (%)	Secondary education N (%)	Tertiary education N (%)
The Main Reason for The Latest Dental Visit					
Routine check-up	4 (10%)	3 (75%)	1 (25%)	2 (50%)	2 (50%)
Pain/Emergency	14 (35%)	6 (42.85%)	8 (57.15%)	11 (78.57%)	3 (21.43%)
Treatment	21 (52.5%)	20 (95.23%)	1 (4.77%)	9 (42.85%)	12 (57.15%)
No answer	1 (2.5%)	1 (100%)	0 (0%)	1 (100%)	0 (0%)

The previous dental treatments the children were provided range from fillings (67.5%, n=27), to extractions (37.5%, n=15), root canal treatments (30%, n=12), and only rarely (12,5%, n=5) were provided prophylactic treatments such as hygiene sessions or sealing (Table 3).

Table 3. Previous Dental Treatments Covered by the Public Health Insurance

Question	N (%)	Urban N(%)	Rural N(%)	Secondary education N (%)	Tertiary education N (%)
Previous Dental Treatments Covered by the Public Health Insurance					
Fillings	27 (67.5%)	23 (85.19%)	4 (14.81%)	10 (37.03%)	17 (62.96%)
Pain/Emergency	16 (40%)	10 (62.5%)	6 (37.5%)	10 (62.5%)	6 (37.5%)
Root canal treatment	12 (30%)	8 (66.66%)	4 (33.33%)	5 (41.66%)	7 (58.33%)
Extraction	15 (37.5%)	13 (86.6%)	2 (13.3%)	5 (33.3%)	10 (66.6%)
Hygiene session/sealings	5 (12.5%)	4 (80%)	1 (20%)	1 (20%)	4 (80%)

Most of the children (70%, n=28) were treated in a private clinic, and the other part (30%, n=12) were treated in a public clinic. None of them were treated in a public hospital nor in a university. Regarding the available budget to reimburse the costs, most of the participants (64.7%, n=22) declared the treatments were provided as scheduled, with no need to delay it or split it across multiple months because of the insurance limit and almost a third (29.41%, n=10) had to split it across multiple months. The reason for the need of splitting the treatment across multiple months being the fact that they needed complex procedures. When choosing a dentist that could provide to their children treatments that can be reimbursed, the majority (62.5%, n=25) of the participants declared that they did it because of financial reasons (Table 4).

Table 4. Reason for choosing covered dental services

Question	N (%)	Urban N (%)	Rural N (%)	Secondary education N (%)	Tertiary education N (%)
Reason for choosing covered dental services					
Financial reasons	25 (62.5%)	20 (80%)	5 (20%)	14 (56%)	11 (44%)
Dentist' suggestion	8 (20%)	6 (75%)	2 (25%)	4 (50%)	4 (50%)
Standard procedure	10 (25%)	9 (90%)	1 (10%)	3 (30%)	7 (70%)
A right to benefit from	9 (22.5%)	8 (88.88%)	1 (11.11%)	1 (11.11%)	8 (88.88%)
More trust in services reimbursed	5 (12.5%)	2 (40%)	3 (60%)	5 (100%)	0 (0%)
Don't know	2 (5%)	2 (100%)	0 (0%)	2 (100%)	0 (0%)

Regarding the level of quality of treatments, all of the participants declared themselves satisfied with the treatments provided and the clinic where the treatments were provided (Table 5).

Table 5. Satisfaction Regarding Various Aspects of the Covered Dental Services

Question	N (%)	Urban N (%)	Rural N(%)	Secondary education N (%)	Tertiary education N (%)
Satisfaction Regarding Various Aspects of The Covered Dental Services					
Variety of treatments offered	Yes 33 (82.5%)	25 (75.75%)	8 (24.24%)	18 (54.54%)	15 (45.45%)
	No 7 (18.5%)	5 (71.42%)	2 (28.58%)	5 (71.42%)	2 (28.58%)
Quality of treatments	Yes 40 (100%)	30 (75%)	10 (25%)	25 (62.5%)	15 (37.5%)
	No (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Quality of environment where they were provided	Yes 40 (100%)	30 (75%)	10 (25%)	23 (57.5%)	17 (42.5%)
	No 0%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Necessary formalities	Yes 32 (80%)	27 (84.37%)	5 (15.63%)	17 (53.12%)	15 (46.88%)
	No (0%)	3 (37.5%)	5 (62.5%)	6 (75%)	2 (25%)
Waiting time for coverage	Yes 26 (65%)	19 (73.07%)	7 (26.93%)	14 (53.84%)	12 (46.16%)
	No (0%)	12 (85.71%)	2 (14.29%)	9 (64.28%)	5(35.72%)

