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Nivel de autocuidado y enfermedades bucales más frecuentes en pacientes de una clínica universitaria

Level of Self-care and Most Frequent Juice Diseases in Patients of a University Clinic

Nível de auto-cuidado e doenças bucais mais freqüentes em pacientes de uma clínica universitária

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Resumen

Las enfermedades bucales con mayor prevalencia son la caries dental y la enfermedad periodontal, ocasionadas la mayoría de las veces por una higiene bucal deficiente, de ahí la importancia del nivel de autocuidado de los pacientes. El objetivo de este estudio es determinar el nivel de autocuidado y la frecuencia de las enfermedades bucales en los pacientes atendidos en la clínica multidisciplinaria de Zacatecas (CLIMUZAC), durante el semestre agosto-diciembre 2015. El método que se utilizó fue un estudio descriptivo y transversal en una muestra de 165 pacientes; la recolección de información se hizo después de la atención odontológica mediante un instrumento que incluyó: ficha de identificación, cuestionario de salud bucodental en el medio laboral (ASBLA), e índices epidemiológicos bucales: índice de dientes cariados, perdidos y obturados (CPOD), índice de higiene oral simplificado (IHOS), índice de necesidad de tratamiento periodontal comunitario (CPITN), índice de Ramfjord. Después se creó una base de datos en el paquete estadístico SPSS versión 22, para la obtención de medidas de tendencia central, dispersión y variabilidad, además de las pruebas Chi-cuadrada, ANOVA y T Student. Los resultados fueron: media de edad 33.88 $\pm$ 15.16, 37.0 % (61), correspondiente al sexo masculino y 63.0 % (104) al femenino. Según el cuestionario del ASBLA, se encontró que 12.1 % (20) tuvo autocuidado bajo, 27.9 % (46) medio y 60 % (99) alto. Con una prevalencia de caries de 64.8 % (107) y 35.2 % (58) sin caries; en el índice CPOD 4.2 % (7) fue muy bajo, 4.2 % (7) bajo, 70.9 % (117) moderado y 20.9 % (34) alto. La prevalencia de enfermedad periodontal fue 48.5 % (80), ausencia de inflamación 51.5 % (85); la mayoría de las mujeres, con 35.8 % (59), no presentó inflamación a diferencia de los hombres con 15.8 % (26). Asimismo, en el grupo femenino hubo mayor porcentaje de buena higiene con 44.2 % (73), en comparación con el masculino de 26.7 % (44). En conclusión, tanto la caries como la enfermedad periodontal siguen siendo un problema de salud pública de alta prevalencia, y cuyas causas principales son la inadecuada higiene bucal y la falta de aplicación de medidas preventivas.

Palabras clave: autocuidado, caries dental, gingivitis, periodontitis.

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Abstract

Introduction. The most prevalent oral disease in dental caries and periodontal disease; caused in most cases by poor oral hygiene or care, why the importance of self care of patients. Objective. Determine the level of self-care and frequency of oral diseases in patients treated at the multidisciplinary clinic Zacatecas (CLIMUZAC) during the semester August-December 2015. Method. A descriptive cross-sectional study with a sample of 165 patients, data collection was dental care after using an instrument that included: identification form, questionnaire of oral health in the workplace (ASBLA), the oral epidemiological índices: index of decayed, missing and filled teeth (CPOD), simplified oral hygiene index (IHOS), community periodontal treatment need index (CPITN), Ramfjord index. A database was created in SPSS version 22 for obtaining measures of central tendency, dispersion and variability in addition to the Chi-square, ANOVA and T Student test. Results. The mean age was 33.88 ± 15.16, 37.0% (61) corresponded to male and 63.0% (104) female. According ASBLA questionnaire was found that 12.1% (20) had low self, 27.9% (46) medium and 60% (99) high. With a prevalence of caries of 64.8% (107) and 35.2% (58) without caries; according to the CPOD index 4.2% (7) was very low, 4.2% (7) low, 70.9% (117) moderate and 20.9% (34) high. The prevalence of periodontal disease was 48.5% (80), absence of inflammation 51.5% (85), the majority of women with 35.8% (59) had no inflammation unlike male with 15.8% (26). In the women there was a higher percentage of good hygiene unlike male with 44.2% (73) and 26,7% (44) respectively. Conclusions. Both caries and periodontal disease remains a public health problem due to the high prevalence of these, where its main causes are inadequate oral hygiene coupled with the failure to implement preventive measures.

