

## The impact of learning towards the care of dental prosthesis and oral hygiene

### El impacto del aprendizaje hacia el cuidado de las prótesis dentales y la higiene bucal

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#### Abstract

**Introduction:** A large number of individuals in our society are users of some type of dental prosthesis, of that number very few know the correct techniques and care of the different types of prostheses that exist in the dental field. The needs of wearing a dental prosthesis are varied, ranging from a proper diagnosis to improve mastication to oral aesthetic reasons. The lack of cleanliness and care of the prostheses are currently the problem for oral health.

**Objective:** to analyze the impact of the daily use of dental prostheses as well as determining the care and hygiene of the patients' dental prostheses. The focus of this investigation research falls into the following question: What is the impact of learning towards the care of dental prosthesis and oral health and hygiene?

**Methodology:** It can be considered a preventive study for the chosen population, which in this case are patients who arrived, for different dental reasons, at the facilities of the Faculty of Odontology of the Autonomous University of Campeche. It was made clear to the patient that oral health and hygiene do not always go hand in hand.

**Results:** After analyzing the statistical studies, it was found that there are significant samples of correlation of the variables "Times of brushing per day" and "The information provided by the dentist" (29.41%), giving significant results of 11.76% (informed patients). Doubts are raised about the cause of the real problem "Is it the dentist or the patient?"

**Conclusion:** In this study, it was observed that dentists, at the end of dental treatments focused on prostheses, ignore the information that must be given to the patients such as the different types of prostheses that exist, and the care and hygiene that each one should have. The information given to the patients influences the preservation of the prostheses as well as the oral health of each patient.

**Dental prosthesis, Oral hygiene, Learning**

#### Resumen

**Introducción:** Un gran número de individuos en nuestra sociedad son usuarios de algún tipo de prótesis dental, de ese número muy pocos conocen las correctas técnicas y cuidados de los diferentes tipos de prótesis que existen en el ámbito odontológico. Las necesidades de llevar una prótesis dental son variadas, desde un correcto diagnóstico para mejorar la masticación hasta razones de estética oral. La falta de limpieza y cuidado de las prótesis son actualmente el problema para la salud bucodental.

**Objetivo:** analizar el impacto del uso diario de las prótesis dentales así como determinar el cuidado e higiene de las prótesis dentales de los pacientes. El enfoque de esta investigación se centra en la siguiente pregunta ¿Cuál es el impacto del aprendizaje hacia el cuidado de las prótesis dentales y la salud e higiene bucal?

**Metodología:** Se puede considerar un estudio preventivo para la población elegida, que en este caso son pacientes que llegaron, por diferentes motivos odontológicos, a las instalaciones de la Facultad de Odontología de la Universidad Autónoma de Campeche. Se le aclaró al paciente que la salud e higiene bucal no siempre van de la mano.

**Resultados:** Después de analizar los estudios estadísticos, se encontró que existen muestras significativas de correlación de las variables "Tiempos de cepillado al día" y "La información proporcionada por el dentista" (29,41%), dando resultados significativos del 11,76% (pacientes informados). Se plantean dudas sobre la causa del verdadero problema "¿Es el dentista o el paciente?"

**Conclusión:** En este estudio se observó que los odontólogos, al final de los tratamientos dentales enfocados a las prótesis, ignoran la información que debe darse a los pacientes como los diferentes tipos de prótesis que existen, y los cuidados e higiene que debe tener cada una. La información que se da a los pacientes influye en la conservación de las prótesis así como en la salud oral de cada paciente.

**Prótesis dental, Higiene bucal, Aprendizaje**

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## Introduction

The World Health Organization \* (WHO) defines oral health as the absence of diseases and disorders that affect the mouth, oral cavity and teeth. But now let's relate oral health with hygiene control and adding an extremely important factor in this research, in patients with dental prostheses in general. Regular cleaning of dentures is essential for the oral and general health of wearer patients. Only limited systematic data is available on the recommendations that dental health professionals (DHCP) make to patients for proper cleaning. In developed countries such as Japan, the US, Italy, and developing countries such as India and Brazil, a questionnaire was used that assesses a variety of dental prosthesis cleaning recommendations. The questions addressed the products, the frequency, how to use the remedies, the suggested dilution, the correct brushing technique, time of the cleansing treatment and treatment modes, yielding results of  $n = 2862$  a 1 week diary  $n = 1462$ . Giving thus an impact result, which undoubtedly accelerated the solution to the problem, recommending an average of more than two treatments cleansing tablets, use of hygiene accessories, mouthwashes, soap and water, other recommendations included baking soda, vinegar, salt water and bleach. In this research, the impact, the importance that preventive training of dental prosthesis care and hygiene contributes to our study population was revealed. At the same time, we look at the causes that lead to failure, when it comes to oral health anomalies. As well as pathologies that occur when hygiene control is not adequate.

