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Systematic Review of Current Medical Literature on the Impact of Oral Health on Quality of Life

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Abstract**—** *Much has been studied about the impact of oral health on quality of life. The literature is vast on this subject and many are the results of the most varied studies. This study aims to systematically review the current medical literature on the impact of oral health on quality of life. A scan was carried out in the main portals of idexation and the articles with the greatest impact and relevance factor were selected for this study. Although there are a large number of articles regarding the impact of oral cavity on quality of life, there are still many divergent results, mainly in patients with edentulous users of total prosthesis.*

Keywords**—** ***Oral Health, Quality of life, WHO.***

I. INTRODUCTION

Quality of life (QoL) indicates the level of the basic and supplementary conditions of the human being. These conditions range from physical, mental, psychological and emotional well-being, social relationships such as family and friends, as well as health, education and other parameters that affect human life. It is not a new concept, but its importance has grown. The World Health Organization (WHO) in 1948 defined health not only as the absence of disease or infirmity but also the presence of physical, mental and social well-being. Recently, the use of quality of life as a necessary concept in the practice of health care and research has been reinforced (MINAYO; HARTZ, BUSS, 2000)

To directly measure the health of individuals, structured and simplified instruments have been developed and tested, capable of recognizing the states of "complete physical, mental and social well-being" of the subjects. Quality of life is an important measure of health impact and the interest in measuring it is relatively recent, both in health care practices and public policies, in the fields of disease prevention and health promotion (SEIDL and Zannon 2004)

Several instruments have been proposed, managed by interviewers or self-administered. The instruments of measurement of quality of life can be divided into two groups: generic and specific (CAMPOS; OLIVEIRA; RODRIGUES NETO, 2014).

The generic instruments are used in the evaluation of the QoL of the population in general. In the field of application, population-based questionnaires are used without specifying diseases, being more appropriate to epidemiological studies, planning and evaluation of the health system. The most commonly used in the world are Sickness Impact Profile (SIP), Nottingham Health Profile (NHP), McMaster Health Index Questionnaire (MHIQ), Rand Health Insurance Study (Rand HIS), The Medical Outcomes Study 36-Item Short Form Health Survey (SF-36), World Health Organization Quality of Life Assessment (WHOQOL-100), among others (PATRICK; DEYO, 1989).

The specific instruments are capable of evaluating, individually and specifically, certain aspects of QoL, providing greater capacity to detect improvement or worsen the aspect under study. Its main characteristic is the sensitivity of measuring the changes, due to the natural history or after a certain intervention. They may be specific to a particular population, disease, or to a particular situation. (KATZ et al., 1992)

OHIP is a specific instrument for measuring the impact of oral health on quality of life. This questionnaire has a summarized Brazilian version called OHIP 14Br, elaborated by Jacobovitz et al. (2003).

II. SYSTEMATIC REVIEW

The review on the masticatory function of edentulous patients rehabilitated with complete dentures with maxillomandibular mucosupores has been very much reported in the current medical literature. Poor masticatory function results in the swallowing of large

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deviations in food or changes in diet, resulting in foods that are more difficult to chew. In addition, a difficulty in destroying psychosocial factors that negatively affect the quality of life (OLIVEIRA et al., 2007).

Waad et al (2003), in their article, carried out a randomized clinical trial to evaluate the quality of life and satisfaction of users of conventional total prosthesis and total prosthesis retained by two implants. Edentulous adults, aged 35-65 years, were randomly divided into two groups that received a conventional mandibular prosthesis (n = 48) or an overdenture supported by two osseointegrated implants with a connection bar (n = 54). All ores result in their general enjoyment and other characteristics, with their original units and their comfort, in visual analogue scale, for well being with prostheses. Health-related quality of life was also assessed before and after treatment. Late regression analysis (GP = general mean) was significant in the non-conventional group overdenture group (P = 0.0001). Age, sex, marital status and health status were scored as general assessment associates. In addition, the implant group presented significantly higher evaluations in the thirteen comfort lapses (comfort, stability and ease of chewing). The quality of life was not higher in the implant-retained implant user group.