Key words: Self care, dental caries, gingivitis, periodontitis.

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Resumo

Doenças orais são cárie dentária mais prevalentes e doença periodontal, é causada na maioria das vezes por má higiene oral, daí a importância do nível de auto-gestão paciente. O objectivo deste estudo é determinar o nível de auto-assistência e a frequência de doenças bucais em doentes tratados em clínica Zacatecas multidisciplinar (CLIMUZAC) durante o período de Agosto a Dezembro de 2015. O método usado foi uma descritiva e atravessar em uma amostra de 165 pacientes; recolha de dados foi feita depois de cuidados dentários por um instrumento que inclui: ficha de identificação, questionário de saúde oral no local de trabalho (ASBLA) e índices epidemiológicos orais: índice de dentes cariados, perdidos e dentes obturados (CPO) simplificado índice de higiene oral (OHI), índice necessidade para tratamento periodontal (CPITN), índice Ramfjord. Depois de um banco de dados foi criada em SPSS versão 22, para a obtenção de medidas de tendência central, dispersão e variabilidade, bem como a qui-quadrado, ANOVA e testes t Student. Os resultados foram os seguintes: idade média 33,88 + 15,16, 37,0% (61) correspondente para o 63,0% (104) do sexo masculino e do sexo feminino. De acordo questionário ASBLA, verificou-se que 12,1% (20) tinha baixa auto, médio de 27,9% (46) e 60% (99) elevada. Com uma prevalência de cárie 64,8% (107) 35,2% (58) sem cavidades; CPO em 4,2% (7) era muito baixa, 4,2% (7) de baixo 70,9% (117) moderada e 20,9% (34) elevada. Prevalência foi de 48,5% a doença periodontal (80), ausência de inflamação de 51,5% (85); a maioria das mulheres, com 35,8% (59) não mostraram inflamação ao contrário dos homens 15,8% (26). Além disso, em mulheres que havia uma percentagem mais elevada de uma boa higiene com 44,2% (73), em comparação com 26,7% do sexo masculino (44). Em conclusão, tanto a cárie ea doença periodontal continua a ser um problema de saúde pública de alta prevalência, cujas causas principais são a higiene oral inadequada e falta de medidas preventivas.

Palavras-chave: auto-cuidado, cárie dentária, gengivite, periodontite.

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Introduction

The World Health Organization (WHO) in 2004 noted that oral diseases such as caries, periodontitis, cancers of the mouth and pharynx are a global health problem affecting industrialized countries and developing countries, especially the poorest communities.

In 2008, the Official Journal of the Federation (DOF) announced the modification of NOM-013-SSA2-1994 (for the prevention and control of oral diseases) in NOM-013-SSA2-2006 (for the prevention and Control of oral diseases) and where it is mentioned that the diseases of greater prevalence are dental caries and periodontal disease; Those of medium frequency are cranio-facio-dental anomalies and malocclusions; And those of variable frequency are oral cancer, alterations of oral tissues, maxillofacial traumatisms and dental fluorosis.

In order to combat these pathologies in Mexico, the Epidemiological Surveillance System for Oral Pathologies (SIVEPAB) was created, which evaluates patients who receive care in institutions of right as well as government, and by means of which the following indexes are recorded: index of decayed teeth, (CPOD), simplified oral hygiene index (IHOS), and community periodontal index (CPI). The prevalence of caries was 94.9%, very high in all age groups, being higher than 87%; The average DMFT index was 13.3% for women and 12.6% for men. According to IHOS, 68.2% had a calculation, which increased with age; 59.6% presented some signs of periodontal disease, 20.3%, that is, slightly more than one-fifth, presented gingivitis, 4.7% mild periodontal disease and 1.3% advanced.