## Problem Statement

In developed countries, there is a tendency to decrease edentulism with greater retention of natural teeth until old age, this is due to an increase in the number of older people in the population and socioeconomic privacy as a persistent risk factor for edentulism. The latter is still an oral health problem that is associated with poor general health and well-being problems. Due to the altered oral function and general well-being, edentulous people seek to replace their missing teeth, with alternatives of dental prosthetic treatments, whether they are total, partial, removable or fixed.

There are several studies that indicate that the use of dental prostheses has a positive association with nutrition, cognitive and physical function, general well-being and even survival. However, there are other studies that indicate that cleaning the teeth and oral hygiene is not adequate, which will facilitate the formation and accumulation of an oral biofilm, thus causing oral infections if it is not treated in time. The question arises: What is the impact of learning for the care of dental prostheses on oral health and hygiene? But if it refers to the impact that it has, the separation is made in two points: oral health and on the other hand the hygiene control. Oral health is defined as the absence of diseases and disorders that affect the mouth, oral cavity and teeth, such as mouth or throat cancer, mouth sores, etc; according to the World Health Organization \* (WHO). In the same way, constant visits with the dentist, being considered regularly twice a year, but when referring patients with dental prostheses, review appointments are shorter and more constant. Adequate care is routinely carried out at home, that is, the 50% that the patient must comply with, there includes the correct brushing technique, since the dentist has the obligation to explain and report as many times as necessary; comprising part of the other 50%, if either of the two 50% has a deficiency in function, it is very likely to find a lack of health in the mouth. The training given to the patient, on the correct brushing technique, as well as their plaque control appointments predispose us to greater control of dentobacterial plaque. Hygiene control, which begins with the ideal cleaning of each patient according to the prosthesis they are wearing, since the material of the type of prosthesis can vary. The use of revealing tablets at each appointment is a visual didactic method, where the patient is motivated to improve their cleaning. Dentists must know what accessories patients use to clean their prostheses, the proper use of dental floss, as well as substances that are used at the time of daily cleaning.

## Justification

The diseases that can be active in the mouth of patients with dental prostheses due to poor hygiene and lack of control are extensive. A clear example is stomatitis associated with *Candida albicans*, which is becoming more common every day for patients with dental prostheses. total prosthodontics.

Since they use the plaque throughout the night, thus causing stomatitis, accompanied by inflammation of the gums and high levels of circulating interleukin -6. The various types of dental prostheses include risk factors for contagion or accumulation of bacteria, which become visible if the patient is not informed of the risks they run and the care they must carry out, due to lack of training and motivation. This comparative research study was carried out to know the impact that patient training on improving the cleaning technique and dental prosthesis care, influence oral health, in informed and uninformed patients.

### Theoretical framework

The WHO \* defines Health as a condition of a state of total well-being, in the person and the absence of disease in the organism, Health is a state of complete physical, mental and social well-being, and not only the absence of affections or diseases. "The quote comes from the preamble to the Constitution of the World Health Organization, which was adopted by the International Sanitary Conference, held in New York from June 19 to July 22, 1946, signed on July 22, 1946, by the representatives of 61 states Official Records of the World Health Organization, No. 2, p. 100, and entered into force on April 7, 1948. The definition has not been modified since 1983. Health encompasses three aspects, physical, mental and social The physical has a scope in the organs, preservation of organic functions. In the mental aspect, it is about the preservation of the mental faculties, that is, the ability to decide and act based on their emotions or what improves r consider the subject. Finally, the social aspect is considered the way of coexistence that the members of a society have. In order for health to be carried out in the life of an individual, important aspects must be provided that mark the difference between well-being and disease, attributing to the balance that every human being indispensable needs. The oral area is one of these health-related factors to be treated, since in various studies it has been proven that they go hand in hand, because in the oral area there are microorganisms and bacteria that induce the formation of systemic, pathological diseases, etc. The close bidirectional relationship between oral health and general health, as well as its impact on individual health and quality of life, provide a solid conceptual basis for an approach to integrating oral health in general health.

