

## KNOWLEDGE CONCERNING EXPLICIT HEALTH GUARANTEES FOR ADULTS AGED 60 IN PRIMARY CARE DENTIST OF VALPARAISO

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### ABSTRACT

**Objective:** To evaluate the knowledge degree in primary health care Odontologists regarding the clinical guide for Explicit health guarantees for 60 years old adults, evidence-based recommendations for the optimization in clinical attention of this group.

**Material and Methods:** A transversal descriptive study was conducted, surveying Primary Care professionals from the Family Health Centers of the Municipal Corporation of Valparaíso, with at least a 6 months old work contract. An informed consent was signed by all participants before an instrument was applied to them, where general data were consulted: 15 clinical-guide related questions, and 4 opinion related questions.

**Results:** The sample consisted of 41 professionals, belonging to 12 Family Health Centers, of which, 41% worked full time. 36 professionals acknowledge the guide, 31 of them have read it, and 71% of them have accessed it via the web. The mean of knowledge was 71.23% of correct answers, with a range between 40% and 92%. The recommendation of electric toothbrushes was correct in all, meanwhile, the wrongest answers were those concerning the normal characteristic of the mucosa and Xerostomia Treatment. The highest scores were obtained by professionals with less than 5 years of working experience. 58% recognize barriers and limited time available for their implementation, lack of supplies, difficulty in accessing the guide, among others. 57,58% believe that the guide is a good way of standardization.

**Conclusion:** 71% of professionals surveyed possess adequate knowledge of the guide.

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## INTRODUCTION

Worldwide, the elderly population is a priority in public policies, in Chile, this is no different.

A milestone in this matter was the GES (Explicit Health Guarantees) program, formerly known as AUGE, that provides access guarantees, quality, opportunity, and financial protection to every FONASA (National Health Fund) or ISAPRE (Provisional Health Institutions) affiliates, and their custody<sup>1</sup>. In July 2005, this program started operating, offering coverage to 56 health issues, and rising to 80 since 2013, however, only 5 of them comprise dentistry issues<sup>2</sup>. One of these is the "60 years old Oral Health Program" also known as GES-60, whose intent is to educate, prevent, recover and rehabilitate oral health in 60 years old patients, trying to give a solution to 20 health problems recognized in this population, observable in the care basket.

The Chilean Ministry of Health (MINSAL) establishes a guide as a reference for dental treatment in primary health care, as in Endodontics, Periodontics, and Oral Rehabilitation, encompassed in the GES-60 program<sup>3</sup>. Its aim is to deliver recommendations based on available evidence, for the treatment of caries, periodontal disease, and partial/total edentulism, contributing to improving the quality of life of the elderly. While they emphasize that it is just a helping tool for clinical decision making, it must be considered all patient's preferences and personal values. According to both, MINSAL and FONASA statistics, the coverage of GES-60 is scanty, 27% of the population registered in 2016, in comparison to the "Integral oral health program" for 6 years old children or pregnant women, each with 80% and 72% respectively, of coverage that same year<sup>4</sup>. It has been given as the reason of this scanty coverage the retirement age of older adults, usually over 65 years old, their low pensions and high cost of living, these last the reason on why they must continue work until an older age and in schedules not compatible with access to Primary health care (APS) attention<sup>2</sup>. It is suggested an increase in the GES-60 policy range since although socioeconomic inequities have decreased in the Chilean adult population that utilizes dental

care, it is still very meager the number of elderly - especially males- who consult<sup>2</sup>. Another measure proposed to tackle this problem is to financially incentivize all primary health care workers to upgrade their performance<sup>5</sup>.

The need for treatment of these patients is high, being evident in, for example, how 82,3% of the total of GES-60 patients treated in APS of Villa Alemana requires complex periodontal treatment (6), or the 17,4 COPD in women, and 17 in men of Maipú<sup>7</sup>. The need for prosthetics in this group is 98%.

The aim of this study is to evaluate the degree of knowledge of primary health care Odontologist in Valparaíso regarding the clinical guide of the GES 60 years old Oral Health Program.

