Oral Health Practices in Home Care: A Report on Bonding and Care

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Abstract: Introduction: Home Care (HC) is a form of healthcare that provides patients with a comprehensive range of services. The guidelines of Brazil's National Oral Health Policy highlight HC as a key approach for expanding access to services and fostering a connection with the population. Methodology: This study presents an experience report from the Oral Health Team within the Family Health Strategy (FHS). The intervention period was from March to July 2023 in the city of Itatiba, SP. Results: A total of 25 patients received home care consultations, with an average age of 65 years. Eleven patients used full dentures, five had carious lesions, eight presented dental calculus, and one patient had an ulcerated lesion on the alveolar ridge. Interventions included oral hygiene guidance, restorative treatment, periodontal treatment, and referrals to secondary care for complementary exams. Conclusion: The study concluded that most procedures performed were denture guidance, atraumatic restorative treatment, and scaling and root planing. Additionally, the importance of oral cancer screening was highlighted, with one case identified in a patient. Moreover, the need for sensitivity and compassion in home care was emphasized, recognizing the conditions of both the patient and their family.

Keywords: Home care services, Dentistry, Family health.

INTRODUCTION

Healthcare delivery is a crucial dimension of any society, and in Brazil, the Unified Health System (UHS) was established in 1988 with the purpose of promoting equitable access to health services for the entire population. This system encompasses the identification of health determinants, the formulation of policies, and actions to promote, protect, and restore health [1, 2]. To strengthen the UHS, the Ministry of Health introduced the Family Health Program (PSF) in 1994, where primary care assumes the role of the health system's gateway. The PSF, now known as the Family Health Strategy (FHS), focuses on risk-based health actions and seeks to develop family-centered care [3-5].

The comprehensiveness of health actions, a fundamental principle of the UHS, led to the inclusion of the Oral Health Team (OHT) in the FHS from the year 2000 onward, aiming to provide accessible and comprehensive dental care to the population. This incorporation aligned with the principle of comprehensiveness, aiming to deliver health care in a holistic and integrated manner [5, 6].

Home Care (HC) emerges as a relevant tool in the FHS context, as it enables closer relationships between healthcare professionals and users, allowing for a deeper understanding of family dynamics and community realities. Through HC, health promotion, disease prevention, and health surveillance activities can be carried out, with family follow-up according to needs identified by the team [7-9].

The inclusion of the OHT in HC emerges as a means of optimizing access to oral care for those who face geographic, mobility, or health barriers preventing them from seeking conventional care. Elderly patients, individuals with chronic or terminal illnesses, and those with mobility difficulties are examples of individuals who benefit from dental HC [8, 9].

Given the complex interaction between oral and general health, it is evident that HC in the dental context can play a significant role in improving patients' quality of life. The relationship between poor oral health and the occurrence of systemic diseases has been well documented [10-13]. Additionally, providing adequate oral care at home can prevent severe complications, such as pneumonia, which frequently affects people in need of long-term care [14, 15].

Considering the growing importance of Oral Health in HC, this article aims to report on an experience in home dental care, highlighting its relevance within the FHS and its contribution to the promotion of comprehensive and quality oral health.

METHODOLOGY

This experience report is based on the work of a dental surgeon in Itatiba, São Paulo, Brazil, from March to July 2023. The experience described in this study is

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that of the dental surgeon from the Family Health Strategy (FHS) team “Euclides Deantoni,” also known as “FHS Centenário.” The study was approved by the Human Research Ethics Committee at São Paulo State University (UNESP), School of Dentistry of Araraquara (CAAE: 69122923.6.0000.5416).

EXPERIENCE REPORT

The municipality of Itatiba, São Paulo, Brazil, is considered medium-sized and is part of the Campinas Metropolitan Region. With a population estimated by the IBGE in 2019 of approximately 120,858 inhabitants, Itatiba has 12 Family Health Units (FHUs). Currently, the home care service is provided to around 290 patients, who are included in this assistance according to criteria established by the Ministry of Health. Eligibility criteria for home care are divided into two types: clinical and procedural. The clinical criteria involve data about the patient's situation, the necessary procedures for care, and the frequency of required visits. This process includes assessments made by community health agents, family members, nurses, and doctors.

Regarding oral health teams, the city’s dental surgeons conduct home visits alongside the multidisciplinary team. These visits are usually requested by team members or family members due to a painful complaint from the patient. However, I prefer to visit patients monthly to ensure continuous care.

To conduct home care visits, a meeting was held with community health agents (CHAs) to schedule home visits (HVs) for some of the bedridden patients. Inclusion criteria covered all homebound patients registered in the area assigned to the Health Unit where I work. Three patients who were hospitalized during the study period were excluded. However, it is important to note that once they are discharged and return home, home visits are conducted for these patients.