A longitudinal clinical trial involving 103 individuals was conducted to evaluate the impact of oral implant therapy on the psychosocial well-being of individuals with dental prosthesis problems. There were four experimental groups: (1) a group whose individuals were edentulous in an arch and received implants to retain an oral prosthesis (GI); (2) individuals edentulous in an arch and received conventional prostheses (CDG1); (3) edentulous individuals requesting replacement of their prosthesis with conventional prostheses (CDG2); (4) toothed individuals requiring routine treatment and included for comparison. Data were collected in each pre and post-treatment group, using specific oral and oral health measures (OHIP) and generic (SF36). Individuals in the GI, CDG1 and CDG2 also completed an enthusiasm scale with the prosthesis. After treatment, subjects who received implant prostheses (GI) reported a significant improvement in well-being and health-related quality of life, as well as participants who requested and received conventional prostheses (CDG2). Individuals who requested implants but received conventional prostheses (CDG1) reported little improvement in prosthesis satisfaction and only a modest improvement in their quality of life. None of the individuals who used dental prostheses reported health-related quality of life as good as teeth dentin (ALLEN; MCMILLAN, 2003).

Zani et al (2009) compared the satisfaction of edentulous patients who had been rehabilitated with embedded prostheses on implants and fixed prostheses in the mandible and evaluated the technical aspects of prostheses in relation to patient satisfaction. This is a cross-sectional study involving 30 patients, 15 of whom were rehabilitated with implants embedded on implants and 15 treated with fixed prostheses. Patients answered the OHIP-14Br questionnaire, validated for Brazilian Portuguese, to analyze satisfaction. In addition, the patients underwent clinical examination to estimate the condition of their prostheses. Statistical analysis, using the Mann-Whitney U test, did not reveal significant differences in pleasure between patients with embedded prostheses on implants and those with fixed prostheses. It was concluded that the two types of prostheses were perceived as equally satisfactory by edentulous patients and that the condition of the prostheses did not influence individual satisfaction in terms of rehabilitation.

Couto et al (2018) validated a Portuguese version of the Oral Health Impact Profile (OHIP-14) for people with mild intellectual disabilities (OHIP-14-MID-PT). The Portuguese version of the questionnaire was prepared based on the original English version, following the guidelines defined internationally. A total of 240 people (or attending) were interviewed at institutions in the central region of Portugal, affiliated with Humanitas, to measure quality of life related to oral health (OHRQoL). The OHIP-14-MID-PT presented high reliability (ICC = 0.999; Cronbach's α = 0.922). The total OHIP-14-MID-PT scores were significantly associated with self-perception of better oral health status and less need for dental treatment, more natural teeth and better results in the oral health index. OHIP-14-MID-PT has proven to be a consistent, valid and reliable instrument with good psychometric properties to determine the impact of oral health on quality of life in adults with mild intellectual disabilities in Portugal.

Preciado et al (2013) studied the Quality of Life with Implant-Prosthesis (QoLIP-10) questionnaire to assess the impact of implant-supported rehabilitations on oral health-related quality of life (OHRQoL); 131 patients with fixed screw prostheses and removable prostheses were analyzed with QoLIP-10 and OHIP 14sp. The QoLIP-10 confirmed its psychometric capacity for users of screwed prostheses and had results very similar to those of OHIP 14sp when compared. The group with screwed fixed prosthesis had a better quality of life when compared to the group with removable prosthesis.

Kuo et al (2011) legitimized the Chinese version (Taiwan) of the Oral Health Impact Profile (OHIP-49T) and developed a summarized form of OHIP (OHIP-14T) for the elderly. They measured 1402 individuals, 65 years of age or older, who used or needed dental prostheses. The assessment of OHIP-49T, related to the criterion, was measured by associations between the OHIP-49 score with prosthetic need and prosthetic status. A subset

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(OHIP-14T), obtained by a controlled regression procedure, was compared to the original Slade OHIP-14 (OHIP-14S). Cronbach's alpha and ICC values were 0.97 and 0.98 for OHIP-49T and 0.90 and 0.93 for OHIP-14T. Mean OHIP-49T scores were significantly associated with prosthetic status (P = 0.0013) and prosthetic requirement (P = 0.0004). The OHIP-14T score had a stronger discriminatory capacity than the OHIP-14S. The OHIP-49T showed satisfactory reliability and validity for this elderly population in Taiwan. OHIP-14T is more effective in measuring the quality of life of older people who use or need to use dental prostheses than OHIP-14S.

