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Original Article

Factors influencing the discrepancy between clinical periodontal status and subjective oral health perception among Korean adults

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ABSTRACT

Objectives: In this study, we aimed to identify the prevalence of discrepancies between clinically assessed periodontal status and self-perceived oral health among Korean adults aged 35 years and older, and examine sociodemographic and health-related factors associated with such discrepancies. **Methods:** Data from 10,146 adults who participated in the 7th Korea National Health and Nutrition Examination Survey were analyzed using complex sample chi-square tests and multivariate logistic regression. The agreement and discrepancy between clinical periodontal status and self-rated oral health were evaluated using the corresponding clinical and subjective measures. **Results:** A total of 59.7% of participants exhibited a discrepancy between their clinical periodontal condition and self-perceived oral health. Multivariate analysis indicated that individuals who had received mental health counseling within the past year had a significantly higher likelihood of exhibiting such discrepancies, with an odds ratio of 1.496 (95% confidence interval: 1.072–1.496), compared with those who had not received counseling. **Conclusions:** A substantial proportion of Korean adults inaccurately perceived their periodontal health. Targeted dental hygiene interventions are essential, particularly for individuals whose mental health issues may increase the risk of oral health status misperceptions.

Key Words: Mental health, Oral health, Oral health status, Periodontal disease, Self-rated oral health, Treatment needs

Introduction

Health status is generally assessed through two approaches: objective assessments, based on clinical indicators, and subjective assessments, which reflect an individual's self-perception of health, known as self-rated health (SRH) [1]. Clinical assessments are useful for identifying the presence and severity of diseases; however, they often fail to capture psychosocial factors or quality of life dimensions. In contrast, subjective assessments are closely related to life satisfaction, health behaviors, and healthcare utilization, thus providing valuable information for monitoring health inequalities and developing prevention oriented public health strategies [2,3]. Therefore, a comprehensive understanding of health and the establishment of effective management strategies require

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consideration of both clinical indicators and subjective perceptions.

However, the correspondence between clinical outcomes and subjective perceptions does not always exist within the same individual. This discrepancy, or health perception gap, directly influences disease management and healthcare seeking behavior, potentially reducing the efficiency of health management [4]. For example, individuals who perceive themselves as healthy despite the presence of disease may miss opportunities for early diagnosis or preventive care [5], whereas perceive themselves as having poor health despite being clinically healthy may experience unnecessary medical use and psychological distress [6].

Such discrepancies are also common in oral health [7,8]. Periodontal disease is often referred to as a "silent disease" because it progresses slowly and painlessly, leading many individuals to underestimate its severity [9,10]. This misperception can delay diagnosis, reduce adherence to professional recommendations, and increase the risk of disease progression, eventually leading to severe periodontitis or tooth loss [11]. Accordingly, the mismatch between clinical periodontal status and subjective perception should be recognized as a critical factor influencing preventive care and public health outcomes rather than a mere perceptual error.

Previous studies have reported that various factors affect this mismatch. Sociodemographic characteristics, including sex, age, education, and income, as well as oral health behaviors, such as toothbrushing frequency, dental visits, and unmet dental needs, have been found to influence self-perceived oral health [12–15]. Furthermore, systemic health status (e.g., presence of chronic diseases) and psychological conditions (e.g., stress, fatigue, and mental health counseling) have been identified as important determinants of subjective health perception [16].

Specifically, mental health status is known to exert a powerful influence on subjective health perception. Psychological distresses, such as depression, anxiety, and stress, can induce a distortion in overall health evaluations, often leading to a pessimistic perception that deviates from the actual clinical status [17]. Furthermore, mental health issues have been reported to compromise oral health management behaviors, consequently elevating the risk of periodontal disease [18]. In addition, some research suggests that subjective oral health perception is more strongly correlated with mental health status than with objective clinical conditions [12,19]. In the context where discrepancies in periodontal disease are common, mental health status is highly likely to act as a crucial factor amplifying the mismatch between clinical periodontal status and subjective oral health perception.

The discrepancy between clinical and subjective health assessments has implications not only for individual selfcare but also for the effectiveness of community oral health policies and promotion programs [20]. Despite this significance, few Korean studies have systematically analyzed mismatches focusing on periodontal disease using nationally representative data and complex survey designs. Given the multifactorial nature of periodontal disease shaped by behaviors, systemic health, and psychological factors-understanding the patterns and determinants of this mismatch is crucial [9].

Therefore, this study aimed to analyze data from the 7th Korea National Health and Nutrition Examination Survey (KNHANES, 2016–2018) to determine the prevalence of mismatch between clinical periodontal status, assessed using the Community Periodontal Index (CPI), and subjective oral health perception among Korean adults. Additionally, this study sought to identify sociodemographic, systemic health and mental health-related factors influencing this mismatch. The findings are expected to provide fundamental evidence for developing targeted oral health education, periodontal disease prevention, and public health strategies tailored to adults in Korea.