The World Health Organization WHO defines oral health as the absence of oral or facial pain, oral or throat cancer, infections or ulcers, periodontal diseases, cavities, tooth loss as well as other diseases and disorders that limit the individual's ability to bite. , chew, laugh, talk or compromise psychosocial well-being. For a large number of individuals in our society, oral health is considered an insignificant aspect if there is absence of pain. The Canadian Dental Association points out that oral health "is a state of the tissues of the mouth and related structures that positively contributes to physical, mental and social well-being, well-being and enjoyment of the possibilities of life, allowing the individual to speak , eat and socialize unhindered by pain, discomfort or embarrassment. The loss of dental organs affects perceptions of quality of life, but it is not considered as something essential by society, because erroneous ideas, such as the high cost of treatments or fear of the dentist, propitiate this event to progress. increase. Maintaining a healthy and functional teething is important in all phases of life.

Talking, smiling, eating and being able to socialize are functions that motivate proper care and corresponding oral hygiene to maintain an optimal style and quality of life. One of the dental treatments with a risk factor, which is increasing, is the indication of extraction as a definitive treatment that is exercised due to various factors such as: low educational level, housing in rural areas, age and sex that are focused on diseases of systemic, pathological or hereditary diseases, poor oral hygiene and lack of knowledge of the necessary care in the oral cavity. Statistical data of worldwide relevance. The media, magazines, newspapers, television and the Internet manipulate this aspect of perfection" with beauty standards, which encompasses the ideal figure, including oral aesthetics and the search for the ideal smile. This factor is increasing, the retrograde ideas of society, since approximately 14% of society, go to the dentist for aesthetic purposes, this according to a survey carried out in Spain this year, making it clear that patients come for treatments of non-visible orthodontics, cosmetic veneers and whitening and the other 80% go for preventive reasons. In Mexico, only 15% of the inhabitants go to their dental consultation every 6 months, as recommended for preventive reasons this according to AXA Prevention in December of 2015.

Tooth loss alters the functions of the stomatognathic system, such as chewing, phonetics and aesthetics. In the case of the chewing function, it can lead to a variation in diet by the person, forcing new dietary practices determined with a greater consumption of soft and easy-to-chew foods, causing dietary restrictions and compromising the nutritional status of the person. Edentulism is considered a chronic, irreversible and disabling disease, in all partial edentulous, the loss of teeth, adversely affects the stomatognathic system, reflecting in an alteration of the occlusion, of the neuromuscular component and many times with serious repercussions in the temporomandibular joint. Likewise, the remaining oral structures undergo position and contour modifications and even the formation of a new anatomical component, the edentulous ridge. Edentulism is preventable, irreversible and constitutes mutilation, a loss of physical integrity and is the result of systemic diseases such as diabetes and prevalent oral diseases, such as dental caries and PD periodontal disease, or it can be secondary to orthodontic and aesthetic reasons, prosthetic needs, trauma, and be generated by socioeconomic, cultural and public policy factors that favor inequities and inequalities in health. The loss of teeth brings with it a series of mechanical, functional, aesthetic and emotional alterations for the patient, the prosthesis allows us to return to oral health and at the same time recovers general health, since they are closely related to each other; The usual therapy to recover the loss of a dental organ, it is necessary to place a dental prosthesis, be it a fixed prosthesis, removable partial prosthesis or total prosthodontics. Types of dental prostheses: With the dental prosthesis the dental aesthetics, the smile, volume and shape of the face are recovered, without forgetting the chewing function that is essential for the maintenance of health in general. Dental prostheses prevent adjacent dental organs from becoming distal in the place where a tooth has been lost. Dental prostheses prevent possible interference and the appearance of cavities, solving many problems of the jaw joint. It is essential to replace lost teeth as soon as possible with dental prostheses, to prevent the different problems that the absence of a tooth entails. According to the latest research, prosthetic needs are increasing due to tooth loss caused by multiple factors.