As in other countries, in Mexico there is a high prevalence of oral diseases caused in the majority of cases by poor hygiene or oral care; Hence the need to know the level of self-care that the patients attended in the clinics of the university. The word self-care refers to everything that people do for themselves in order to restore or preserve their health, as well as prevent and treat diseases (WHO-FIP, 1998); Can also be defined as the ability to voluntarily take care of their health to promote healthy lifestyles and environments, which can be done in three ways: behaviors that consciously seek to maintain health, behaviors that respond to the symptoms of Disease and harmful habits that affect health (MINSA, 2009).

Investigations on conditions, habits or hygienic factors at the oral level, such as Navas et al. (2014) included adult patients with a questionnaire and where 53% said they were healthy or absent, 82% identified good presence, image and beauty as benefits of oral health, and indicated that they are ill when they have pain , Bad breath or dental sensitivity; 88% acknowledged that being sick of the mouth, teeth and gums affects the general health, being its main causes the deficient dental brushing and not to use flushing and flossing. Azpeitia et.al. (2009) found a prevalence of caries of 52.7% in a population of 6 to 15 years of age, while Fernández et al. (2014) found a prevalence of 83.3% — higher in the male group-, predominance of poor brushing in 79.1%, mainly at 13 years of age, in addition to a DMFT index of 6.26, which is why they recommend educational actions for That there is an adoption of healthy lifestyles.

On the other hand, Corchuelo et al. (2016) found that there were 82.3% of caries with or without cavitation and a prevalence of 62.6% in caries with cavitation in Colombian adolescents. González et al. (2009) described the morbidity of caries and risk factors in Venezuelan workers, with 90.6% of caries, higher in males than females; The associated factors were previous experience of caries, cariogenic diet, inadequate oral hygiene, lack of visits to the stomatologist and poor knowledge of oral health.

Ruíz et al. (2009) evaluated patients older than 60 years to identify prevalence of periodontopathies and risk factors. This group presented in 55.38% gingivitis according to Russell index, none presented bag periodontitis and mobility, and only three patients with periodontopathies had root caries. Lao et al. (2013) report that the application of the oral risk system (SIRB) determined that 71% had a mild risk, 16% very mild, 13% moderate, 0.1% high and no cases with a severe risk of oral diseases.

Zaldivar et al. (2014) found that male adolescents in 55% had gingivitis, with the age of 14 being the highest percentage with 61% of gingivitis and periodontal pocket formation, only 10% of the sample had acceptable hygiene ; In addition, they found that women are more knowledgeable about hygienic measures than men (30.5% and 21%, respectively). This coincides with the findings of Duque et al. (2014), who speak of male predominance with 52.1%, and that 65% of men and 60% of women had loss of insertion greater than 1mm,

concluding that the loss of insertion between 15-19 years is high. For Villegas et al. (2016), 83.3% of the male group had chronic gingivitis as opposed to the female with 69.6%; Deficient oral hygiene was 70.3% followed by smoking with 12.4%; There was an unsatisfactory level of knowledge. Gutiérrez et al. (2011) indicate that the prevalence of periodontal disease was 96.8%, 39.3% had regular oral hygiene related to dental hygiene habits and 60.7% brush their teeth twice a day, 24.6% three times and only 9.8% used dental floss.

Based on the above information, it is necessary to apply a previously validated instrument that provides clear results on the oral self care of patients attending the multidisciplinary clinic in Zacatecas (CLIMUZAC), as well as identifying the frequency of the most common diseases (Caries and periodontal disease), with the objective of determining the level of self-care and the frequency of the diseases with the highest prevalence in the patients who were cared for in the clinic.

Method

For the study, a descriptive and cross - sectional method was used, using simple random sampling without replacement, considering the patients seen during the previous semester in a sample of 165 patients seen in the Multidisciplinary Clinic of Zacatecas (CLIMUZAC) of the Academic Unit of Dentistry Of the Autonomous University of Zacatecas (UAO / UAZ), during the semester August-December 2015. It included people who had the total of erupted permanent teeth; The collection of information was done after dental care by means of an instrument that included: the identification card, a questionnaire to evaluate oral health in the workplace (ASBLA), in addition to oral epidemiological indexes: index of decayed, lost teeth and (DMFT), simplified oral hygiene index (IHOS), community periodontal treatment need index (CPITN), Ramfjord index.