During the intervention period from March to July 2023, 25 patients were included. The sample showed 40.0% male and 60.0% female patients. Regarding age groups, a significant concentration of participants was between 60 and 70 years (45.0%), and a substantial portion (35.0%) was composed of patients aged 59 or younger. Concerning marital status, the majority were married (43.4%), followed by those in a common-law relationship (30.0%), while singles represented only 3.33% of the sample. In terms of education, 60.0% had incomplete elementary education, contrasting with 15.0% who completed elementary education and 5.0% with incomplete high school education.

As for the duration of home care, there was varied distribution: 41.6% had been receiving care for 13 to 24 months, 21.6% for 1 to 12 months, and 23.3% for 25 to 36 months, highlighting the complexity of home care needs. Finally, through clinical records, we collected data on illnesses; some patients presented with heart failure, arthritis, stroke, hypertension, and diabetes, with multiple morbidities observed in some patients.

During HVs, I was accompanied by the CHA responsible for the family and the dental assistant. First, I performed a clinical exam for oral cancer prevention, looking for potentially malignant changes and other pathologies that might require referral to specialized care. We then conducted the patient’s anamnesis. Each dental consultation lasted approximately 40 minutes.

While providing care, we found that most patients (n=11) wore full dental prostheses. When asked about their age, most patients reported using the same prosthesis for more than 15 years; thus, some patients were referred for a new dental prosthesis at the city’s Dental Specialty Center. Additionally, instructions on hygiene were provided, explaining that cleaning of complete dentures should be done after each meal using a brush and neutral soap. Once or twice a week, we advised soaking the denture for 15 minutes in a solution containing 220 ml of water and one teaspoon of 2% sodium hypochlorite. These instructions were given to both patients and caregivers, as most patients are elderly and have home caregivers.

In some patients (n=5), carious lesions were found, and Atraumatic Restorative Treatment (ART) was performed. The carious dentin was removed with a manual excavator until slightly moist, reasonably soft affected dentin remained, which could not be removed without force. The cavity was then conditioned with 20% polyacrylic acid for 20 seconds, rinsed, and dried with cotton rolls. For the ART procedure, we used Ketac Molar Easymix glass ionomer cement (3M Ketac™). Relative isolation was achieved with cotton rolls to control moisture. For teeth with proximal surface cavities, a matrix band and a wooden wedge were inserted to ensure proximal adaptation.

The dental assistant who accompanied me during the HV prepared the glass ionomer manually following

the manufacturer's instructions, maintaining a 1:1 ratio (1 drop of liquid to 1 scoop of powder). The material was mixed on a mixing pad with a plastic spatula, loaded into Centrix™ syringes, and inserted from the cavity floor, extending over the marginal ridge. Digital pressure was applied for 40 seconds, creating a sealant restoration on the occlusal surface. After the initial set, excess material was removed with manual instruments. The matrix was carefully removed with buccolingual and occlusal movements 5 minutes after the mixing began.

Finally, we checked occlusion with carbon paper, and contact with the adjacent tooth was verified using dental floss. After verification, any excess material was removed with an excavator, and the restoration was coated with petroleum jelly.

As for periodontal treatment, some patients presented with dental calculus (n=8); thus, scaling and root planing were performed using periodontal curettes. Patients were positioned to ensure comfort for both the patient and the practitioner. Despite the challenges in execution due to posture, we managed to perform a good procedure.

While conducting the oral cancer prevention exam, we found an ulcerated lesion on the alveolar ridge of a patient who had recently suffered a stroke. This lesion measured approximately 5 cm in length by 4 cm in width. Since the patient was debilitated and unable to communicate, all instructions were given to his caregiver (sister). We informed her that the patient had an oral lesion and that a biopsy was necessary for analysis. We coordinated with the stomatology specialist at the Dental Specialty Center for urgent care. The biopsy was performed, and squamous cell carcinoma was diagnosed through histopathological examination, and he was referred to the regional hospital for treatment. Unfortunately, this patient passed away after 5 months due to other health complications.

I believe that home dental care goes beyond techniques; sensitivity and humanity are paramount to understanding the reality of the patient and their family. Often, these patients are debilitated, needing to remain in their beds constantly, exposed to heat and unable to communicate due to their condition.

It is essential for the dental surgeon to go beyond procedures, developing an empathetic and understanding approach. This involves recognizing and respecting each patient's specific limitations and needs, providing care that considers the home environment and the daily challenges the family faces. Humanized interaction allows for the creation of a bond of trust, essential for the success of the treatment and the improvement of patients' quality of life.