The replacement of missing teeth is the common need of patients, especially the elderly, for this reason, rehabilitative dentistry specializes in performing treatments on patients with alterations of any level of complexity, restoring function, aesthetics and harmony. of the stomatognathic system through the use of fixed, removable and / or total dental prostheses to replace lost teeth, always looking for a correct occlusion; However, there may be poorly adapted or deteriorated prostheses due to their prolonged time in the mouth, which prevent the intake of food satisfactorily, causing stomatological damage. A prosthesis can be made to replace one tooth, two teeth, three teeth, and so on up to all of the dental organs. For each situation there is a recommended type, or several types of possible prostheses. Fixed prosthesis, fixed prosthesis treatment consists of the replacement or restoration of natural teeth by placing artificial analogs that will remain fixed in the mouth. The fixed prosthesis ranges from the restoration of a single tooth to the rehabilitation of the entire occlusion, this depends on the treatment needs of the patient. The missing teeth can be replaced with fixed prostheses that will improve the comfort, the chewing capacity of the patient in many cases, the concept he has of himself. It is also possible, through fixed restorations, to carry out the basic and extensive corrections necessary to treat problems related to the temporomandibular joint and its neuromuscular components. When a fixed prosthesis is placed, the masticatory function is recovered, the aesthetics for this influence some factors such as color, shape, size, tooth texture, midline, dark back of the mouth, buccal corridor, degree of opening of the incisal pockets, height of the occlusal plane, gingival tissue and the need or not for artificial gingiva and phonation. Among fixed prostheses we can find various treatment options such as individual crowns, which are cemented restorations that rebuild the morphology, function and contour of the damaged coronal portion of a tooth, it must protect the remaining structures of the tooth from subsequent damage, if it covers the entire clinical crown, it is a full crown; If only a part of it is covered, it is called a partial crown, a crown can be made of some metal free of corrosion, porcelain fused to metal, only porcelain, resin or only resin.

Inlays are intracoronal cast restorations that are used to repair proximal-occlusal, or gingival lesions of moderate or minimal size. If the occlusal aspect is covered, the intracoronal restoration is called an onlay and is very useful for repairing extensively damaged teeth and those requiring a mesio-occlusal-distal restoration. A bridge is a prosthesis that replaces one or more missing teeth, permanently attached to the remaining teeth. There are some indications that must be taken into account when making a fixed prosthesis. The realization of crowns will represent an intervention of difficult balance for the integrity of the functional and biological principles of the masticatory organ, therefore it is advisable to choose a conservative therapeutic procedure that protects as much as possible the pulp and the marginal periodontium as well as the hard tissues. General procedures for the placement of a crown: extensive caries, morphological defects, trauma to the crown, discolorations, position anomalies, abrasions, erosions, vertical corrections. Bridge anchorage: Socio-economic aspects also influence the placement and the material to be chosen in the elaboration of a fixed prosthesis, this is because prosthetic restorations of fixed crowns and bridges are usually high-cost treatments. They require a great investment of time for the previous treatment as for their definitive insertion. Equal oral hygiene is a factor for the placement of fixed prostheses since the main cause of caries and periodontitis is bacterial plaque, for this reason it is unpredictable to determine the plaque index when starting treatment, the assessment should be simple. There are contraindications that must be taken into account for the procedure of the fixed prosthesis, they must be considered as relative, since generally from the pertinent previous treatment the necessary conditions can be created for the placement of a crown or a bridge, for fixed restorations. However, tooth grinding should be avoided, especially in the placement of full crowns, in young people, due to the width of the pulp cavity, the relative contraindications are: teeth with necrotic pulp without root treatment, with periapical lesions, oral hygiene deficient, gingivitis, periodontitis, obstacles, unclear occlusal conditions, insufficient retention, socioeconomic aspects. Removable partial prosthesis.