Methods

1. Participants

This study used data from the 7th Korea National Health and Nutrition Examination Survey (KNHANES) conducted from 2016 to 2018. Among the 16,489 participants in the overall health survey and oral examination of the 7th KNHANES, 10,146 individuals aged 35 years and older who had complete information on subjective oral health status and the presence of periodontal disease were

selected as the study subjects. According to the decision of the Korea Disease Control and Prevention Agency Institutional Review Board (IRB), the first and second years of the 7th KNHANES were exempt from ethical review, while the third year resumed ethical review to account for the collection of human derived materials and the provision of raw data to third parties, and received approval (Approval No. 2018 01 03 PA)

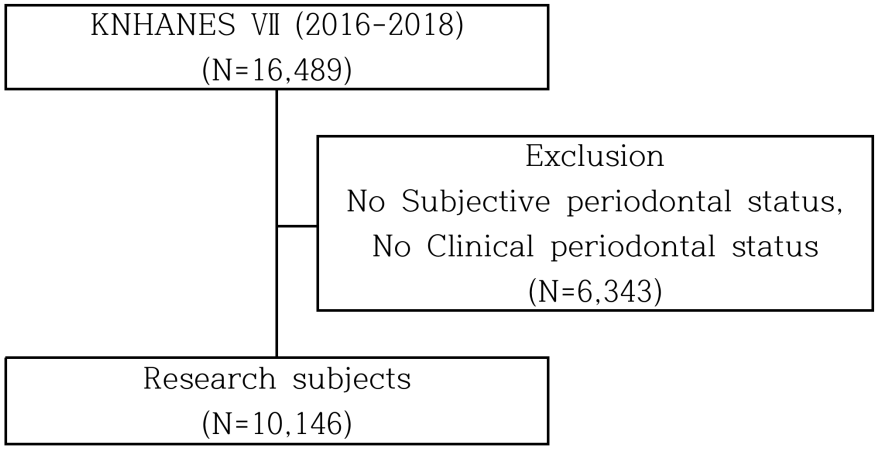

Fig. 1. Research subject selection process

2. Variables of analysis

1) General characteristics

The general characteristics of the study participants included gender, age, education level, income level, smoking status, alcohol consumption, and presence of chronic diseases. Age was categorized into 35–39 years, 40–59 years, and 60 years or older, while education level was classified as middle school or below, high school graduate, and college graduate or higher. Daily toothbrushing frequency related to oral health behavior was categorized as ≤1 time, 2 times, and ≥3 times per day, while unmet dental treatment needs during the past year and oral examination during the past year were dichotomized.

2) Mental health problems

Mental health problems were dichotomized based on whether the participant had received counseling in the past year due to psychological problems, through visits, phone calls, the internet, or other means.

3) Clinical periodontal status

The clinical periodontal status of the study participants was assessed based on the Community Periodontal Index (CPI), as proposed by the World Health Organization (WHO). The CPI divides the mouth into six sections for examination, and the highest score observed is recorded as the representative score. Code 0 indicates a healthy periodontal tissue, Code 1, gingival bleeding; Code 2, calculus formation; Code 3, the presence of shallow periodontal pockets of 4–5 mm; and Code 4, the presence of deep periodontal pockets of 6 mm or more.

Codes 0–2 were classified as having no periodontal disease, whereas Codes 3 and 4 were classified as having periodontal disease.

4) Subjective oral health status

Subjective oral health status was assessed using a questionnaire in which participants evaluated their perceived oral health. Responses of “very good” and “good” were classified as “good,” while “fair,” “poor,” and “very poor” were classified as “poor,” resulting in two categories for good and poor.

5) Match and mismatch between clinical periodontal status and subjective oral health status

Match and Mismatch were assessed using the previously categorized clinical periodontal status and subjective oral health status variables. If the clinical periodontal status and subjective oral health status response results were identical, they were considered to be a match. On the other hand, cases where the clinical periodontal status and subjective oral health status did not match were considered as Mismatch.

Clinical periodontal status	
Code 0~2	Code 3, 4
No periodontal disease	Periodontitis

Subjective oral health status	
Very good, Good	Fair, Poor, Very poor
Good	Poor

	No periodontal disease	Periodontitis
Good	Match	Mismatch
Poor	Mismatch	Match

Fig. 2. Classification of match and mismatch between clinical periodontal status and subjective perception

3. Data analysis

All statistical analyses were performed using SAS 9.4 (SAS Institute Inc., Cary, NC, USA), and the level of statistical significance was set at 0.05. Because the Korea National Health and Nutrition Examination Survey uses a complex sampling design, sampling weights were applied in the analysis. To examine the relationships between Match or Mismatch in clinical periodontal status and subjective perception with general characteristics and health related behaviors, a complex sample chi square test accounting for the complex sampling design was performed.