Additionally, it is crucial to offer guidance and support to the family, helping them understand how they can assist in daily dental care and in maintaining the patient's oral health. This type of integrated and compassionate care not only improves oral health but also contributes to patients' overall well-being, offering them a bit more comfort and dignity in difficult conditions.

DISCUSSION

Oral health conditions are intrinsically linked to socioeconomic, environmental, psychological, and nutritional factors. Low socioeconomic status is often associated with limited education levels among patients and/or caregivers, which plays a significant role in understanding the importance of maintaining oral health [16, 17]. These circumstances also impact housing conditions, particularly for the elderly or individuals with physical or mental disabilities. The presence of a safe residential environment, including features such as handrails, grab bars, appropriate stairs, and adequate lighting, plays a crucial role in preventing household accidents, which often pose substantial risks to residents [16-18].

The dental professional, as an integral part of the health sector, plays a fundamental role in home visits, engaging in health promotion, encouragement, and education activities aimed at both the patient and their family. This approach focuses on the prevention and protection of oral health, providing guidance on oral hygiene practices, maintenance of prostheses, topical fluoride application, and supervised brushing. Additionally, the professional performs clinical treatment upon identifying potential malignant oral lesions. This role establishes a participative communication network that includes the patient's family and other professionals from the Family Health Strategy (FHS) team, contributing to the coordination of the patient's care within their home environment [16].

Access barriers to health services can also be exacerbated by factors such as lack of transportation, poor urban infrastructure, urban violence, and issues related to drug trafficking, further increasing the

proportion of patients with mobility challenges or confined to their homes [16]. A recent study addressing HC within FHS units that adhere to the National Program for Improving Access and Quality of Primary Care revealed that about 50% of Oral Health Team (OHT) professionals are involved in home care [19].

The promotion of HC actions within the territory seeks to minimize inequities arising from health care disparities. The concept of access is multifaceted, encompassing both entry capabilities and accessibility to available resources. The analysis of access equity for homebound patients is substantially influenced by the territory covered by the FHS, considering individual factors that may impact the use of health services [20].

Within the FHS, home care is more prevalent in the activities of nurses, physicians, and nursing technicians, compared to dentists and oral health technicians. This imbalance may be related to various factors, including the more recent incorporation of the OHT within the FHS and the still predominant emphasis on the biomedical paradigm in dental education [20]. Despite the 2004 National Oral Health Policy guidelines aimed at expanding access and service provision at all levels of health care, challenges remain [8, 21].

It is evident that the success of home visits is mediated by Community Health Agents (CHAs), who play a crucial role in implementing interventions, coordinating between health services and the community, and strengthening the bond between these two entities [22]. A relevant finding from this experience was the negative perception of patients and caregivers regarding the importance of oral health. Despite the serious implications oral problems can have on systemic health, oral health is often undervalued compared to other medical care [8].

To enhance patients' understanding of the dentist's comprehensive role in health, it is essential to deepen formative activities that promote humanization and a trusting relationship between health professionals and the community [23]. Although this experience report has its limitations, given the short intervention period and high workload demands in health services, it serves as a starting point for future explorations.

CONCLUSION

Based on the study, it can be concluded that most procedures performed were guidance on dental prostheses, atraumatic restorative treatment, and root scaling and planing. However, the study also highlights the importance of oral cancer screening, with one case detected in a patient. Additionally, it emphasizes that home care requires recognition of the patient's and their family's circumstances, demanding sensitivity and humanity in the care provided.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

[1] Giacomozzi CM, Lacerda MR. A prática da assistência domiciliar dos profissionais da estratégia de saúde da família. Texto & Contexto-Enfermagem. 2006; 15: 645-653. https://doi.org/10.1590/S0104-07072006000400013

[2] Scaglia JP, Zanoti MDU. Conhecimento de usuários de uma unidade básica de saúde quanto aos princípios do SUS. CuidArte, Enferm. 2021; 96-102.

[3] Barros MG, Barbosa AB. Redes de Atenção À Saúde Bucal. Revista Ibero-Americana de Humanidades, Ciências e Educação. 2022; 8(11): 1571-1587. https://doi.org/10.51891/rease.v8i11.7756

[4] Genaro LE, Marconato JV, Tagliaferro EPS, Silvio SRC, *et al*. Oral Health Team in Brazil and Their Contributions to Home Care: Literature Review. Adv Dent & Oral Health. 2023; 16(3): 555936.

[5] da Silva JC, Moreira MBA, Silva JKF, Paulo DL. Atuação de cirurgiã-dentista, na atenção domiciliar, a idoso restrito ao leito: relato de experiência. JMPHC| Journal of Management & Primary Health Care| ISSN 2179-6750. 2023; 15: e003-e003. https://doi.org/10.14295/jmphc.v15.1194

[6] Cericato GO, Garbin D, Fernandes APS. A inserção do cirurgião-dentista no PSF: uma revisão crítica sobre as ações e os métodos de avaliação das Equipes de Saúde Bucal. Revista da Faculdade de Odontologia-UPF. 2007; 12(3).