The removable partial prosthesis has the purpose of preserving the remaining teeth and secondary tissues that can be replaced when they are not there, it also helps to improve the phonetics, chewing and aesthetics of the patient. The main purpose of the removable prosthesis should always be the preservation of the remaining teeth and tissues and not their replacement when they are already lost, which is a secondary purpose. Once the main purpose of the removable prosthesis has been fulfilled, we can begin to improve phonetics, increase chewing efficiency and aesthetics. There are several factors that must be considered to achieve the success of a removable partial prosthesis and determine the specific indications for its placement: a) balance the retention of the abutment teeth, b) eliminate interferences, c) establish optimal esthetics and d) prepare guide planes. The indications to be followed for the placement of the removable partial denture are the following: When due to lack of health of the periodontal tissue, the residual ridge should help to support the chewing forces. The edentulous space does not have any remaining posterior teeth, except in those cases in which it is not advisable to replace the second and third molars. There is little tissue in the remaining teeth support and requires splinting through the arch, the PPR can act as a splint stabilizing the teeth weakened by underlying periodontal disease. The metal or physical conditions of the patient do not allow the necessary procedures to be carried out for the adequacy of implantation and action of the fixed prosthesis. There is excessive bone loss in the edentulous area, therefore, a base in the prosthesis is required, in order to obtain a correct position of the teeth and at the same time support the lips and cheeks. There is a long prosthetic gap, it is necessary to place a RPP that achieves retention, support and stability of that from the abutments on the opposite side. To serve as coverage, support or both in the treatment of cleft palate in maxillofacial prostheses. The contraindications of this type of prosthesis are minimal: A fixed partial prosthesis can be successful. When there is no adequate oral hygiene. There is no cooperation on the part of the patient. There is a classification of partially edentulous arches. Currently, different methods of classifying arches or partially edentulous spaces are being applied and are still being proposed. Kennedy classification.

This classification is the most accepted, because it precisely defines the areas of the partially edentulous arch. When making the modifications applied to classes I, II, III, and IV, the number of edentulous areas must be taken into account in the original classification.

Dr. Oliver C. proposed several rules to use appropriately the original classification of Dr. Kennedy, without which this classification is difficult to apply in each case, namely: First rule. Rather than precede, the classification must follow any dental extraction that could alter the original classification. Second rule. If the third molar is missing and it will not be replaced, it is not considered within the classification.

Third rule, if there is a third molar, it will be used as an abutment, then it is considered within the classification. Fourth rule, if a second molar is absent and will not be replaced, it is not considered within the classification, fifth rule. The most posterior edentulous zones or zones always determine the classification. Sixth rule. Edentulous areas that do not determine classification are only marked as modifications and are designated by their number. Seventh rule. The size or extent of the modification is not considered, but only the number of additional edentulous areas.

Eighth rule. There cannot be modifying zones in class IV, any edentulous zone posterior to the bilateral zone that crosses the midline, determines in turn the classification. Kennedy Classification: Class Zones Location, Bilateral edentulae Bilateral edentulous areas located posterior to the remaining teeth Unilateral edentules Unilateral edentulous areas located posteriorly to the remaining teeth, Unilateral edentulae Unilateral edentulous areas with anterior and posterior teeth, Single edentulae, but bilateral, which crosses the midline Single but bilateral edentulous area that crosses the midline located anterior to the remaining teeth.

There are two types of removable partial denture: tooth-borne and the distal extension-based prosthesis.

Total prosthodontics: Total prosthodontics is the total rehabilitation of natural or remaining teeth that have already been lost due to different causes, from the general clinical point of view, patients partial or total edentulous are classified considering their anatomical structures, psychological, pathological characteristics, geriatric patients, usually present in a mono-maxillary superior, or inferior and bimaxillary form, separated into three categories: edentulous patients after partial or total extraction, edentulous patients not rehabilitated with partial or total prostheses, patients with partial or total defective prostheses, edentation It means, at the same time, the loss of self-confidence, confessed or not, consciously or acting from the planes of the subconscious.