Results

1. Clinical and subjective oral health status according to general characteristics of the study participants

A total of 10,146 individuals were included in the study, and among them, 59.7% showed mismatch between clinical and subjective oral health status. Analysis of clinical and subjective oral health status according to general characteristics revealed significant differences across all variables, including gender, age, education level, income level, smoking status, and alcohol consumption. The proportion of mismatch was higher in women (65.7%) than in men (51.1%) (p<0.001). The proportion of mismatch by age group was 77.1% among those aged 35–39 years, 61.9% among those aged 40–59 years, and 52.0% among those aged 60 years or older (p<0.001). Mismatch was highest among participants with a college degree or higher (67.9%) (p<0.001), and highest among those in the high income group (62.8%) (p<0.001). In addition, the proportion of mismatch was higher among non-smokers (64.4%) (p<0.001) and higher among non-drinkers (61.2%) (p<0.001) <Table 1>.

Table 1. Match and mismatch between clinical and subjective periodontal status according to general characteristics

Unit: N(%)

Characteristics	Total	Clinical and subjective oral health status		p^*
		Match	Mismatch	
Total	10,146(100.0)	4,166(40.3)	5,980(59.7)	
Gender				
Male	4,357(41.0)	2,132(49.7)	2,225(35.1)	<0.001
Female	5,789(59.0)	2,034(50.3)	3,755(64.9)	
Age (yr)				
35-39	1,218(11.6)	290(6.6)	928(15.0)	<0.001
40-59	4,850(48.5)	1,896(45.9)	2,954(50.3)	
≥60	4,078(39.8)	1,980(47.5)	2,098(34.7)	
Education				
≤Middle school	3,862(37.7)	1,881(45.3)	1,981(32.6)	<0.001
High school	2,930(29.5)	1,173(28.5)	1,757(30.1)	
≥College	3,354(32.8)	1,112(26.2)	2,242(37.2)	
Income				
Low	2,511(24.7)	1,121(27.1)	1,390(23.0)	<0.001
Middle	5,134(50.2)	2,095(49.6)	3,039(50.6)	
High	2,501(25.2)	950(23.3)	1,551(26.4)	
Smoking				
No	6,130(61.7)	2,220(54.5)	3,910(66.6)	<0.001
Yes	4,016(38.3)	1,946(45.5)	2,070(33.4)	
Drinking				
No	5,854(58.0)	2,330(55.9)	3,524(59.3)	<0.001
Yes	4,292(42.0)	1,836(44.1)	2,456(40.7)	
Chronic disease				
No	5,915(58.5)	2,136(51.1)	3,779(63.5)	<0.001
Yes	4,231(41.5)	2,030(48.9)	2,201(36.5)	
Frequency of daily tooth brushing				
≤1	1,075(10.1)	548(12.8)	527(8.2)	<0.001
2	3,958(38.7)	1,707(40.8)	2,251(37.3)	
≥3	5,113(51.3)	1,911(46.4)	3,202(54.5)	
Unmet dental treatment needs				
No	7,346(72.7)	2,867(69.2)	4,479(75.0)	<0.001
Yes	2,800(27.3)	1,299(30.8)	1,501(25.0)	
Oral health examination in the past year				
No	6,427(62.9)	2,813(67.5)	3,614(59.8)	<0.001
Yes	3,719(37.1)	1,353(32.5)	2,366(40.2)	

*by complex sample chi square test

2. Clinical and subjective oral health status according to health related behaviors

Analysis of clinical and subjective oral health status according to health related behaviors showed significant differences across all variables, including chronic disease, frequency of daily toothbrushing, unmet dental treatment needs, oral health examination in the past year, and mental health consultation in the past year. Participants without chronic disease showed a higher proportion of mismatch (64.8%) compared with those who had chronic disease (52.6%) (p<0.001). Regarding frequency of daily toothbrushing, the proportions of mismatch were 63.6% for ≥3 times, 57.5% for twice, and 48.8% for ≤1 time, indicating that higher brushing

frequency was associated with a greater likelihood of mismatch (p<0.001). Participants without unmet dental treatment needs showed a higher proportion of mismatch (75.0%) (p<0.001), and those who had not undergone an oral health examination in the past year also showed a higher proportion of mismatch (61.7%) (p<0.001). Participants who had received mental health consultation in the past year showed a higher proportion of mismatch (67.4%) (p=0.033) <Table 2>.

