

Oral Health Policy in Latin America: Challenges for Better Implementation

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ABSTRACT

Background: Oral health is considered an important public policy. This study aimed to understand which barriers and facilitator occurs during the implementation of oral health programs/policies.

Methods: A qualitative study was conducted within personal interviews with decision-makers, at the political, technical, and academic levels. Data were transcribed and analyzed using Maxqda®.

Results: The formation of dentists with an emphasis on the public service proved to be a critical knot, also the population's lack of knowledge about their rights was mentioned. In Chile and Colombia, one of the main facilitators was the previous existence of oral health programs. As barrier, the lack of systematization of epidemiological data. In Brazil, the main facilitators were many dentists available and the political will of politicians to include oral health as public. Managers unprepared to work in public service was one of the main barriers.

Conclusions: During the development and implementation of public policies several factors are encountered, it can be concluded that human resources are fundamental elements for the functioning of public service, besides the interest of the managers and politicians for the inclusion of this theme in the political agenda of the country.

Keywords: Decision-making, Latin America, oral health, public health.

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I. INTRODUCTION

Oral diseases are a global public health epidemic and a neglected epidemic that affects all ages worldwide, with particular concern about their increasing prevalence in many LMICS (Low and middle-income countries [1]. Only from a courageous decision-making process, with financial incentives and commitment from various actors to include oral health in political agendas, to enable the taking of decision [2]. The public policy cycle consists of five stages:

- (1) agenda-setting,
- (2) public policy formulation,
- (3) public policy decision-making,
- (4) public policy implementation, and
- (5) public policy evaluation.

Implementation is seen as one of the stages of the public policy cycle and is influenced by the following factors: unpredictability; the multiplicity of stakeholders and organizations with different interests; shifts in stakeholders, their relationships, viewpoints, and perceptions; discontinuity and the need for new negotiations [3]. The efficiency of public policy implementation involves the concept of functions, duties, controls, and coordination, and understanding conflicts, resilience and cooperation between stakeholders are key to managing the implementation process, but they are also important during the policy design and adoption phases [4].

In Latin America, there are different models of health systems and different ways of offering oral health as a right

to the population, not always focusing on universal access, and with different models for offering services to the population. Understanding how the decision-making process took place so that oral health integrates these systems is essential in the process of convincing decision-makers, strengthening oral health and expanding access to populations. This study identified the main barriers and facilitators for the implementation of oral health policies in Brazil, Chile, and Colombia.

II. METHODS

A. Setting

The Colombian health system is organized under the model that Londoño and Frenk [5], called Structured Pluralism, in which, instead of nationalizing the health system, the government encourages the operation of many health providers (Instituciones Prestadoras de Salud - IPS) and insurance companies (Entidad Administradores de Planes de Beneficios de Salud - EAPB). According to rules established by the government Resolution 3.577 of 2006 adopts the "National Plan of Oral Health, and within the National Public Health Plan of 2007 oral health was included as one of the priorities in health in the country, as provided for in law 1122 of 2007. The promulgation of the 1988 Constitution in Brazil represented the extension of social rights, the Brazilian health system has universal access and dentistry has expanded the offer of services in 2004 with the creation of the "National Oral Health Policy" (PNSB) [6]. The Chilean health system is characterized as a public/private mix, with the Ministry of Health (MINSAL) playing the leading role throughout the sector. The public sector is responsible for most of the population is FONASA (Fondo Nacional de Salud), and profitable and non-profit private sector regulated by the Superintendency of ISAPRES (Instituciones de Salud Previsional). In 2004, Law 19.966 established as the "GES Law" (Garantía Explicita de Salud), brought benefits to FONASA or ISAPRES affiliates and dentistry was included in this law, which is revised and includes new services regularly [7].

B. Design

A multiple case study with a qualitative approach was used to explore the perceptions about individual barriers and facilitators and those related to the health system when implementing Oral health care in Brazil, Chile, and Colombia. This study was approved by the School of Dentistry from USP research ethics committee (CAEE 92350418.1.0000.0075).