The prosthetic rehabilitation of total indentation focused on the human plane is a difficult purpose and presupposes achieving, in addition to the good biomechanical functioning, other factors including phonetics, this p It will allow emotional communication with others, and the comfort that involves the physical or mental relaxation of the stomatognathic muscles, which will favor their calm and harmonious relationship with said functional environment. There are different types of edentulisms, prosthetic treatments and calcifications for this oral health problem; The American College of Prosthodontics developed a classification method to establish a better level of diagnosis and complexity of treatments in patients with mixed partial edentulism. This system offers the following benefits: it is an objective method to analyze patients in dental schools and establish standardized criteria to measure treatment and research results, among others. The system establishes four classes according to the degree of complexity, established with the following diagnostic criteria: location and extension of the edentulous areas, conditions of the abutment teeth, occlusion and characteristics of the residual alveolar ridges. Classification system of partial edentulism according to the degree of complexity: Grade I: Minimal compromise in the location and extension of the edentulous areas limited to an arch, of the abutment teeth without pre-prosthetic treatments, occlusal characteristics and conditions of the residual ridge. Grade II: Moderate involvement in the location and extension of the edentulous areas in both arches, the abutment teeth, and the occlusal conditions require additional treatments and moderate involvement of the residual ridges.

Grade III: Substantial compromise in the location and extension of the edentulous areas in both arches, abutment teeth that require substantial additional treatments, occlusal characteristics that require reestablishment without modification in the occlusal vertical dimension, and residual ridges that compromise the stability of the bases. Grade IV: Severe compromise and reserved prognosis in the location and extension of the edentulous areas, abutment teeth that require excessive additional treatment, occlusal characteristics that require reestablishment of the occlusion with modifications in the occlusal vertical dimension and residual ridges that do not provide support and stability. Types of hygiene, the prosthetic area has a great variety of models and materials, each one has its disciplined hygiene technique, which the wearer must know according to the case. Fixed prostheses, which include individual crowns, bridges of three or more units, have easy but demanding care due to the fact that they are tooth-supported, that is, they are fixed to the surface of the stump replacing the restored or missing piece, the care consists of: Soft or semi-soft food avoiding dry fruits or seeds to prevent fractures and leaks, hygiene should be done after each meal and before sleeping, the use of a conventional toothbrush to clean the accessible parts of the mouth, with a little fluoride toothpaste, use dental floss or floss between the pontics and the gum line, which is where more bacterial plaque and food debris accumulates, in case of having spaces between teeth, the use of interdental brushes, use of mouthwashes such as at least three times a week, pay the same attention to other natural teeth. Take care of prostheses from blows, or rough chewing to prevent fractures due to trauma. Total and partial removable prostheses have their own hygiene and care methods, which the wearer must carry out for a better quality of the prosthesis and life span of the same, these steps to follow are: Remove the prosthesis from the mouth Carry out sweeping brushing preferably with a prosthetic brush, water and liquid soap or anti-grease dish soap, do not use toothpaste, rinse with plenty of water, immerse in A container that covers its capacity, fill it with water and place a disinfectant effervescent tablet (special for prostheses or orthodontic appliances), leave it to act for 5 to 10 minutes, rinse and dry.

This procedure is carried out once a day preferably before sleeping, removing the dental prosthesis while sleeping, massage the initial edges, to induce circulation in case of total prosthodontics, keep the prosthesis out of the mouth in water alone or in addition to some suitable disinfectant tablets, in the case of partial removable prostheses \*, carry out the cleaning procedure on natural teeth in the manner explained in fixed prostheses. Percentage of dental prosthesis wearers in the world According to a study carried out by Odontología San Marquina in 2012 with the title of "The profile of oral health-disease and the treatment needs of the elderly in urban Lima 2012", shows some tables where emphasizes the needs of dental prostheses, carriers of fixed and removable prostheses of adults, giving an idea of the percentage of inhabitants who have a prosthesis or require it. Situation of the prosthesis in the upper and lower jaw in older adults Of the people studied, 26.7% are not carriers of some type of upper prosthesis, while 31.7% are carriers of a complete removable upper prosthesis followed by a fixed prosthesis in 19.2%. Regarding the situation of the use of an inferior prosthesis, there are 47.5% of the population that do not use any type of prosthesis, there are 20% that use PPR and 13.3% use a complete removable prosthesis. Need for prostheses in the upper and lower jaw in older adults Lima 2012. Oral health and control prevention. Much of the oral disorders in people are the product of poor oral hygiene throughout life and lack of access to timely dental services in young people and adults. Based on oral health problems, it is related to inadequate nutrition and the modification of the quantity and quality of the food consumed daily. It is a shame to have the limited information about the oral health situation. If there is prevention of the disease in Mexicans, there is a benefit in the short, medium and long term, in populations exposed to risk factors, eating habits and promoting oral health are factors that should not be overlooked. Prevention that benefits oral tissues and external factors such as diseases, pathologies and early deaths. In whether prevention allows the incidence on risk factors and avoid contracting the disease, through an effective strategy, so that the appearance of the effect of the disease is anticipated. In the same way, health promotion focuses on bringing the strategy to healthy people and communities, so that they acquire healthy lifestyles within their possibilities.