HEYDECKE et al (2005) determined the impact of embedded overdentures on two conventional mandibular implants or total dentures in leisure and sexual activities. One hundred and two subjects, aged 35-65 years, received mandibular overdentures fitted by two implants (IOD; n = 54) or new conventional mandibular total dentures (CD; n = 48) in a randomized controlled clinical trial. A Social Impact Questionnaire was used to assess the impact on social and sexual activity, including avoiding conversations, refusing invitations, avoiding sports, and feeling uncomfortable in kissing and sexual relationships, and loosening of the prosthesis during such activities. Quality of life related to oral health was measured with the Oral Health Impact Profile (OHIP). The IOD group presented lower scores on the OHIP scale and, consequently, a better quality of life when compared to the CD group. Edentulism has a negative impact on social and sexual life. Mating mandibular overdentures provide greater improvement in discomfort in intimate activities than new conventional dental prostheses.

BERRETIN-FELIX et al (2008) verified the consequences of fixed oral rehabilitation implanted in quality of life (QoL) of the elderly. Fifteen patients were studied, of which 10 were female and five were male; all were aged> 60 years old, were completely edentulous, had removable prostheses in both arches, and were treated with implanted fixed prostheses. Three QOL questionnaires, two related to oral conditions (Oral Impact on Daily Performance - OIDP - and Oral Health Impact Profile, short version - OHIP-14) and one dealing with global aspects (WHOQOL - Quality of Life of the World Health Health) BREF), before the 3, 6 and 18 months, after the surgical placement of the implants. The OIDP and OHIP-14 questionnaire scores were better than after the dental treatment. The WHOQOL-BRED was less sensitive, confirming the greater reliability of specific (focal) questionnaires compared to general issues in such situations. Treatment with fixed implant-supported prostheses improved QoL in the elderly whose effects are better detected by specific instruments focused on the subject.

Allen and Mcmillan (1999) evaluated the impact of tooth loss on total denture wearers using the Oral Health Impact Profile (OHIP) and compared the validity of OHIP 49 against OHIP 14 in a population with total prosthesis. The study participants were divided into two groups: patients receiving implanted prosthesis (n = 48) and edentulous control group of the same age group and gender, requesting conventional total dentures (n = 35). The OHIP data were calculated using the weighted standardized and simple counting methods. Non-parametric statistical tests were used to compare the responses of the implant and control subjects. Both groups were dissatisfied with their conventional prostheses and had relatively similar levels of dissatisfaction. Individuals in the implant-retained prosthesis group had a worse quality of life assessment than the group with conventional prostheses. The results suggested that OHIP-49 and OHIP-14 had a similar ability to discriminate between groups. This indicates that OHIP-14 can be a helpful aid in a clinical setting.

Montero et al (2012) pointed the Oral Health Impact Profile to edentulous patients (OHIP-20sp) in the Spanish population and analyzed the factorial of prosthetic well-being. A total of twenty-one (n = 21) edentulous patients using mandibular implant prostheses (LO) and twenty (n = 20) with conventional total prostheses (CD) were retrospectively assessed in this study. The reliability coefficient (Cronbach's alpha = 0.91) showed high consistency. There was no significant difference in quality of life and satisfaction between the two groups, since 48% of the sample showed occasional or frequent dissatisfaction with at least one questionnaire item. The OHIP-20sp was found to have satisfactory efficiency to measure the quality of life and satisfaction of total edentulous users of total prosthesis.

Perea et al. (2013) investigated the differences in impact on oral health related quality of life among users of total dentures, depending on their sociodemographic characteristics, factors related to prosthesis and oral status. 51 patients aged between 50 and 90 years, between 2005 and 2010, with at least one complete denture in the Department of Buco - holic Prostheses of the Universidad Complutense (Madrid), were included in this cross - sectional study. All participants answered the Oral Health Impact Profile (OHIP-14sp) questionnaire. The prevalence of impact was 23.5%, with an average score of 9.8 points. The location of the prosthesis significantly influenced the patient's overall satisfaction, with the prosthesis being less comfortable. Having a complete removable prosthesis as an antagonist significantly impaired patient satisfaction. Patients without prosthetic stomatitis and those requiring prosthesis repair or replacement reported significantly higher overall OHIP-14sp scores. The use of conventional total prosthesis has negative impacts on the HRQoL of elderly patients,

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especially in the case of inferior prosthesis requiring repair or replacement, with a removable total prosthesis as an antagonist. Prosthetic stomatitis in this study was always associated with other serious diseases, which may have influenced the self-perception of discomfort with the prostheses.