The ASBLA questionnaire includes four dimensions (oral hygiene habits, oral cavity status, oral health habits, health education) and 11 items with specific scores that show three possible outcomes: low, medium and high level of self-care (Peña, et al. Al., 2012).

Epidemiological indices have the characteristic of evaluating certain organs of the oral cavity with specific deductions, which were applied using WHO criteria.

Epidemiological indices are based on WHO criteria, according to oral health surveys (1997), where the DMFT reviews the present teeth with a value: 0 = empty space, 1 = permanent decay, 2 = permanent sealed, 3 = 4 = permanent extraction indicated, 5 = permanent healthy, 6 = temporary healthy, 7 = temporary sealed, 8 = temporary withdrawal indicated, 9 = temporary healthy. With this information, the total of decayed, extracted, obturated and extracted teeth is generated, in addition to the average grouped in: 0-1.1: Very low, 1.2-2.6: Low, 2.7-4.4: Moderate, 4.5-6.5: High And 6.6-plus: Very high.

IHOS is determined by reviewing six teeth with two surfaces examined, buccal teeth 16, 11, 26 and 31, lingual teeth 38 and 46 by codes: 0 = absence of plaque, 1 = presence of plaque 1/3, 2 = presence of plaque 2/3, 3 = presence of plaque 3/3. The total per person is obtained by adding the values obtained and dividing the result by the number of surfaces examined. The total index graduation is the sum of the two values found in soft deposits and calculations; Clinical levels can be measured with: 1 = from 0.0 to 1.2 good, 2 = from 1.3 to 3.0 regular, 3 = from 3.1 to 6.0 poor.

In the gingival index the quadrants are observed considering the codes: 1 = absence of inflammation, 2 = slight inflammation, slight color change and gingival edema, no bleeding at the catheter, 3 = moderate inflammation; Redness, edema and gingival hypertrophy, bleeding at the catheter (at 10 sec), 4 = severe inflammation, marked redness and hypertrophy, there may be ulcerations and spontaneous bleeding. For the CPITN, six teeth are evaluated using the calibrated probe, with the codes: x = when there is no tooth or there is indication of extraction. With the values an average is obtained, 0 = healthy, 1 = periodontal catheter bleeding (up to 30 seconds later), 2 = calculation presence or other plaque retentive factor. Coded black area of the probe is visible (small sac). If there is a defective obturation that reaches the gingiva, it is coded in 2. 3 = black coded area located at the level of the gingival margin and indicates presence of a sack 3.5 to 5.5 mm deep. And 4 = black area of the probe is not visible, is below the gingival margin, deep periodontal sac of 5 mm or more. From the results an average is obtained.

With the information obtained a database was created in the statistical package SPSS version 22, the data processing was done through measures of central tendency, dispersion and variability, in addition to the Chi-square, ANOVA and Student T inferential tests considering a level Of significance of $p<0.05$.

Results

A mean age of 33.88 + 15.16 was determined from the sample of 165 patients; 37.0% (61) were males and 63.0% (104) females. Similarly, 1.2% had no schooling, 11.5% primary, 15.8% secondary, 21.2% preparatory, 1.2% technical career, 44.8% undergraduate, and 4.2% graduate. As for marital status, 49.7% were single, 43.6% married and 8.6% were in another situation.

Regarding the level of self-care, 12.1% (20) was low, 27.9% (46) medium and 60.0% (99) high; The values for males in this aspect were 6.7% (11), 7.9% (13), 22.4% (37), respectively; While females were 5.5% (9) low, 20.0% (33) medium and 37.6% (62) high. In education, the high level of self-care was concentrated in the undergraduate degree with 37.0% (61), preparatory 12.7% (21), secondary 4.2% (7); In the average self-care there were 7.9% (13) with secondary, 6.7% (11) with high school and bachelor's degree; In the low level there were low percentages, the highest being primary education with 5.5% with only nine patients.