As we can deduce, prevention works with individuals who have a risk factor for becoming ill, and promotion with a healthy population WHO 1988.

### Methodology

The comparative study was carried out in the period August-December 2018, the patients to be treated were an active part of clinics I, II, VII, VIII of the Faculty of Dentistry at the Autonomous University of Campeche 2018. The preparation of the examiners included in the training on the inside of oral health and hygiene in patients with dental prostheses, the patients were evaluated at the time of the oral examination and the completion of the surveys. With the previous preparation, a pilot test was carried out. All the information collected was kept confidential and the patient was informed of the entire process.

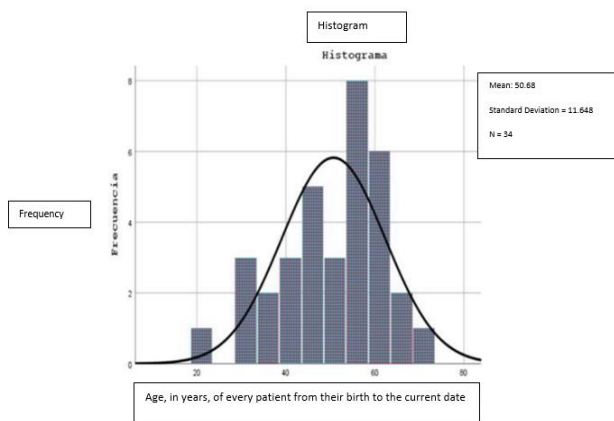
At visual examination, the O'Leary index was used to evaluate the hygiene of smooth surfaces. It indicates the percentage of smooth surfaces stained in pink on the total of dental surfaces with prostheses and abutments. The study operation. The patient had to make a swish with water to eliminate the excess of dye. This index was applied at the initial moment of the study and at the end of it, whether from group A Informed or B not informed, thus, the ability to control plaque with daily tooth brushing was determined, before and after teaching oral hygiene.

Patients with partial removable prostheses were randomly chosen, in the same way with fixed prostheses in equal parts. Two groups of patients will be formed, the first group had access to training talks and preventive learning for the correct hygiene of their corresponding prosthetic appliances. The second group was not fully informed of the training talks, they only attended their check-up appointments without sharing information on their health and oral hygiene status. In this way, the comparative research study and the impact that learning a good oral hygiene technique in patients with prostheses could have was highlighted with both groups.