C. Participants and Data Analysis

This research was conducted from August 2018 until March 2020, the interviews were conducted, in loco, with 14 key actors involved in the oral health decision-making process in the countries studied, namely: Brazil, Colombia and Chile. The interviewees were identified through key informants from each country, that had participated: at the political, academic, and technical levels. These informants are recognized as essential in the decision-making process, many of them were the creators and leaders of the health implementation process in their countries. Individuals were

purposely selected to ensure different perspectives, allowing a balance of individual positions. Decision-makers have been described as political decision-makers (e.g., national and/or local oral health coordinators) at the director level, roles such as oral health director; at the professional level, positions that have served directly at the political level, e.g., oral health advisor; at the academic level, professors and researchers who have been active at the technical level. The staff who provide clinical services to the Community at the health service level was also included.

Participants were identified by researchers from each country, then were invited to participate in the face-to-face interview, using a semi-structured script, which contained open-ended questions with a specific question about "what were the barriers and facilitators found at the time of implementation of the oral health policy/program?". All Interviews were audio-recorded, recordings were transcribed verbatim, and the transcriptions were anonymized. Interviews were 60 min long on average. Data were included in the Maxqda software [8] and were analyzed by three researchers from the research group, then the codes were grouped into categories and subcategories, which were then described and later related according to their similarities and differences, allowing the identification of emerging categories based on empirical findings, for the content analysis [9]. Regulations, legislation, and other documents related to the topic of the research were analyzed and evaluated to contextualize the facts at a certain point in time. To fully understand how the health system and its infrastructure worked, the main researcher was accompanied by local researchers from the research group and went deeper into the local context for one to two weeks before conducting the interview.

III. RESULTS

A barrier is an obstacle that prevents a given policy instrument from being implemented, can be embedded in many reasons, including resistance from key stakeholders, lack of human or financial capital, lack of agreement regarding institutional guidelines or duties and obligations for implementation, disagreement with other current policies, lack of communication and cohesion between the parties responsible for implementation, or lack of commitment or political will [10], and a facilitator is defined by a person or thing that makes an action or process easy or easier. In this way, the identified barriers and facilitators are described according to Table I.

After grouping the common themes, we can describe the main excerpts of the interviewees' speeches according to Table II.

IV. DISCUSSION

Despite their different health systems, the countries studied encountered similar barriers and facilitators, according to each local context. Brazil has chosen to adopt a universal health model with the inclusion of dentistry throughout its territory, and Chile and Colombia include dentistry in their service package for the public system.

TABLE I: THEMES ACCORDING TO CONTENT ANALYSIS

	Facilitator	Barriers
Chile	The previous existence of oral health programs; Conducting epidemiological studies; Academy participation; Creation of the GES Law.	Lack of systematization of health data; higher education training of human resources in dentistry; Population access to health services; Awareness of the importance of oral health by the population.
Colombia	Existence of territorial policies and their importance; Conducting epidemiological studies; Data available for decision making; The existence of normative frameworks for policies/programs to guarantee their continuity,	The distribution of dentists across the country is uneven in more remote or violent regions; The difficulty of financing to conduct epidemiological studies, Beliefs and awareness of the population concerning oral health, the capacity of leadership and key actors, Training of dental surgeons for private practice.
Brazil	The availability of professionals to work in the public health system, political will and engagement of those involved in the decision-making and implementation process, participation of the academy	Training of professionals and changes in the work process, Financing and management of resources, ignorance of rights by the population, lack of access to information data