Øzhayat and Gotfredsen (2012) evaluated the effects reported by 200 patients with fixed dental prostheses (DPF) and 107 patients with removable dental prostheses (DPH) on the change in the quality of life related to oral health (OHRQoL) with the type of prosthetic treatment. Participants completed Oral Health Impact Profile 49 (OHIP - 49) before and after treatment. All participants had a significant improvement in OHRQoL. The improvement was greater for the RDP group than for the FDP group. Removable dental prostheses that replaced masticatory teeth alone did not significantly improve OHRQoL. Older age, being female and having teeth replaced in the aesthetic zone were associated with deterioration of OHRQoL. Both RDP treatment and FDP treatment were associated with a reduction of the most frequently reported problems prior to treatment. Fixed dental prostheses and RDP treatments improved OHRQoL and reduced the number of problems. Participants in the RDP improved more than the participants in the FDP.

Raes et al. (2017) conducted a study on the quality of life related to oral health in unit implants. 96 patients received 102 dental implants. The implants were immediately provided, and the permanent crowns were cemented after 12 weeks. Oral Health Impact Profile Questionnaires (OHIP - 14) were completed before surgery, after installation of the implant and provisional crown, permanent corona installation, 12 months after the final crown was installed and 60 months after the final crown was installed . OHIP-14 showed that patients, when they were edentulous, showed high scores at school and a poor quality of life. In the period of the installation of the implants and provisional, there was a substantial improvement in the quality of life. The OHIP-14 score was very low with the installation of definitive crowns and up to 12 months after the procedure, indicating good quality of life. After 60 months using the crowns, there was a small increase in the OHIP-14 score but still maintained a good quality of life.

Furuyama et al. (2012) studied the quality of life related to oral health in users of fixed prosthesis on implants and removable prosthesis. 79 individuals screened at the University of Tokyo responded to the OHIP-46 Japanese version. All users of fixed prosthesis on implants presented better quality of life, when compared to the user of removable prosthesis.

Oh et al. (2016) compared oral health-related satisfaction and quality of life (HRQoL) between fully edentulous patients treated with fixed implant prostheses (PF), removable implant prostheses (RP), or mucosuported (CD) dentures. Eighty-six patients - 29 FP, 27 RP and 30 CD patients participated in this study. The research was conducted through interviews with a questionnaire that included the patient satisfaction scale and the oral health impact profile (OHIP - 14). Patient satisfaction was measured after prosthetic treatments and HRQOL before and after treatments. After prosthetic treatments, HRQoL increased in all three groups (P <0.5). The FP and RP groups did not present a significant difference in satisfaction and HRQoL, and both groups presented greater improvement compared to the CD group, which showed good satisfaction and good HRQoL, but at levels lower than FP and RP.

Assunção et al. (2007) compared the satisfaction and quality of life in an elderly population using conventional prostheses and implant-supported prostheses. 34 patients were submitted to a questionnaire based on the Oral Health Impact Profile and oral health quality of life to evaluate their levels of satisfaction and quality of life with their prostheses (OHIP 14). There were no significant differences between groups, regarding comfort, aesthetics, masticatory capacity, general satisfaction, pain, functional, phonetic, social and psychological limitations. Comparing the stability of total dentures, the implant-supported prosthesis group presented the best results.

Boerrigter et al. (1995) evaluated thirty-two men and 118 women to determine satisfaction with dental prostheses. Patients were randomly divided into two groups; one received conventional total prosthesis and the other received total implant-supported prosthesis. The group that received total implant-supported prostheses had better evaluation and greater satisfaction with their prosthesis in all aspects and in all stages of the study.

Oral rehabilitation with implants provided a way to minimize the problem of the stability and retention of total dentures, thus increasing their functionality, leading to improved patient satisfaction and higher quality of life (VAN DER BILT et al., 2006).

In relation to natural dentition, Prado (2004) compared the masticatory efficiency of the total and implosurgery of the total denture, in 21 individuals with total dentures (PT group), 10 individuals with implanted dentures (PIR group) and 15 with natural dentition). The masticatory performance index was obtained by calculating the mean geometric diameter of the chewed and sieved particles. After analysis, the PT group obtained a mean of 21% of the masticatory efficiency, when compared to the DN group; and the PIR group had a mean of 89% when compared to the same DN.