## MATERIAL AND METHODS

A cross-sectional descriptive study was conducted, where 41 Odontologists of the Family Health Centers of the Municipal Corporation of Valparaíso, Chile were surveyed in the first semester of 2016. This sample size, randomly selected, is calculated based on a total of 69 Dentists belonging to this Corporation in 2017, with a confidence level of 95%, and a sampling error of 5%. For the inclusion in this study, the participant had to present their status of contractual quality: plant, contract, or fees with at least 6 months in office, excluding those in replacement. All signed an informed consent attached to the survey.

The survey created was applied to different professionals from different departments of the University of Valparaíso, until it was standardized. Finally, the instrument consisted of a general information section for all participants such as age, sex, educational degree, length of office and municipal workload; a second section consisted of 15 multiple selections problems that evaluated knowledge regarding the guide's info on oral hygiene, technique, frequency, and length, prosthesis disinfection, use of fluorides and most common oral lesions present in the elderly. A final section consisted of 4 questions about their personal opinion on the survey. The survey was evaluated in percentage and also scored with grades from 1.0 to 7.0, using a cut-off score of 4.0 and a minimum acceptable

requirement of 60%.

The investigation protocol, measurement instrument, and informed consent were all presented and approved by the Municipal Corporation. The heads of dental programs were contacted and asked to define a schedule where the survey could take place without interrupting the normal attention to patients; the aim of the study was then explained and the survey was applied to them.

The register of the data obtained was executed using the Microsoft 2013 Office Excel program, in order to obtain a database, tables and figures.

For the description of the variables and descriptive analyzes, the STATA® (Statistics / Data analysis) from StataCorp, Texas – U.S.A. 11 version program was employed.

## RESULTS

The sample consisted of 41 professionals, 56,1% were female and 43,9% male, all from 12 different Family Health Centers (CESFAM) from the city of Valparaiso. 78% of this sample were aged 26-35 years old, with an in-office experience of fewer than 5 years, only 41% were working full time. 36% have subsequent studies, related to a specialty diplomate and/or post-title. In regard to the GES-60 clinical guide, 36 professionals (88% of the sample) acknowledged its existence, and 31 of them had read it. The most common method accessing it was via the web (71%). Only seven professionals claimed to have the guide physically at their workplace for access.

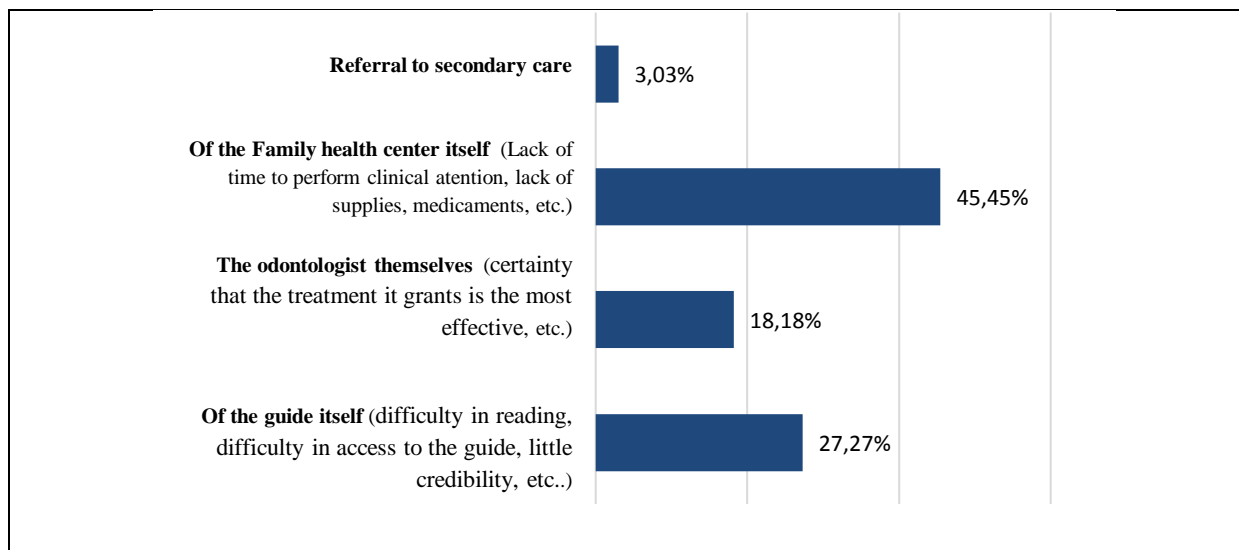
The percentage of correctly answered answers, that evaluated knowledge in all participants, had they read or not the guide, it's presented in table I. All answered correctly when to indicate an electrical toothbrush, and 85,63% when to indicate fluorides. The least correct answers were those concerning the normal characteristic of the mucosa in the elderly, and Xerostomia Treatment, each with 55% out of the total sample. The average of the knowledge, obtained from the total of correct answers by the professionals, was 71.21%, with a minimum of

