Twenty-Nine Years of Home Gerodontological Assistance *

Veintinueve años de asistencia gerodontológica domiciliaria

Vinte e nove anos de atendimento gerodontológico domiciliar

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Abstract:

Purpose: This article reflects on the author's professional experience of 29 years in a home geriatric dental service. Methods: The manuscript uses autobiography as a methodology to report this experience with an elderly community in conditions of disability in the city of Medellín, Colombia. Findings: The history of the service dates back to the early 1990s when the author was a university professor. The service and training developed in scientific areas that are not often part of the academic curriculum among dental schools. Likewise, the service was institutionalized, and the professional dentist-patient/family member/caregiver relationship consolidated until the service's closure in 2019 just before the onset of the COVID-19 pandemic.

Keywords: community dentistry, dentistry, dentistry for the disabled, dentistry for the handicapped, geriatric dentistry, geriatric health care, gerodontology, history of dentistry, home care, Medellin, Colombia.

Resumen:

Objetivo: Este artículo presenta una reflexión sobre la experiencia profesional del autor durante 29 años en un servicio de odontología geriátrica domiciliaria. Métodos: El trabajo emplea la autobiografía como metodología para relatar dicha experiencia con la comunidad adulta mayor en estado de discapacidad en la ciudad de Medellín, Colombia. Hallazgos: La historia del servicio data de principios de 1990 cuando el autor era profesor universitario. Describe cómo se fue desarrollando el servicio y la capacitación en áreas científicas que normalmente no forman parte del currículo académico de las facultades de odontología. Igualmente, se relata cómo se formalizó el servicio y cómo se consolidó la relación profesional odontólogo-paciente/familiar/cuidador hasta el cierre de este en 2019, justo antes de la pandemia por COVID-19.

Palabras clave: atención domiciliaria, cuidado geriátrico de la salud, gerodontología, Medellín, Colombia, odontología, odontología comunitaria, odontología para discapacitados, odontología para minusválidos, historia de la odontología, odontología geriátrica.

Resumo:

Objetivo: Este artigo apresenta uma reflexão sobre a experiência profissional do autor durante 29 anos em um serviço domiciliar de odontogeriatria. Métodos: O trabalho usa a autobiografia como metodologia para relatar esta experiência com a comunidade idosa em estado de deficiência na cidade de Medellín, Colômbia. Resultados: A história do serviço remonta ao início da década de 1990, quando o autor era professor universitário. Descreve como o atendimento e o treinamento se desenvolveram em áreas científicas que normalmente não fazem parte do currículo acadêmico das faculdades de odontologia. Da mesma forma, relata como o atendimento foi formalizado e como se consolidou a relação profissional dentista-paciente/familiar/cuidador até seu encerramento em 2019, pouco antes da pandemia de COVID-19.

Palavras-chave: atendimento domiciliar, cuidados de saúde geriátrica, gerodontología, história da odontologia, Medellín, Colômbia, odontologia, odontologia comunitária, odontologia geriátrica, odontologia para deficientes.

INTRODUCTION

This article has been written in the form of autobiography (1-3), a qualitative research technique that is rare in the scientific jargon of the dental profession. Professional activities and technical publications in dental discipline, as well as in other areas of health care, are emotionally detached and emphasize the intellect. I believe qualitative research, with autobiography within this methodological field, is a way of giving a heart to

science so that it beats with emotion. I believe this method of reflecting on professional and life experiences is meaningful and can destabilize the status quo that quantitative methods pretend to maintain. However, the qualitative humanistic perspective should be more relevant, especially in health disciplines since it is the foundation of the professional-patient relationship. In this article, I established the main purpose of making a historical account of my 29-year professional experience as a dental care provider at a Home Geriatric Dental Service in the city of Medellín, Colombia.

I describe the service in a self-assessment for license renewal in 2013 (4) as follows: Since 1990, the service has provided ambulatory low-complexity health care in general dentistry through an extramural home modality to elderly adults (geriatric) who, due to physical and/or mental illness and social and/or family constrains, are difficult to move and commute, generating a high risk for their health and well-being. Therefore, the service was provided at the client's temporary or permanent residence, being it a geriatric institution, a hospital, or at home. It is common to find clients residing in their homes and receiving home assistance by professionals from other health fields such as medicine, nursing, clinical laboratory, and physical and respiratory therapy, where the physical space has been adapted by the family for an adequate health care of the affected loved one.