TABLE II: EXCERPTS ACCORDING TO COMMON THEMES

Facilitator	
Themes	Excerpts of the interviewee's
Previous Existence of Norms/Policies / Programs	<p>"...oral health policies, one can establish certain programs that are installed from primary care and that take today from the pregnant woman who is guaranteed care, to adults 60 years who also have guaranteed care, dental emergency at all ages. Guaranteed attention by the Ges law (Chile - Political/Technical/Directive Level)</p> <p>"There are programs of local authorities of the secretary of health that are including oral health activities, within other health activities, educational system, recovery, different health." (Colombia - Technical/Health Service Level)</p> <p>". . .another facilitator is the existence of previous policies" (Colombia - Academic Level)</p>
National epidemiological surveys	<p>"Health survey of 2003, a classic question that to this day comes up "do you think your oral health affects your quality of life?" It is a question from which we hang ourselves, a question from a national survey, which allowed us to give everything that we are developing today" (Chile - Political/Technical/Directive Level)</p> <p>"The opinion is based on what we have with the ENSAB IV that was made in 2012–2104 and although we have improved, there are also complicated conditions, so it has been improved in some situations" (Colombia - Technical Level)</p> <p>"I think the first data that are important are that in some publications, it is not even considered is that what was most considered for the inclusion of ESB in the ESF was the data from PNAD 1998, which said of almost 30 million Brazilians, that is, 20 %, had never been to the dentist" (Brazil - Directive Level)</p>
Academy participation	<p>"Mainly the advances made in dentistry, have been attributed to the support of the academic sector that integrates the universities, opportunistic as the opinion of experts, saying that they range from the opinion of experts, from a response to a demonstration of the citizenship of whatever is its format" (Chile - Political/Technical/Directive Level)</p> <p>"Universities helped a lot in the construction of politics, in the defense of politics, it was because people were on the advisory committee and in the collaborating center, they conducted research that was of interest to politics (Brazil - Technical Level)</p>
Funding and management/leadership skills	<p>"There was a window of opportunity, which was the political will of a given government to start and the qualification of management (Brazil - Political Level)</p>
Barriers	
Lack of data systematization/information	<p>"There is a lack of systematization to be able to say with certainty if the territorial impact has it for developing public policy, I cannot say that there is an impact or not! Because there is no evidence, and if there is, they are technical guidelines . . . we build based on what we see, but when we cite the evidence, it is from the outside! (Chile - Political/Directive/Technical Level)</p> <p>"If there is no monitoring, I think they left things in the middle, because the only way that I get some information to capture to be able to monitor and evaluate and be able to measure with respect to the goal that we have achieved and we have managed to change the strategy if not served to see the result" (Colombia - Technical Level)</p> <p>"There was a barrier for us too, which was the information system, because then, the SIAB (Primary Care Information System) at the time collected little information about oral health, and we did not have several data to show" (Brazil - Technical Level)</p>
Human Resources	<p>"Inability of dentists to have, or difficulties from dentists to work in communes . . . scarce number of dentists who are within the public health for decision making ... the lack of political power... (Chile - Technical/Health Service Level)</p> <p>"There are professionals and the number in theory enough, but they are concentrated in the places where people have access to the service ... because there are no policies with incentives to work in places where we have greater difficulty "... because the social reality of this city ... makes that there are areas where you cannot reach ... because there is a violent climate that does not allow the entry of services . . . because the demand determines where the services are located..."(Colombia - Academic/Health Service Level)</p> <p>"The dentist continues to think about the clinic and clinic for the provision of the service, how does the social security system in health work, but rather the clinics of the particular service, from aesthetics complex, the chip has to be changed and that is done from academic training." (Colombia - Technical Level)</p> <p>"In terms of public logic, we train for a private initiative. We professionally go to the dental office to have a clinical examination and a price quote. The dentist cannot, he was not trained to plan, territorialization, to list the risk group, demand organization, was not it? So, most of the problems are due to the problem of training professionals." (Brazil - Political Level)</p>

TABLE III: EXCERPTS ACCORDING TO COMMON THEMES (CONT.)

Knowledge about rights and access to services	<p>"One of the biggest barriers that the adult population has is access to primary care, adults, in hours, outside work hours ... it is one of the factors that have influenced the low coverage that the GES 60 years, GES 60 years, unfolds from 8 to 5 in the afternoon, and people of 60 years are working (Chile - Political/Technical Level)</p> <p>Difficult to term an empowered population, towards health, especially in oral health, because in reality, we have never had empowering oral health. Dentists who are the establishment that has been able to make the population literate regarding, on the one hand, their rights, we must ask people they know what guaranteed care is entitled to." (Chile - Political/Directive/Technical Level)</p> <p>"Our country considers that oral health is unimportant" (Colombia - Technical/Health Service Level)</p> <p>"Culturally, the population still does not give the importance of oral health. In addition, dental practice is still detached from general health practices" (Colombia - Academic/Health Service Level)</p> <p>Oral health was not even constituted by the social issue, as a right of access, on behalf of the people to not even know that they have the right to oral health in the SUS, nor of the health authorities or not. Because oral health has always denied lower plans. I say the following, rich has a dentist, poor has pain! That is it, and this situation became natural in Brazil (Brazil - Political Level)</p>
Financing and leadership skills	<p>"If there is no leadership in an organization, the things that we must remove and execute this policy are fulfilled, it is not fulfilled and if the state does not see results" (Colombia - Technical/Health Services Level)</p> <p>"Oral health is still not part of the agenda of priorities, compared to other areas, if you must withdraw money will it be where? Unfortunately, it is the most likely scenario, we live in a situation in which there is no political will, not only in oral health, in general, in SUS, much less in oral health, and we have a series of national oral health managers unprepared, which there is an important issue, which is a technical issue" (Brazil - Political Level)</p>