40% and a maximum of 92%. The average grade of the group was 4.9 ( in a 1.0 to 7.0 scale) with a minimum of 3.0 and a maximum of 6.4. Grades were higher in those professionals that had been

*Table I: Percentage of correct answers regarding the GES-60 Clinical Guide.*

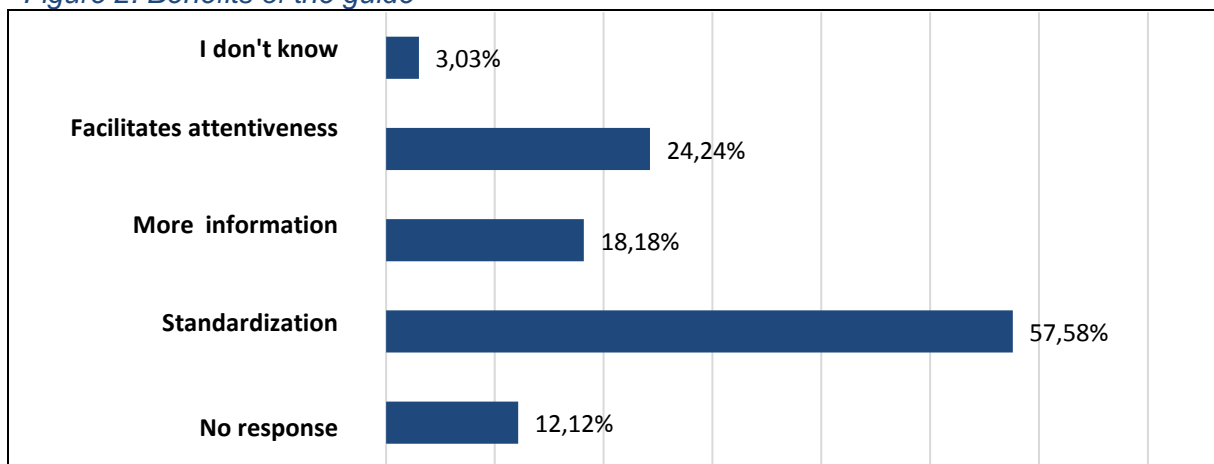
Concept to evaluate	Total of the sample (n = 41)	Read the clinical guide (n = 31)	Didn't read the clinical guide (n=10)
Characteristics of toothbrush	69,17%	73,12%	55,56%
Use of toothbrush	100,00%	100,00%	100,00%
Technique, frequency and length of oral hygiene	65,00%	69,35%	50,00%
Interproximal hygiene method	65,00%	66,67%	59,26%
Prosthetic cleaning and disinfection	69,50%	74,84%	51,11%
Use of fluorides	85,63%	85,48%	86,11%
Characteristics of normal mucosa	55,00%	54,84%	55,56%
Oral lesions more prevalent	79,50%	77,42%	86,67%
Xerostomia etiology	77,50%	78,23%	75,00%
Treatment of Xerostomia	55,00%	59,68%	38,89%
Drugs associated with xerostomia	63,75%	68,82%	46,30%
Etiology of subprosthetic stomatitis	77,50%	78,23%	75,00%
Aims of a treatment plan in the elderly	65,00%	64,52%	66,67%
Treatment of gingival and periodontal diseases	63,33%	64,52%	59,26%
Criteria for referral to the specialty of Periodontology	77,50%	79,35%	71,11%

Figure 1: Barriers presented when following the guide's recommendations



Percentages of responses regarding the "Perceived Barriers" for the implementation of the GES-60 Clinical Guide (n = 18 professionals).