I hope readers deem this scholarly reflection interesting and its general content useful for dental practice. It is intended as an appetizer for dental professionals and those who, in the future, decide to explore professionally these roads of practice.

Origin of the Home Geriatric Dentistry Service. First Step: University Teaching

Without a prior intention, like certain things that happen unexpectedly in life, I gradually became a geriatric dentist, motivated, guided, molded, and determined to acquire the necessary training and experience in the work. When the days of 1987 passed, in the city of Medellín, Colombia, after having received the title that certified me as a Dentist in 1984, I fulfilled the responsibilities of my recent job at my alma mater as a university professor. The fear that I experienced as a newcomer in the dental profession was constantly with me to remind me to follow the best practices I learned from my true teachers. I had doubts about my expertise in dental knowledge and my responsibility to communicate it to new generations of dentists. We did not have internet, cell phones, or document storing in the cloud then, so we invested a lot of time studying at the library of CES University (named at that time Institute of Health Sciences). Paper copies of books and journals were awakened from the university library shelves from their temporary rest until members of the teaching and/or student community borrowed them. One afternoon at the library, I found the only book on geriatric dentistry that I remember was from the mid-twentieth century. In one of the book's final chapters, the author described the geriatric home dentistry service. I looked at several photos and noticed the size of the "portable equipment" of that time, which required spacious trunks for transportation. Fortunately, vehicles were spacious then. During the writing of this article, I returned to the current Fundadores Library of CES University, but the book was no longer in the catalogue. However, there are other recent publications that described the home service for older adults (5,6).

One morning of the same year, I met Dr. Alpidio Jiménez Gómez (R.I.P.), dean of the CES University's Dental School, and shared with him about my appointment as a professor of total prosthetics, particularly in clinical teaching. I also told him of my responsibility of a large number of elderly patients, but that I did not have enough knowledge on this subject and had many doubts. Dr. Jiménez, with his visionary mind, asked me: "Why don't you study geriatric dentistry?" My response, a product of fear and uncertainty, was a multiplicity of excuses, perhaps all absurd and opposed to my concern. He stopped my rambling and putting his brown reading glasses on the desk, as was his custom -for a fragment of a second I thought maybe the frame was tortoiseshell-, and with just two words he brandished the green flag for me to act on this area of dentistry: "Then, dare!"

During the years following the closing of the decade of the 1980s and as a university professor, I had special dedication in my academic training, incubation of ideas, and generation of project proposals in geriatric dentistry. The following decade was the time for the materialization of those dreams that I put on paper, such as education, promotion and prevention, and clinical assistance programs. Today, I can say that it was not easy, but it was very gratifying. Allow me to list some of those episodes.

In 1992, during an academic meeting at the dental school, "whose name I cannot remember," as Don Quixote of La Mancha started, my idea had matured, and I submitted the proposal to implement oral promotion and prevention programs for the elderly population of the city. Some participants at the meeting burst out laughing, as if I had told a great joke. Nevertheless, for those who know the path they are walking and the direction they want to travel, these attitudes are encouraging, very motivational! At the end of the meeting, Dr. Augusto Arango Calderón, vice dean of the school, expressed his interest in the project and offered his support. After a few days, I formally delivered my proposal to the schools' governing body, which was approved by the dean and materialized with the backing of the vice dean. In this way, the first oral promotion and prevention program in geriatric dentistry for low-income elderly people was created and was conducted at the Bernarda Uribe Restrepo Shelter in the municipality of Envigado, Colombia. Senior dental students (fifth year) participated in the program, of which the caregivers of that senior care institution and 79 elderly patients from the charity pavilion benefited.