Most of the singles showed high self-care with 43.0% (71), followed by married women with 15.2% (25), in the middle there were 6.1% (10) in singles while married had 18.8% (31); The highest percentage in the low level was 9.7% (16) in married couples; In widowed, divorced and others there were frequencies of three or less at different levels. The self-care questionnaire measures four dimensions (Table 1), answering that brushing 53.9% (89) do it when they eat something more than three times a day, most of them usually brush their tongue and cheeks, 52.7% (87) never brush their teeth At work, while 42.4% (70) use silk or floss sporadically.

Regarding the state of the oral cavity, 43.6% (72) conserves all its dental pieces; 45.5% (75) attends the dentist when they have a problem, most change their toothbrush after 3 to 6 months and take it with them only when traveling in 44.8% (74); Less than half select his brush according to the brand he considers is going well; 52.1% (86) have received advice about healthy oral habits but only follow them at times, while 11.5% (19) follow them with rigor.

Table 1. Dimensions of self-care.

Hábitos de higiene oral					
Cada cuando se cepilla los dientes	Nunca 3.6 % (7)	Cuando me acuerdo, no diario 10.9 % (18)	Una vez al día 31.5 % (52)	Cuando como algo o más de tres veces al día 53.9 % (89)	
Suele cepillar lengua y mejillas	Sí 78.2 % (129)	No 21.8 % (36)			
Se cepilla los dientes en el trabajo	Nunca 52.7 % (87)	Cuando me acuerdo 33.3 % (55)	Siempre que como lo hago 13.9 % (23)		
Usa seda o hilo dental	No, no sé qué es, nunca no he usado. 30.3 % (50)	No, sé qué es, cómo se utiliza y no lo he usado. 21.8 % (36)	Sí, lo uso esporádicamente, no sé si lo haga bien. 42.4 % (70)	Sí, lo uso a diario y sé cómo se usa. 5.5 % (9)	
Estado de la cavidad bucal					
Cuántas piezas dentarias ha perdido	Todas o la mayoría 9.7 % (16)	He perdido entre 3 y 6 piezas dentales 21.8 % (36)	Sólo he perdido 1 ó 2 piezas dentales 24.8 % (41)	Conservo todas las piezas 43.6 % (72)	
Ha restaurado las piezas dentales perdidas	No he restaurado ninguna 36.4 % (60)	Sólo algunas 10.3 % (17)	Todas o casi todas 9.1 % (15)	No he perdido ninguna. 44.2 % (73)	
Hábitos de salud bucodental					
Con qué frecuencia asiste al dentista	Nunca he ido al dentista. 2.4 % (4)	Sólo cuando tengo algún problema. 45.5 % (75)	Una o dos veces al año, cuando tengo algún problema. 30.9 % (51)	Una o dos veces al año, de forma preventiva. 21.2 % (35)	
Cada cuánto tiempo cambia su cepillo dental	Nunca 4.2 % (7)	Cuando está muy estropeado 27.9 % (46)	Una vez al año aproximadamente 4.2 % (7)	Cada seis meses 28.5 % (47)	Cada tres meses 35.2 % (58)
Lleva consigo cepillo de dientes cuando come fuera de casa	Nunca 24.2 % (40)	Sólo cuando viajo 44.8 % (74)	Siempre o casi siempre 26.7 % (44)	Siempre, y llevo colutorio y seda dental 4.2 % (7)	
¿Qué criterio sigue para comprar su cepillo dental?	Cualquier cepillo me sirve 29.7 % (49)	Una marca y tipo que conozco y me va bien 43.6 % (72)	Uno de buena calidad, que me aconseje el vendedor 12.7 % (21)	El que me aconseje un profesional sanitario 13.9 % (23)	
Educación sanitaria					
Ha recibido consejos sobre hábitos saludables bucodentales	No 21.2 % (35)	Sí, aunque nunca los llevo a cabo 15.2 % (25)	Sí, aunque sólo los sigo a veces 52.1 % (86)	Sí, los sigo con rigurosidad 11.5 % (19)	