DISCUSSIONS

For the past years, the World Health Organization has advocating for a universal dental coverage, as part of a universal health coverage [3,7]. Currently, the percentage of covered oral health services offered by different countries varies from 40 to 80%. In Romania, the 60% coverage is characteristic to low-to-middle income countries [1]. In order to enable people to access dental treatments regardless their income, an appropriate dental insurance system should be designed.

When addressing the dental visits, the majority of participants (47.5%) of the current study declared they visit the dental office based on their needs, similar to the participants in another study conducted in Romania, where the patients where adults and the percentage was alike (40.7%) [6]. In both Romanian studies, the participants are more treatment oriented and less preventative oriented – in the current study the participants were addressing the dental office for dental hygiene sessions or sealings only for 12.5%, whereas in other European countries patients request this type of treatment more often [9].

The most requested procedure is dental fillings 67.7%), similar to the adult patients from Romania (45.7%), and other European countries such as Germany and France [8].

Regarding the available budget for reimbursement, currently, it is limited to 4000 Romanian Lei (RON), and even if it is double than the available budget in 2021, when a quarter of the participants had to split the treatments in to multiple months [6], in the current study the percentage is even higher, almost a third (29.41%).

The increased needs for dental treatments in children and the high costs for treatment are the main reason why the participants chose reimbursed treatments, in opposition with the adult participants, who chose it because it was either a standard procedure or it was a right they wanted to benefit from, meaning that both education and awareness of the consequences of neglecting oral health in children must be improved.

CONCLUSIONS

In the studied group, despite the main reason why this type of service was chosen – all of the participants were satisfied both with the quality of the environment and the quality of the treatments provided.

Most of the participants were addressing this type of service for treatments and less for routine check-up and most of the times the treatment provided was direct restorations (fillings). The least addressed procedures were preventive, such as scaling or sealing.

Despite the fact that the participants had access at reduced cost, one third of them chose to visit the dental office only in case of pain or emergency. Parent's satisfaction related to the quality of the treatments and the environment are high, and this should encourage more people to address this type of dental treatments, in agreement with universal oral health coverage for all.

REFERENCES

1. FDI Position on Free Sugars. https://www.fdiworlddental.org/fdis-general-assembly-approves-new-position-free-sugars.
2. Peres KG, Thomson WM, Chaffee BW, Peres MA, Birungi N, Do L, Feldens CA, Fontana M, Marshall TA, Pitiphat W et al. Oral Health Birth Cohort Studies: Achievements, Challenges, and Potential. J Dent Res 2020; 99, 1321–1331.
3. Global oral health status report: towards universal health coverage for oral health by 2030. Geneva: World Health Organization; 2022.
4. OECD/European Union. Health at a Glance: Europe 2020: State of the Health in the EU Cycle; OECD Publishing: Paris, France, 2016.
5. Zivkovic N, Aldossri M, Gomaa N, Farmer JW, Singhal S, Quiñonez C, Ravaghi V. Providing dental insurance can positively impact oral health outcomes in Ontario. BMC Health Serv Res 2020; 20, 124.
6. Cărămidă M, Țâncu AMC, Imre MA, Dumitrache MA, Mihai C, Sfeatcu R. Patients' Perspective on Their Experience of Dental Treatments Covered by Public Health Insurance in Romania—A Pilot Study. Int J Environ Res Public Health 2022; 19, 272.
7. Mathur MR. Williams DM, Reddy KS, Watt RG. Universal Health Coverage: A unique policy opportunity for oral health. J Dent Res 2015; 94, 3S–5S.
8. Petersen PE. Strengthening of oral health systems: Oral health through primary health care. Med Princ Pract 2014; 23, 3–9.
9. Calcoen P, Van De Ven WPMM. How can dental insurance be optimized? Eur J Health Econ 2018; 19, 483–487.