In 1993, other extramural assistance programs for the elderly population emerged, which were designed for clinical practice of senior dental students of the same school at ES University. One of them was a dental education, prevention, and treatment (total dentures) program delivered to 11 elderly residents in a geriatric home managed by the Rotary Club located in the neighborhood of San Cristóbal, as well as to 23 residents of the Diego Echavarría Misas Gerontological Home in the neighborhood of San Antonio de Prado, in Medellín, Colombia. I remember that one of the students, when noticing that at the San Cristóbal facility residents slept in two large rooms, one for women and one for men, he asked an old woman: "How do you manage to live here? And do you all sleep together?" To which she replied: "Here I have a roof, bed, food, and company. During my adult life I only had a slum that my father left me as an inheritance. Now and here I live in a palace."

In 1994, as a continuation of the clinical activities performed to a successful conclusion, a new proposal to include the course of Geriatric Dentistry in the senior dental curriculum (ninth semester) of CES University was implemented. The course was designed to be covered in three learning modules: basic concepts of gerontology, basic geriatric concepts, and dental concepts. Thus, the content from the first two modules combined with the third one to consolidate the concept of Geriatric Dentistry, Odontogeriatrics or Gerodontology.

Between 1994 and 1996, 126 elderly inhabitants in the municipalities of San Vicente Ferrer and Envigado, Colombia received dental care at the dental clinic of the CES University's dental school. This program was impactful and changed the focus of dental care for the elderly. The emphasis on total prosthesis ceased to open the door to comprehensive and gerodontological care, that is, to address all the health needs of senior patients. It also left behind extractions as a required clinical procedure. During these years, research activities with undergraduate students began and three undergraduate theses were successfully completed.

In 1997, with the sponsorship of the dental school, I participated in the V International Seminar on Elderly Care in Havana, Cuba. There, for the price of one dollar, I acquired the excellent book titled, *Temas de gerontología* ["Topics of Gerontology"], which I got signed and dedicated by the authors Oswaldo Prieto and Enrique Vega (6). In October of the same year, the CES Health Sciences Institute organized the International Course on Geriatric Dentistry, thanks to the collaboration of Dr. Guillermo Cárdenas Jaramillo, founding dentist of CES University. Distinguished colleagues and professors from the University of the Basque Country in Spain, doctors Gerardo Rodríguez Baciero and Francisco Javier Goiriena de Gandarias were guests. In 1999, we taught a course geriatric dentistry entitled, "Epidemiological Approach to Edentulism

in the Elder" at the University of Costa Rica's Dental School in San José, Costa Rica. The latter closed the activities for the decade of the nineties.

In May of 2000, we organized the academic event "Oral Health for the Elderly". In the same year, we published an interactive educational CD entitled, "Geriatric Dentistry: Assessment of the Prognosis in Total Prosthesis," in association with the EAFIT University, produced by the systems engineer Claudia María Zea Restrepo, and with the participation of students from our dental school. We participated with the CD in the XV Festival International du Film Dentaire, World Dental Congress, Association Dentaire Francaise, Federation Dentaire Internationale, ADF/FDI in Paris, France, in November 2000. Likewise, we took the CD to the XII National and II Latin American Meeting on Dental Research at the dental school of the University of Valle in Cali, Colombia (September 2001).

Finally, the CES University Dental School won first place in undergraduate research with a qualitative study titled, "Social, Cultural, and Historical Factors that Influenced Dental Loss in Older Adults, Aburrá Valley 2000" (7), which had the participation of five students. Besides the prize, this was an unforgettable experience because it was the first qualitative research conducted of this kind that struggled to be by the research committee at CES.

Putting aside the teaching experiences that served to incubate and develop home gerodontology care, let us look back at its history.

The Beginning of Home Gerodontological Assistance

In the first quarter of 1990, Dr. Gabriel José Molina Vásquez, a colleague and professor at CES University who was aware of my professional interest in geriatric dentistry, commented that he had a family member who could not leave her home due to a complicated health status and asked me if I could see her. I packed the instruments, a white clinical gown, and latex gloves in a small briefcase similar to that doctors used in the mid-twentieth century when they visited homes to provide care to all the members of the same family. The person-patient was in bed, and I gave her assistance for the first time. After the oral clinical examination, I let Dr. Molina know that his family member had several decayed teeth and that needed dental treatment, but that he could not perform treatment because he did not have the necessary equipment at home. With a short and forceful phrase, as is customary in the paisa culture (a Colombian region), he replied: "Well, buy it!" Therefore, I did. I was surprised to find out that portable dental units were for sale purchase one for a good price. In this way, I was able to perform my first gerodontological assistance at home and started providing this service from then on.