A. Oral Health Survey and Lack of Data Systematization

Even though conducting a national study is difficult, there is clarity in the availability of these results for the population and politicians, open science is an impeller for better policies and practices, and respondents reported that conducting epidemiological surveys served as facilitation for better policies and practices. As reported in Brazil, the PNAD (National Household Sample Survey) in 1998 pointed out that the main oral health problems were dental caries and its consequences, as well as a lack of access to oral health actions and services, revealing that approximately 30 million Brazilians had never been consulted by a dentist [11]. This indicator was one of the facilitators for the inclusion of oral health in the political agenda during the 2003–2006 federal government, where the National Oral Health Policy [6] was instituted that expanded the service network and introduced new procedures in public service.

Advances were observed in the quality of oral health of the Colombian population, in the study conducted in 1977–1980, it was observed that 96.7% of the Colombian population had a history of caries [12]. In Chile, the elaboration of the "National Plan for Oral Health" (2018–2030), proposed by MINSAL [13] (Ministry of Health) was to improve oral health conditions and reduce inequalities, based on the concepts of equity, intersectoriality, citizen participation, inclusion and non-discrimination, this plan brought advances concerning previous policies, which were focused on priority groups with a preventive and curative focus since 1978 [14].

Despite the availability of national health surveys, access to this information remains a barrier, demonstrating that countries, despite their ability to organize themselves to seek strong data for decision making, data are not currently freely available for use in future research. There is a need for knowledge translation and data access to build evidence-based policies [15], and this point must be considered by countries; in addition to performing epidemiological studies regularly, data must be made available to allow for analysis and evaluation of the programs/policies adopted.

B. Laws and Regulations

The previous existence of norms/laws that favour oral health acted as a facilitator, The GES Law (Explicit Guarantees of Health), in Chile, was designed to grant a set of explicit and enforceable guarantees, and this law was delegated to the Ministry of Health the function of selecting these health problems, conditions, or diseases, as well as guaranteeing the benefits and characteristics of access and opportunity, which began with 25 problems and now exceeds 80, and oral health is included in these guarantees via priority [16]. While these guaranteed services enable individuals to gain access to oral health care and address some of their issues, they are not based on a life-course logic, and thus do not allow for the development of a series of programs that are compatible with the various processes of a person's existence to act as isolated circumstances of support [17].

In Colombia, there is also a prioritization in age groups and early childhood, the program "Soy Generación más sonriente" seeks to improve the indicators and guarantee access to children from 0 to 5 years of age, however, it can be observed that although all children have been protected by the General System of Social Security in Health [Sistema General de Seguridad Social en Salud], not all have access to dental services, only half of them requested and obtained appointments [18].

An initiative of the WHO (World Health Organization) [19] proposed to its member states the inclusion of dentistry in primary care by 2030, and oral health should be firmly incorporated into the agenda of non-communicable diseases, the burden of oral diseases shows significant inequalities disproportionately affecting marginalized populations and of lower economic condition. This will be a great challenge that will have to be overcome by countries to guarantee access to and care for their population, therefore, health policies must consider comprehensive care and access to all age groups to minimize the accumulated damage and be sustainable.

C. Dental Workforce

The overabundance of professionals with a dental degree acts as both a barrier and a facilitator; in recent years, dentistry faculties in various nations have grown at an exponential rate. The Colombian College of Dentists (CCO) estimates that there are 65,000 professionals in the country, according to the Colombian Dental Federation there are more than 40 higher education programs in Dentistry in Colombia. According to information from the Ministry of Health in the study of professional competencies of the dentist in Colombia [20] establishes that the largest concentration of dentists is in large cities, Bogotá being the one with the highest numbers of professionals with a participation of 44% of the total number of dentists in the country, followed by Antioquia with 15% and Valle del Cauca with 10%. In Chile, there are 20 dental schools, this number increased between 1997 and 2011 [14], the number of dentists registered in the national registry of individual providers (RPI) is 26.377 (2019) [21]. In Brazil, according to the Federal Council of Dentistry, there are 412 faculties of dentistry and more than 336.000 registered professionals [22].