Figure 2: Benefits of the guide



Percentages of responses regarding the "Potential Benefits" of the GES-60 Clinical Guide (n = 31 professionals).

working in office less than 5 years in the CESFAM, and there was no difference between those who had a specialty and those who didn't. Regarding those who reported having read the clinical guide, all of them answered correctly when to indicate an electrical toothbrush, and 85.48% when to indicate fluorides (Table I). The least amount of correct answers was achieved regarding the characteristics of normal oral mucosa in elderly patients, and the treatment of Xerostomia, 54,84%, and 59,68% respectively. The average of the knowledge obtained by the professionals was 73.00% of correct answers, with a minimum of 46.00%, and a maximum of 92.00%.

Converting to a rating scale, the group's average mark was 5.0, with a minimum of 3.3 and a maximum of 6.4. Results were slightly higher in those professionals with less than 5 years of working experience in the CESFAM, there was no difference among those who had a specialty and those who didn't.

Regarding those who claimed to have read the guide, all 10 professionals answered correctly when to indicate an electrical toothbrush, followed by 86,67% that answered correctly the most prevalent lesions in the elderly (Table I). The least percentage of correct answers were obtained concerning Xerostomia, its treatment,

and associated pharmaceuticals, 38.89%, and 46.30% respectively.

The average of knowledge obtained by these professionals was 65.01% of correct answers, with a minimum of 40.00% and a maximum of 74.12%. Converting to a rating scale, the average grade for the group was 4.45, with a 3.0 minimum and a 5.06 maximum.

There were no professionals, practicing for more than 10 years at CESFAM, who have not read the clinical guide. There was no difference found among those who had a specialty and those who didn't.

Of all 31 professionals who had read the clinical GES-60 guide (3), 58% recognize barriers for its implementation being mainly evidenced within the CESFAM itself (Figure 1). Regarding the potential benefits of this Guide, 57.58% of these professionals believe that it is a good way to standardize care (Figure 2).

## DISCUSSION

This report had participation of 59.42% of the dental professionals belonging to the CESFAM of the Municipal Corporation of Valparaíso. Those who refused to participate claimed that they had little available time due to their busy schedules, both clinical and administrative. This clinical guide created by MINSAL mainly focused on its application in APS, delivers the best available evidence on the situation of this population (60 years old) and the most prevalent oral lesions they suffer, seeking to standardize their diagnosis and therapeutic approach. This could not be achieved if one of every four dentists in a working team hadn't read it. The benefits of this guide, perceived by the same professionals, are mainly the standardization of the processes (57.58%), facilitate care (24.24%), and provide more information (18.18%).

There is no previous evaluation of the GES-60 executing staff, odontologists from APS, as there is for the "Integral Oral Health program" for 6 years old children<sup>8</sup>. In that said executive review done by the MINSAL in 165 professionals from the public and private

sectors, it is stated that 97.2% of dentists in the public sector and 85.7% in the private sector know that it exists and have read the guide. Thirteen questions were applied based on recommendations and concepts present in the guide, with 52.8% of these having more than ten correct answers, and 25.4% less than six.

The concept they least handled was the risk classification of patients. The sufficient level of knowledge was set at 60% of correct answers, note 4.0, obtaining mean values of 5.0 in the group that declared having read the guide and 4.5 those who did not.

In the present study, the best results were found associated with workers with less than 5 years of experience in APS, attributing this to a greater updating of public policies in their study houses, due to their short time of graduates, and the greater incentive to this type of evidence-based guidelines, as evidenced in a study that reported that 71% of these people access to these type of guidelines via the web.

Regarding the level of knowledge of the same, the treatment of Xerostomia is one of the less correct answers, when 51.61% said they would recommend the use of artificial saliva when in fact the GES-60 guide considers it to be ineffective. The usage of this therapy is controversial in the literature<sup>3,9,10</sup>. Only 61.29% of those surveyed recognized that the mucosa of the elderly presents less resistance to pressure and less ability to respond to external influences. This consideration is relevant given the possibility of the development of irritations, hyperplasia, and infections in the mucosa, as well as the need for a special design in rehabilitation treatments.