At that time, in 1990, I worked at CES University as a professor, practiced private dentistry in a dental office, and added home geriatric dentistry assistance to my practice. After six years of combined practice, in 1996, I decided to end my traditional clinical practice at a dental office. Later, in early 2002, my teaching at the CES University's dental school ended unexpectedly and so my main work activity.

Admission to the Neuroscience Group of Antioquia (GNA)

On August 2002, while attending the 5th congress of the Colombian Association of Gerontology and Geriatrics in Cartagena, Colombia, I met with Dr. Francisco Javier Lopera Restrepo, a neurologist, researcher, and director of the Neurosciences Group of Antioquia (8). I shared with him my interest in training in neurodegenerative diseases that affect the elderly population, given that many of the patients I serve at home had disabilities due to these types of health conditions and that were not included in the academic curriculum of my dental program. Dr. Lopera advised me to make an appointment when we went back to Medellín to talk about my interest in detail.

The date of the appointment with Dr. Lopera arrived. At that time, the GNA functioned on the first level of the so-called "neuroscience house." It was a two-story building. The entrance on the first floor was a brown-colored wooden door of yesteryear and metal fence of the same color that maintained a large space at the top that allowed a climber to enter, even if it was sealed. The fence had double key and padlock. Inside on the right was Dr. Lopera's office. After heard, "well, you can continue" from the secretary, I opened and closed the left wing of the office door. I did not need more space. I walked a few steps into the office, we shook hands and, sitting in the chair in front of the desk, we began the conversation with the crystal clarity of receiving fees in the form of knowledge, for that reason I was not alarmed when he told me: "there is no money here." He asked me about my interest in research, a question that I answered by commenting on my title of Specialist in Epidemiology; After more words, the conversation ended, and I received permission with the freedom to enter and leave the GNA if the activities that I would carry out there were not to my liking. Thus, after this pleasant interview, I became a member of the GNA, a membership that I still hold.

Formalization of the Home Geriatric Dentistry Service

At the end of 2002, that is, 12 years after starting to provide Geriatric Home Dentistry service, the Colombian Ministry of Health established a Mandatory System for Quality Assurance of Health Care of the General System of Social Security in Health (4). The System established the authorization of health care providers. According to Article No. 15 of 2003, the registration form was implemented in the special registry of independent professional dentist health service providers, beginning the mandatory process of qualification of health professionals in Colombia. In that first form, the requested information had to be completed in handwriting, which consisted of general data and conditions for the authorization of health service providers. In my case, fortunately, the form included the option of home care option within the extramural care item, which I enthusiastically marked, added the term "dentistry" in parentheses.

In 2006, after receiving authorization to provide the service for three years (4), authorizations of all health care providers needed to be renewed. On that occasion, health professionals had to fill out the registration form in the special registry of health service providers electronically, print it, and deliver it personally to the state offices of health. In my case, it was the Department of Antioquia. That day, under the sunlight but with an absurd fear of rain, I found myself standing in a long and slowly moving line of health professionals that extended around the block to submit my request. Step by step, patiently, I waited for the time for my turn to submit the form. I entered a room where there were several tables and at each one there was an official from the state office of health. I handed my filled-out form with the supporting documentation to an available official, who verified my responses in the general dentistry item, the mobile extramural modality. In the health promotion item, the extramural home modality of low complexity, he exclaimed, "What do you do?"

"That cannot be done!" I was perplexed... A few seconds later, back into reality, I explained to him that I provided home dental care to disabled elderly people. "That cannot be done!" The official replied, walked away, and told me to wait for a moment. The other health professionals in the room heard the exclamations and wondered what was happening and so other officials.