The presence of a higher number of professionals may not always imply an improvement in the population's oral health or better access to dental care. In Colombia, there is no control over the number of professionals graduating from universities; what exists are different information systems, one in which the number of professionals graduating each year is recorded, also the National Registry of Human Talent in Health -ReTHUS-, which compiles basic information on professionals who have fulfilled the requirements that authorize them to practice professionally, among others. However, this disjointed information does not allow to precisely know the number of professionals or their distribution in the national territory or to recognize the characteristics of labor insertion and working conditions in the institutions of the health system, which limits the possibilities of having accurate information to guide policy decisions on the development of human resources and public policies on oral health at the national and territorial levels [23]. The training of dentists and their uneven distribution in countries can act as a barrier to the implementation of oral health policies and underused in the health systems. Brazil benefited from this surplus of professionals at the time of implementation of the National Oral Health Policy, was reported by the interviewees that many of these professionals had to be trained to be able to work in the logic of public service, as their training is still geared to private practice. Moscoso-Matus [24] demonstrated that there is no dentist specialized in public health registered with the RPI of Chile, it is necessary to improve the quality of care, through the creation of a graduation profile from dental careers aligned with the performance profile that the country needs [25], similar was found in Colombia [23]. Reference [26] proved that the poor distribution of dentists is a worldwide factor and understudied, it is necessary to evaluate ways to guarantee access to services by the population. Barriers to access to health services are still found in Chile, inequities in oral health and the adult population persist (especially men) has little access to dental care, this scenario occurs together with

an alarming surplus of dentists who graduate every year in the country [14].

D. Financing and Leadership Skills

During the implementation of the policy, it is necessary to facilitate the process of using leadership distributed among chains of leaders at all levels and functions within the health system, to achieve mutual goals, and to think about how to build leadership that includes leaders from national to the regional level [27].

Oral health professionals have opportunities to become strong advocates for policy changes to reduce damage to health, social conditions, and reduce inequality, working collectively at the community and national level through its professionals and dental organizations. It is worth noting that this is generally not a role that odontologists play. It is necessary to take the support of interested individuals who can contribute to better health practices. Nonetheless, dentistry has been neglected, being included in the package of non-communicable diseases in several health systems, causing little interest on behalf of policymakers, decreasing funding and incentives for creating local health oral health and these professionals who answer for oral health in the countries end up being overwhelmed and without a work team, generating stress, and tiredness, weakening the power of local leadership and advocacy for prioritizing oral health. Health spending can be influenced by spending on oral health, being the fourth most expensive disease to treat in most industrialized countries, hence the importance of strengthening public health programs [28].

E. Health Literacy and Academia

Health literacy is a significant predictor of individual health, health behavior and health outcomes, the poorer the health outcomes. in the countries studied, the population's awareness of their rights and the importance of oral health were mentioned as factors that hinder the implementation of health policies, resulting in less funding and expansion of the network care to meet the repressed demands. A study conducted in Brazil identified that there is a relationship between low health literacy and income and educational level [29]. The role of scientific evidence in decision-making processes needs to be improved, the presence of academia in decision-making processes contributed to the development of policies in these countries, however, research investments and continuity are still required, particularly in an epidemiological study.

The qualitative research understands phenomena deeply and in detail, as points of limitation, the diversity of Latin America as a whole and the countries studied from qualitative studies is dependent on the context of each country and the health models adopted by them; additional studies in other Latin American countries are needed to understand the differences between the health systems that incorporated oral health into the public service.

V. CONCLUSION

During the development and implementation of public policies, several factors are encountered, and although oral health is offered in different ways by health systems, it can

be concluded that human resources are fundamental elements for the functioning of public services and consequently success, besides the interest of the managers and politicians for the inclusion of this theme in the political agenda of the country. Stakeholders should keep in mind that oral health is a fundamental part of the comprehensive health of the population and should include and advocate this theme.

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CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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