The prevalence of caries was 64.8% (107) and 35.2% (58) without caries according to the DMFT index 4.2% (7) was very low, 4.2% (7) low, 70.9% (117)) Moderate and 20.9% (34) high, with an arithmetic mean of 3.70 + 1.04. The percentages were concentrated in moderate and high, that is, 47.9% (79) and 9.7% (16) in the female sex, while the male showed 23.0% (38) and 10.9% (18). In the moderate DMFT, they were concentrated in the 20 to 49 age group, being higher from 20 to 29 with 32.7% (54) in that group, and in high 13.9% (23). According to table 2, 40% (66) despite having high self-care, has moderate DMFT, only one person with high self-care was evaluated with a very low DMFT.

Table 2. Self-care level according to CPOD index.

		Índice CPOD				**Total**
		Muy bajo	**Bajo**	**Moderado**	**Alto**	
Autocuidado	**Bajo**	2.4 % (4)	0.6 % (1)	6.7 % (11)	2.4 % (4)	12.1 % (20)
	Medio	1.2 % (2)	1.8 % (3)	24.2 % (40)	0.6 % (1)	27.9 % (46)
	Alto	0.6 % (1)	1.8 % (3)	40.0 % (66)	17.6 % (29)	60.0 % (99)
Total		4.2 % (7)	4.2 % (7)	70.9 % (117)	20.6 % (34)	100 % (165)

In periodontal disease the prevalence was 48.5% (80), while the absence of inflammation occurred in 51.5% (85); With respect to the CPITN index, it showed an average of 1.17 + 0.69 classifying in the absence of inflammation 51.5% (85); Slight inflammation with color change, gingival edema and that does not bleed to the catheter with 37.6% (62); Moderate inflammation, redness, edema and gingival hypertrophy, bleeding at catheterization with 9.7% (16); And severe inflammation, marked redness and hypertrophy, there may be ulcerations in addition to a tendency to spontaneous bleeding with 1.2% (2). The majority of the women group 35.8% (59) had no inflammation in contrast to the male 15.8% (26); While in mild inflammation with color change, gingival edema and no bleeding to the catheter, there were similar results of 19.4% (32) and 18.2% (30), respectively. In the age group of 20 to 29 without inflammation was with 32.1% (53), in contrast to the 50 to 59 years old who presented severe inflammation in 1.2% (2); 39.4% (65) did not present inflammation with high self-care (Table 3).

Table 3. Periodontal disease self-care level.

		Enfermedad Periodontal				Total
		Ausencia de inflamación	Inflamación leve	Inflamación moderada	Inflamación severa	
Autocuidado	Bajo	3.6 % (6)	4.8 % (8)	3.6 % (6)	0 % (0)	12.1 % (20)
	Medio	8.5 % (14)	13.3 % (22)	5.5 % (9)	0.6 % (1)	27.9 % (46)
	Alto	39.4 % (65)	19.4 % (32)	0.6 % (1)	0.6 % (1)	60.0 % (99)
Total		51.5 % (85)	37.6 % (62)	9.7 % (16)	1.2 % (2)	100 % (165)

The data regarding IHOS were: oral hygiene poor 2.4% (4), regular 26.7% (44) and good 70.9% (117); With an average of 0.96 + 0.88. In the female group there was a higher percentage of good hygiene than the male group: 44.2% (73) and 26.7% (44), respectively. The age group 20-29 presented good hygiene with 40.6% (67), followed by 10.9% (18) in 30 to 39 years; Only four people showed poor hygiene at ages of 30 to 49. Table 4 shows that 50.3% (83) of the patients had high self-care and good IHOS, in the middle were found equal percentages for regular and good IHOS with 13.3% in 22 people.

Table 4. Self-care level according to IHOS index.