After a few minutes, the official returned with another official, who resumed the questioning and maintained the position of denying that dentistry could be done at home. I maintained my position calmly but nervously. I tried to explain it to them in a better way, once again, about my home care service and pointed out my initial authorization document filled out three years ago. When there were already five officials around me, each new one of a higher rank, arriving at my location and listening to the argument of the impossibility of such a service. At one point, after having reached my breaking point, I exclaimed, "All people have the right to access health services. What do you do with disabled older adults who cannot leave home and have dental pain?" Silence followed my exclamation, and a wave of emotional compression formed around. I thought that was the end of my home professional practice, while with my face flushed. I perceived the same glances from

the colleagues who were nearby still presenting your documents. Moments later, the silence was broken by the highest-ranking official who was the last to arrive, accepting my argument and approving my authorization to continue providing geriatric home dental service. This occurred on November 17, 2006. It was a difficult time with a great achievement and a cheerful conclusion. I stood up from the chair with pride, smiling and jumping of joy inside me. The authorization of my service was renewed from then on without problems and within the terms determined by the regulatory health entity.

Evolution of the Home Geriatric Dentistry Service

When we started the Home Geriatric Dentistry service in 1990, for obvious reasons, the relatives of a person-patient had doubts and, on many occasions, rejected the visitation. I believe that the confidence in an appropriate delivery of care at an elderly person's own residence was not easy to achieve. Nevertheless, gradually, I started to be accepted by people-patients and their relatives. Dr. Jairo Moreno (R.I.P.) once told me during my years as a dental student: "it is very important to cultivate your own clientele." I see here a great term with a deep meaning, "cultivate." Yes, cultivate the clientele, which means that the ultimate goal must be defined. What is such a goal when devoting our career to assistance through Home Geriatric Dentistry? The uttermost goal should be to improve the health condition of the patient and limit the collateral social damage that oral diseases cause. Paraphrasing a definition from the Spanish Royal Academy (9), the professional must provide the necessary means to maintain the professional-patient/family/caregiver relationship and strengthen the treatment towards those means. This interest, coupled with the knowledge used during the treatment, will allow the clinician to harvest the results of fulfilling the ulterior goal outlined from the start of the professional relationship and, thus, to cultivate the clientele. Hence, the number of people-patients grew as long as experience and professional diligence.

The Home Geriatric Dentistry service brings the dentist closer to the essence of what it is to be a health professional, which is to serve others, those who suffer and those who trust in the professionalism of the geriatric dentist. To achieve this, it is necessary to understand the person-patient. It does not matter if they are affected by Alzheimer's disease or cannot communicate. If a person-patient has physical pain from cancer, it deeply affects their well-being. If a person-patient cannot leave home because of their esthetics of their mouth, it deeply affects their well-being. Dental health professionals must reinvent themselves in each consultation in such a way that they can achieve effective communication with the person-patient, their family member and/or caregiver to reach the most appropriate treatment option.

In the home environment, unlike care provided in a dental office, the geriatric dentist is a visitor, and the person-patient is the host. This representation allows the dialogue to facilitate and define the reason for the consultation and the solution that the sick person has in mind to address their ailment. Information from the dialogue, combined with that obtained from the clinical assessment, allows the health care provider to establish the most appropriate therapeutic option. When information comes from a family member or a caregiver, clinicians must verify it with that provided by the person-patient. If the procedures requested by the family member or caregiver do not coincide with those of the person-patient, the health care provider must finish the appointment. If the provider continues with the appointment, there is a risk of delivering a treatment that may not be adequate, provided to someone who does not want it, and may not be backed by a consent.

Currently, there are multiple diagnostic aids that are increasingly sophisticated. However, they are not always accessible at a home health service. When available, such aids should be used to confirm a preliminary diagnosis. The clinical examination and the interview continue to be the most important means to achieve a diagnosis, estimate a prognosis, and provide a treatment. In other words, diagnosis remain rooted in the foundations of health practice that, despite the advancement of technologies, relies primarily on a focused and detailed questioning and a meticulous clinical examination.