58% recognize barriers and limited time available for their implementation, lack of supplies, difficulty in accessing the guide, among others, being these mainly evidenced within the CESFAM itself. On the contrary, the GES-60 guide declares that the greatest barrier is the knowledge of the professionals, 71.23% of what was evaluated, followed by their attitudes towards the guide, and external barriers<sup>3</sup>. The least discussed barrier described by the



professionals of Valparaiso was the referral to specialty care.

## CONCLUSION

71% of professionals surveyed in the CESFAM of the Municipal Corporation of Valparaíso possess adequate knowledge of the GES-60 guide, although one in every four professionals haven't had read the guide.

## CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest with respect to this article.

## REFERENCIAS

- [1] Ministerio de Salud de Chile. Establece un Régimen de Garantías en Salud. 2004. [consultado 20/10/2019]. Disponible en: <https://www.leychile.cl/N?i=229834&f=2004-09-03&p=>.
- [2] Cornejo-Ovalle, M., Paraje, G., Vásquez-Lavín, F., Pérez, G., Palència, L., Borrell, C. Changes in Socioeconomic Inequalities in the Use of Dental Care Following Major Healthcare Reform in Chile, 2004–2009. *Int J Environ Res Public Health*. 2015;12(3), 2823-36. doi: 10.3390/ijerph120302823.
- [3] Ministerio de Salud de Chile. Guía Clínica. Salud Oral Integral 60 años. 2010. [consultado 20/10/2019]. Disponible en: <http://web.minsal.cl/portal/url/item/7221747c2c9484b7e04001011f0141a4.pdf>.
- [4] Ministerio de Salud de Chile. GES Atención odontológica Integral Adulto de 60 años. 2015. (consultado el 20/10/2019). Disponible en: <http://web.minsal.cl/garantias-explicitas-en-salud-salud-bucal/>.
- [5] Cornejo-Ovalle, M., Brignardello-Petersen, R., Pérez, G. Pay-for-performance and efficiency in primary oral health care practices in Chile. *Rev Clin Periodoncia Implantol Rehabil Oral*. 2015;8(1),60-5. doi: 10.1016/j.piro.2015.02.011.
- [6] Rojas C, Segovia J, Raccoursier V, Godoy J, Lopetegui MS. Estado Periodontal y Necesidad de Tratamiento en Pacientes GES 60 Años de Villa Alemana. *Rev Clin Periodoncia Implantol Rehabil Oral*. 2010;3(2):86-9. doi: 10.4067/S0719-01072010000200005.
- [7] Mussa I. Martínez B. Estudio descriptivo del estado de salud oral en pacientes de 60 años ingresados al programa GES 2007 en CRS Maipú. [Tesis Doctoral]. Santiago - Chile: Universidad Mayor; 2009. [consultado el 12/07/2018]. Disponible en: <https://www.umayor.cl/salud-publica/wp-content/uploads/2014/06/Mussa-Indra.pdf>.
- [8] Ministerio de Salud. Resumen ejecutivo estudios de difusión e implementación de la garantía explícita: salud oral integral para niños de 6 años. 2008. [consultado el 20/10/2019]. Disponible en: <http://web.minsal.cl/portal/url/item/a14bd85994322821e04001011e01257d.pdf>.
- [9] Hanchanale, S., Adkinson, L., Daniel, S., Fleming, M., Oxberry, S. G. 2015. Systematic literature review: xerostomia in advanced cancer patients. *Support Care Cancer*, 23, 881-8. doi: 10.1007/s00520-014-2477-8.
- [10] Rodríguez EH, Sacaquispe SJ. Tasa de flujo salival y nivel de confort al emplear saliva artificial y caramelos de menta sin azúcar en adultos mayores con xerostomía. *Rev Estomatol Herediana*. 2006;16(2):103-9. doi: 10.20453/reh.v16i2.1912.

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