		Índice IHOS			Total
		Pobre	Regular	Bueno	
Autocuidado	Bajo	0.6 % (1)	4.2 % (7)	7.3 % (12)	12.1 % (20)
	Medio	1.2 % (2)	13.3 % (22)	13.3 % (22)	27.9 % (46)
	Alto	0.6 % (1)	9.1 % (15)	50.3 % (83)	60.0 % (99)
Total		2.4 % (4)	26.7 % (44)	70.9 % (117)	100 % (165)

When applying the ANOVA test for a factor, it was significant with age (p = 0.000), DMFT (p = 0.000) and IHOS (p = 0.000), finding differences between the groups according to the level of self-care by the ASBLA questionnaire. With chi-squared and Student t, no significant differences were found (Table 5).

Table 5. One-way ANOVA test for ASBLA

		Suma de cuadrados	gl	Media cuadrática	F	Sig.
EDAD	Entre grupos	12468.376	2	6234.188	40.005	.000 *
	Dentro de grupos	25245.200	162	155.835		
	Total	37713.576	164			
CPITN	Entre grupos	1.609	2	.804	1.700	.186
	Dentro de grupos	76.655	162	.473		
	Total	78.263	164			
IHOS	Entre grupos	11.743	2	5.872	8.118	.000 *
	Dentro de grupos	117.168	162	.723		
	Total	128.912	164			
CPOD	Entre grupos	31.622	2	15.811	17.772	.000 *
	Dentro de grupos	144.125	162	.890		
	Total	175.747	164			

* significancia estadística, considerando *p=0.05*

Discussion

When comparing self-care with the aforementioned investigations, 53.9% of Zacatecanians said to brush their teeth every time they eat something or three times a day, unlike the study by Gutiérrez et al. (2011), where only 24.6% do so on these occasions, while flossing was 9.8% while 5.5% of this research referred to daily use and how to use it; Although comparing the data of Gutiérrez et al. (2011) with IHOS were higher in regular hygiene with 39.3% as opposed to 26.7% in the present study. It should be mentioned that the majority obtained good hygiene. Navas et al. (2014) agree that the causes of oral diseases have to do with dental brushing and the use of thread.

González et al. (2009) indicate that there is a lack of visits to the stomatologist, while in the study 45.5% responded that they only seek it when they need it. In Venezuela they mentioned not having adequate knowledge, while in Zacatecas 52.1% say they have knowledge but they only follow it sometimes.

Despite the programs and prevention campaigns implemented by educational and health institutions, in the present investigation, high cases of caries and periodontal disease were identified, with percentages similar to those recorded by the SIVEPAB. Caries in women than in men, which contrasts with that found by González et al. (2009). For these, men have

a higher prevalence of caries, with an equal or similar percentage in the general population. The present study determined lower prevalences for caries with respect to the one cited by Fernández et al. (2014), Corchuelo et al. (2016) and González et al. (2009), but higher than those mentioned by Azpeitia et al. (2009). It should be noted that these investigations were carried out at the international level.

As for periodontal disease, SIVEPAB and Ruíz et al. (2009) indicate prevalences that fluctuate in 50% in their different stages; However, the percentage of Gutiérrez et al. (2011) surpasses 90%, although it is important to mention that this research was performed in patients diagnosed with diabetes. When comparing advanced SIVEPAB disease (1.3%) with that found in the study (1.2%), a differentiation can not be made with that provided by Ruíz et al. (2009), since in the investigations the most advanced degree of the periodontal disease is presented in minimal cases. It is important to mention that in relation to the prevalence of healthy gums in the research carried out in the Zacatecas, 51.5% were obtained, higher than those cited in this document.

Conclusions

Caries and periodontal disease continue to be a high prevalence public health problem, with inadequate oral hygiene and lack of preventive measures. The research shows that the Zacatecan population knows self-care and a good brushing technique, because few people with poor hygiene; However, it is not an activity that is a habit because if it were, there would be fewer cases with the pathologies mentioned.

Oral prevention programs must have continuity to be able to control diseases, detect them in their early stages and avoid dental morbidity. According to the World Health Organization (WHO), in addition to other risk factors, such as poor oral hygiene habits, consumption of sugars, lack of calcium, micronutrients, and smoking, an essential part of the strategy also deals with the main Socio-cultural determinants such as poverty, low level of education and lack of traditions that promote oral health.

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