During the diagnostic phase of Geriatric Home Dentistry care, it is necessary to determine the general health conditions of the older adult (i.e., general disease and associated medications) due to an unstable state of health, which means that the health status can change at any time and the dentist must be prepared to proceed accordingly. Therefore, we must avoid therapeutic conditions that can trigger health changes, especially those that can affect the emotional status or drug interactions. In the former situation, constant communication with the person-patient during each gerodontological appointment becomes the best preventive therapy. Thus, they will not only receive information prior to carrying out each clinical activity, but also create spaces to answer questions. Likewise, in some situations it helps alleviate anxiety. This approach helps consolidate the professional-patient relationship.

For the second case, which is to avoid drug interactions, we must opt for non-surgical home gerodontological treatments. Thus, we avoid using drugs such as local anesthetics, analgesics, antibiotics, or anti-inflammatories that may react with the medications required for treatment, affect the control of general health conditions, and may unexpectedly change the state of health and even the life of the person-patient.

To comply with the aspects mentioned above, a professional relationship with the geriatrician who sees the person-patient is important and necessary. Through that relationship, we must conduct medical interconsultation in cases in which it is mandatory to perform surgical treatments and/or prescribe medications. The interconsultation must be documented in the medical record and follow the instructions exactly as given by the medical professional. The communication with the geriatrician ends at the same time that home gerodontological care ends.

The years passed by as the home gerodontological care consolidated, as well as the care conditions. It is the case of the informed consent in which the therapeutic process of each person-patient is documented. Therefore, the consent must be a personalized document because there are not equal clinical cases. This reflection is the manifesto of compliance with the bioethical principle of autonomy that legitimizes the will of the person-patient in accepting the realization of the plan of treatment defined by the dentist. That document must be included in the medical record and the person-patient should have a copy of it. At Home Geriatric Dentistry, the people-patients are in a state of disability for different reason, being them physical, mental, or social. For those purposes and, particularly in cases of mental disability , the informed consent must be obtained from any person with the capacity to assent to the treatment, or the family member or caregiver when appropriate (10-12).

Once the gerodontological treatment is complete, it is necessary to continue monitoring the oral health status achieved in accordance with the treatment provided and the epidemiological conditions of risk of disease that were defined. This stage of maintenance of oral health is, in my experience, the most difficult to implement because the relatives or caregivers responsible for the patients usually consider that, once the planned treatment is finished, it is not necessary to perform additional procedures. Gradually, after training caregivers on appropriate oral hygiene methods, changing hygiene habits, and making hygiene controls at each appointment, the therapeutic phase was implemented. In 2017, a free-access educational video written, edited, and produced by Verónica Luna Zapata from the GNA was released (13). After 29 years of having started the Geriatric Home Dentistry service, I can express from the professional point of view, in the first place, that this type of assistance is a true service since the relief that is provided to the elderly human being who suffers from oral and/or general health conditions is so meaningful that it is difficult to quantify. However, when patients can once again eat and enjoy their favorite foods, communicate again with their loved ones, and smile again with total confidence, and relatives feel relieved with the results in their loved ones who have returned to their usual selves after oral health was restored, even during their last days of life. Secondly, it is a service that requires a vocation to assist the suffering seniors and the understanding of those human beings who have more life experience. Finally, by assuming each therapeutic relationship with heart and intellect, the best results are achieved and provide the professional with a benefit that is also difficult to quantify.

CONCLUSIONS

The Home Geriatric Dentistry service ended in 2019, a few months before the news of the first cases that the COVID-19 pandemic would produce. It was unexpectedly, perhaps following the same steps as it began in 1990. After 29 years of service and without having had any physical affectation as a result of this professional exercise, severe lumbar discomfort occurred repetitively that turned on the alert of the right moment to terminate this wonderful professional experience. I can say aloud -scream- about the great fortune I had by the grace of fate for some or Divine Providence for others, of being the bearer of these extraordinary professional experiences.

If you allow me, I would like to invite you to read the book entitled *Lumbre para el Vergel* (14), which is in the process of being published and describes in detail the oral epidemiological casuistry of the elderly population in a state of disability who received care at the Home Geriatric Dentistry service.

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Notes

* Original autobiographical research.

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