Slade and Spencer (1994) proposed and validated a questionnaire called Oral Helth Impact Profile (OHIP), with the objective of measuring the social impact of an

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oral disease. The questionnaire with 49 questions on oral problems was applied to 328 people. OHIP was considered a reliable and valid instrument for the detailed measurement of the social impact of oral disorders, offering potential benefits for clinical decision-making and research.

Slade (1997) perfected OHIP, summarizing the questionnaire in 14 questions: the new questionnaire was called Oral Health Impact Profile 14 (OHIP-14). The reduction was aimed at facilitating the use, making the instrument more comprehensive, yet without harming reliability. The OHIP-14 and OHIP-49 scores indicated the same standard test of variation among socio-demographic groups of older adults.

Att and Stappert (2003) compared the effect on oral health-related quality of life (OHIP) of two types of rehabilitation: total multisupported prosthesis (PTMS) and total implantable prosthesis (PTIR). The evaluations were done before the prostheses were delivered and two months later. The authors verified that rehabilitation with PTIR was significantly associated with improvement in quality of life. Treatments with PTIR provide a significant improvement, in a short time, more than treatments with PTMS, in oral health related quality of life. A visual analogue scale was used to evaluate the ability to chew certain foods and the comfort, stability, aesthetics, phonetics and ease of hygiene of the prostheses. All indices evaluated were significantly better in the patient rehabilitated with mucosuporated and implanted prostheses, demonstrating that the level of patient satisfaction was similar to the two prostheses.

Jacobovitz (2003) translated, adapted, validated, and determined the accuracy of OHIP-14 for Brazilian culture with the help of three English teachers, and one judge evaluated the translations. This version was applied to 280 patients with a mean age of 42 years. Socio-demographic data and self-perception of oral health and the need for treatment were also collected. The correlation analyzes indicated validity of the concept of the Brazilian version of OHIP-14. OHIP scores increased the self-rated measure of subjects from "very healthy" to "very sick". The individuals with greater need for dental treatment, likewise, had a higher score than those who had less need for treatment. The adapted version of OHIP-14, for Brazilian culture, has demonstrated high values of accuracy and validity and can be considered satisfactory for use in Brazil.

Heydecke et al. (2003) compared the satisfaction of patients using superior fixed and removable dentures on implants. We selected 16 individuals who had participated in other studies. The research was carried out in two stages. In the first, some patients received the fixed prostheses, whereas the others received removable prostheses. After two months of adaptation, the prostheses were changed and two more months were waited. In both steps, patients responded to the EVA psychometric scale. The variables analyzed in the VAS were general satisfaction with prostheses when compared to natural teeth, comfort, phonetics, stability, aesthetics, ease of hygiene, occlusion and ability to chew seven foods (white bread, cheese, raw carrots, sausage, nuts and salad). After the analysis, the patients chose which prosthesis they would remain with. Of the thirteen patients who completed the study, four chose the fixed prosthesis as final and nine the removable prosthesis. Aspects such as phonetics, ease of hygiene, general satisfaction and esthetics were the factors that most influenced the choice of removable prosthesis. The factors that exerted influence in the choice of fixed were: comfort, general satisfaction, phonetics and stability.

Att and Stappert (2003) reported a clinical case, in which there was rehabilitation with implant-supported prosthesis, in a patient with poor oral health and low quality of life according to OHIP-14. Serial exodontia and eight implants were performed in the same session, 4 in the mandible and 4 in the maxilla. After the period of osseointegration, the implants were implanted. Aesthetic, phonetics and masticatory function of the patient were reestablished. The patient had a very low score on the OHIP-14 scale, which means that there was a significant improvement in quality of life.

Scott, Forgie, and Davis (2006) evaluated the impact of oral health on quality of life in edentulous individuals who needed new PTMS, and the prostheses were made by two different techniques. Sixty-five edentulous people participated in the study. Thirty-three had PTMS constructed using the copy technique or neutral zone (a technique that allows artificial teeth to be distributed, adequately biomechanically in relation to the alveolar ridge and the para-prosthetic muscles) and 32 by the conventional technique. The people answered the OHIP-14 questionnaire before and after the preparation and installation of PTMS. Overall, respondents expressed improved satisfaction with the new lower prosthesis. However, the group of people with neutral zone prostheses showed significant improvements, for all seven evaluations, compared to only five of the seven evaluations, for the people in the conventional group. According to the results of the study, although there was a need for PTMS replacement, this fact does not necessarily have significant impacts on oral health related quality of life.