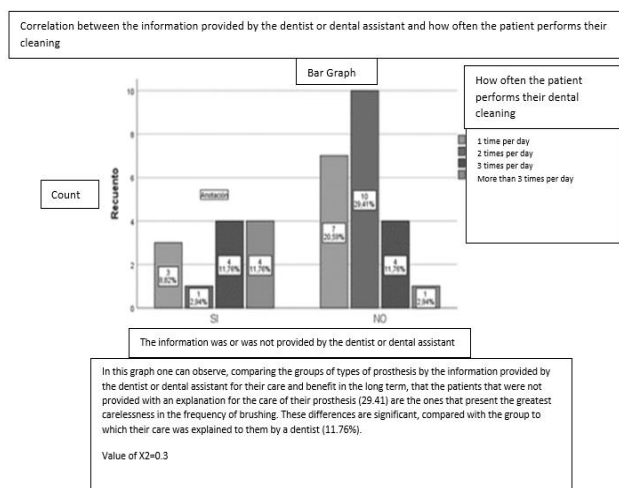
### Results

34 people were interviewed, observing a mean age of 50.68 years  $\pm$  11.64 years, among which 16 were men and 18 women, 34 agreeing to be measured with the revealing tablet, of the 34 people measured, 58, 8% of them are married, 5.9% are single, 5.9% are widowers and 20.6% live in common law union. At their school level, we observed that of the 34 patients 2.9% only studied preschool, 17.6% went to primary school, 29.4% studied only secondary school, 26.5% upper secondary level and 23.5% had some degree. In occupation, it was observed that 26.5% are dedicated to the home, as well as 20.6% work in a company, 17.6% have a business, 29.4% are retired or pensioners and 5.9% do not have employment at the moment. Of the 34 patients measured, 50% had a fixed prosthesis (crowns, bridges), 26.5% had PPR, and 23.5% had both in combination. Based on their oral hygiene, 23.5% of the patients measured only use a toothbrush, 35.3% floss and toothbrush, 23.5% floss, brush and interdental brush, and 17.6% other accessories, 44.1% only use toothpaste as a hygiene substance, 52.9% toothpaste and mouthwash and 2.9% 1 patient uses toothpaste, mouthwash and another substance, of the 34 measured, 32.4% have a cleaning routine of their prostheses and 67.6% not. Based on their knowledge, 29.4% people have knowledge of dental prosthesis care and 70.6% do not. The same was measured if the patient was informed by the dentist or dental assistant about the care and cleaning that he should have for his dental prosthesis, resulting in 35.3% positive and 64.7% negative. He was also questioned about knowledge based on the difference of dental prostheses, related to hygiene and care, giving 32.4% reported and 67.6% uninformed results. In the same way, it was observed with which products they make their prosthesis cleaning reaching the conclusion of 8.8% with detergent, 58.8% with toothpaste, 11.8% with effervescent tablets, 5.9% with water and 14.7% with more options, that patients are not informed by the dentist at the time of completing their prosthetic treatment about the care of the different types of prostheses and the type of cleaning they should have.

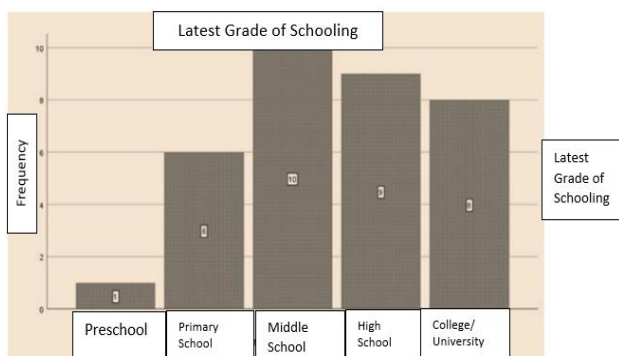




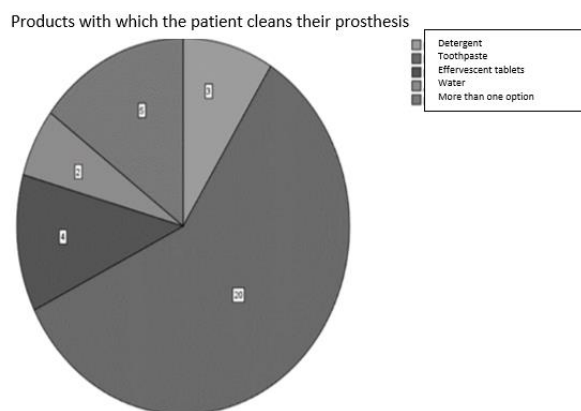
Graphic 1 Histogram of age in study population



Graphic 2 Information provided by the operator



Graphic 3 Educational level of the studied population



Graphic 4 Frequency distribution of products that the patient uses to clean their prostheses

Conclusion

In the present study, it was determined that this population lacks information on the correct care and hygiene of dental prostheses in patients attending the Faculty of Dentistry of the Autonomous University of Campeche. In this population, the majority were never informed by dentists or dental assistants about the correct hygiene technique, accessories and substances to use, thus causing the deterioration of their dental prostheses. The most affected population was patients with the age range of 50 years. This population has a higher percentage of null learning of oral hygiene wearing dental prostheses. It is of the utmost importance that knowledge reaches the patient in a timely manner, as well as the correct brushing technique, the cleaning routine that each dental prosthesis must have and the care of each one of them. The lack of time factor does not predominate to provide the necessary information to patients and thus extend the life of use of dental prostheses within the oral cavity in adequate conditions to use them.

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