[7] da Guia Drulla A, Alexandre AMC, Rubel FI, de Azevedo Mazza V. A visita domiciliar como ferramenta ao cuidado familiar. Cogitare Enfermagem. 2009; 14(4): 667-674. https://doi.org/10.5380/ce.v14i4.16380

[8] Ferraz GA, Leite ICG. Instrumentos de visita domiciliar: abordagem da odontologia na estratégia saúde da família. Revista de APS. 2016; 19(2).

[9] Ramos LMGF, Ramos EV, Ramos JF. Visita Domiciliar do Cirurgião Dentista para pacientes Acamados. InterAmerican Journal of Medicine and Health. 2022; 5: 1-6. https://doi.org/10.31005/iajmh.v5i.227

[10] Cerutti-Kopplin D, Feine J, Padilha DM, *et al*. Tooth loss increases the risk of diminished cognitive function: a systematic review and meta-analysis. JDR Clinical & Translational Research. 2016; 1: 10-9. https://doi.org/10.1177/2380084416633102

[11] Dörfer C, Benz C, Aida J, *et al*. The relationship of oral health with general health and NCDS: a brief review. International Dental Journal. 2017; 67: S2-S8. https://doi.org/10.1111/idj.12360

[12] Falcao A, Bullón P. A review of the influence of periodontal treatment in systemic diseases. Periodontology 2000. 2019; 79: 117-28. https://doi.org/10.1111/prd.12249

[13] Sanz M, Marco Del Castillo A, Jepsen S, *et al*. Periodontitis and cardiovascular diseases: consensus report. Journal of

Clinical Periodontology. 2020; 47: 268-88. https://doi.org/10.1111/jcpe.13189

[14] Müller F. Oral hygiene reduces the mortality from aspiration pneumonia in frail elders. Journal of Dental Research. 2015; 94: 14S-16S. https://doi.org/10.1177/0022034514552494

[15] Czwikla J, Herzberg A, Kapp S, Kloep S, Rothgang H, Nitschke I, Haffner C, Hoffmann F. Effectiveness of a Dental Intervention to Improve Oral Health among Home Care Recipients: A Randomized Controlled Trial. International Journal of Environmental Research and Public Health. 2021; 18: 9339. https://doi.org/10.3390/ijerph18179339

[16] Bizerril DO, Saldanha KDG-H, da Silva JP, de Sousa Almeida JR, Almeida MEL. Papel do cirurgião-dentista nas visitas domiciliares: atenção em saúde bucal. Revista Brasileira de Medicina de Família e Comunidade. 2015; 10(37): 1-8. https://doi.org/10.5712/rbmfc10(37)1020

[17] Cheng YM, Ping CC, Ho CS, Lan SJ, Hsieh YP. Home-care aides' self-perception of oral health-care provision competency for community-dwelling older people. International Dental Journal. 2019; 69(2): 158-164. https://doi.org/10.1111/idj.12417

[18] da Silva LWS, Araújo TC, Santos FF, Lima AA, Santos GB, Lima LV. A família na convibilidade com o idoso acamado no domicílio. Revista Kairós-Gerontologia. 2011; 14: 75-87.

[19] De-Carli AD, Santos MLDM, Souza ASD, Kodjaoglanian VL, Batiston AP. Visita domiciliar e cuidado domiciliar na Atenção Básica: um olhar sobre a saúde bucal. Saúde em Debate. 2015; 39: 441-450. https://doi.org/10.1590/0103-110420151050002012

[20] Travassos C, Martins M. Uma revisão sobre os conceitos de acesso e utilização de serviços de saúde. Cadernos de Saúde Pública. 2004; 20: S190-S198. https://doi.org/10.1590/S0102-311X2004000800014

[21] Barros FPCD, Sousa MFD. Equidade: seus conceitos, significações e implicações para o SUS. Saúde e Sociedade. 2016; 25: 9-18. https://doi.org/10.1590/S0104-12902016146195

[22] Muniz EA, Freitas CASL, Albuquerque IMAN, Linhares MSC. Assistência domiciliar ao idoso no contexto da Estratégia Saúde da Família: análise da produção científica. SANARE-Revista de Políticas Públicas. 2014; 13(2).

[23] Noro LRA, Torquato SM. Visita domiciliar: estratégia de aproximação à realidade social?. Trabalho, Educação e Saúde. 2015; 13: 145-158. https://doi.org/10.1590/1981-7746-sip00027

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