Kelly et al. (2012) conducted a study to determine the quality of life, based on the masticatory efficiency of users of implanted and supported implants. Fifty patients were evaluated, 25 with implants supported and 25 with mucosuported prostheses. The users of implant-supported

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prosthesis presented masticatory efficiency and superior quality of life to users of mucosuated prosthesis.

Lang et al. (2016) conducted a study of the impact on the quality of life of patients submitted to dental implants with immediate loading and late loading. All were submitted to dental extractions in series, and the osseointegratable implants were immediately installed. In Group 1, a temporary bolted interim prosthesis was performed and, in Group 2, a provisional total prosthesis with mucus supported. The oral health related quality of life questionnaire (OHRQOL) was used for these patients by a visual analogue scale of 48 questions related to 6 domains: comfort, function, speech, aesthetics, self-image and oral health. The pooled data showed significant differences for all the questions between pre-treatment and post-treatment responses, indicating that users of mandibular overdenture retained with implant had a better quality of life.

Thomason, Lund, Chehade et al (2003) examined patient satisfaction with conventional total prostheses and fixed prostheses on mandibular implants 6 months after confection. Sixty edentulous individuals (aged 65-75 years) were randomly assigned to use a conventional mandibular prosthesis or a prosthesis supported by two implants with retentive ball-shaped anchors. Patients rated their overall satisfaction and other characteristics of their prostheses along with their ability to ingest certain foods at 100-mm analogue visual scales prior to the use of the tests and after 2 and 6 months. Both treatment groups reported greater satisfaction with their new prostheses at 6 months. Overall satisfaction scores were higher in the implant group than in the conventional prosthesis group by approximately 36%. The only question that the conventional protees surpassed the protests about implants was in the cleaning aspect of the prosthesis.

Harris et al. (2013), in a randomized, prospective and controlled study, showed that 122 edentulous patients (mean age 64; 39 men, 83 women) underwent initial assessment of satisfaction and quality of life with the Oral Health Impact Profile - 49 (OHIP - 49) and Denture Satisfaction. The patients were divided into two groups, and one group received mucosuporated prostheses and the other received new implanted prostheses using them for 6 months. The two groups obtained improvement in the satisfaction and quality of life, being the group with implant-supported prosthesis having better satrisfication and better quality of life.

Meijer, Raghoebar, van't Hof, (2003) conducted a prospective randomized clinical trial to evaluate 10 years of treatment of patients who received an implanted mandibular overdenture (IRO) or a conventional total prosthesis (CD) and to assess the satisfaction of these groups with their prostheses. The IRO group presented substantially higher satisfaction with the CD group in all age groups of use of the prostheses.

Preoteasa et al (2012) evaluated the satisfaction of complete edentulous patients, users of conventional prostheses and fixed implants implants. The study sample consisted of 36 patients - 18 treated with a newly manufactured conventional prosthesis and 18 with fixed prosthesis on implants. All patients were satisfied with their prostheses, but the patients treated with implants presented greater satisfaction in all the requirements of the research.

Xin and Ling (2016) translated the original English version of the oral health impact profile (OHIP) -14 into the Chinese version and tested the psychometric properties of the Chinese version for use among Chinese adults. The formal psychometric properties were tested according to the standard procedure of the international quality of life assessment project (IQOLA). A total of 592 adults were surveyed. There were 550 valid questionnaires. The Cronbach's alpha of the translated scale was 0.93 and the corrected item-total correlation ranged from 0.53 to 0.71. The 14 items were divided into four domains. There was a certain logical relationship between items in the same domains. There was a highly significant association between perceived oral health status, perceived need for dental care, and OHIP-14 scores. The translated Chinese version of the OHIP-14 demonstrated good reliability and validity. Its good psychometric properties provide the theoretical evidence for later use in the Chinese population.

III. CONCLUSION

Based on the data collected by the current medical literature, we can say that oral aude has a direct impact on quality of life. Ususarios of total prosthesis mucosuportada and total prosthesis implants supported have a great number of studies on quality of life, being the users of implant implanted with better quality of life and satisfaction. There is a direct relationship between quality of life and satisfaction, those who are more satisfied with their oral condition tend to have a better quality of life.

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