Table 2. Match and mismatch between clinical and subjective periodontal status according to health related behaviors

Unit: N(%)

Characteristics	Total	Clinical and subjective oral health status		p^*
		Match	Mismatch	
Total	10,146(100.0)	4,166(40.3)	5,980(59.7)	
Chronic disease				
No	5,915(58.5)	2,136(35.2)	3,779(64.8)	<0.001
Yes	4,231(41.5)	2,030(47.4)	2,201(52.6)	
Frequency of daily tooth brushing				
≤1	1,075(10.1)	548(51.2)	527(48.8)	<0.001
2	3,958(38.7)	1,707(42.5)	2,251(57.5)	
≥3	5,113(51.3)	1,911(36.4)	3,202(63.6)	
Unmet dental treatment needs				
No	7,346(72.7)	2,867(38.3)	4,479(61.7)	<0.001
Yes	2,800(27.3)	1,299(45.4)	1,501(54.6)	
Oral health examination in the past year				
No	6,427(62.9)	2,813(43.2)	3,614(56.8)	<0.001
Yes	3,719(37.1)	1,353(35.2)	2,366(64.8)	
Mental health consultation in the past year				
No		4,069(40.5)	5,783(59.5)	0.033
Yes		97(32.6)	197(67.4)	

*by complex sample chi square test

3. Multivariable logistic regression analysis of factors associated with mismatch between clinical and subjective oral health status

The independent effects of various factors on the mismatch between clinical and subjective oral health status were as follows. Individuals who had received mental health counseling within the past year showed a higher likelihood of exhibiting a discrepancy than those who had not, with an odds ratio (OR) of 1.496 (95% CI: 1.496–1.072). Among general characteristics, males had a significantly lower likelihood of discrepancy compared with females (OR=0.598). Age was also negatively associated with mismatch, with each one year increase corresponding to a 0.982 fold lower likelihood of discrepancy (OR=0.982).

Regarding educational level, individuals with a college degree or higher had a lower likelihood of discrepancy than those with a middle school education or less (OR=0.702). Smokers also showed a lower likelihood of mismatch compared with non-smokers (OR=0.847).

Among health related behavioral variables, individuals with chronic diseases had a lower likelihood of discrepancy than those without chronic diseases (OR=0.849). Likewise, those with unmet dental treatment needs showed a lower likelihood of discrepancy compared with those without unmet needs (OR=0.771). Meanwhile, individuals who had undergone an oral health examination within the past year had a higher likelihood of discrepancy than those who had not (OR=1.164) <Table 3>.

Table 3. Multivariable logistic regression analysis of factors associated with mismatch between clinical and subjective oral health status

Factors	Mismatch between clinical and subjective oral health status	
	OR(95% CI)	p^*
Mental health consultation in the past year		
No	1.000	
Yes	1.496(1.496-1.072)	0.018
Gender		
Female	1.000	
Male	0.598(0.520-0.687)	<0.001
Age (yr)	0.982(0.977-0.987)	<0.001
Education		
≤Middle school	1.000	
High school	0.871(0.755-1.005)	0.058
≥College	0.702(0.597-0.824)	<0.001
Income		
Low	1.000	
Middle	0.897(0.798-1.008)	0.067
High	0.876(0.744-1.032)	0.113
Smoking		
No	1.000	
Yes	0.847(0.733-0.978)	0.024
Drinking		
No	1.000	
Yes	0.926(0.834-1.029)	0.155
Chronic disease		
No	1.000	
Yes	0.849(0.758-0.951)	<0.001
Frequency of daily tooth brushing	1.026(0.978-1.076)	0.300
Unmet dental treatment needs		
No	1.000	
Yes	0.771(0.690-0.862)	<0.001
Oral health examination in the past year		
No	1.000	
Yes	1.164(1.051-1.289)	<0.001

OR: odd ratio; CI: confidence interval

Discussion

This study analyzed data from the Seventh Korea National Health and Nutrition Examination Survey (2016–2018). The analysis aimed to examine the prevalence of mismatch between clinical periodontal status and subjective oral health perception among Korean adults aged 35 years and older, and to identify factors associated with this discrepancy. The findings revealed that 59.7% of participants demonstrated a mismatch between their clinical periodontal condition and perceived oral health status. It is indicating that a substantial proportion of adults do not accurately recognize their periodontal health. This pattern is consistent with previous studies reporting gaps between subjective oral health perception and objective clinical indicators [7,8,11]. In the present study, the mismatch group showed significant differences from the match group across most sociodemographic and behavioral characteristics, including sex, age, education, income, smoking, drinking, chronic disease status, and oral health behaviors.

The multivariable logistic regression analysis identified several factors associated with this mismatch. First, adults who had

received mental health counseling during the past year had a 1.496-fold higher likelihood of mismatch compared with those without such experience (p=0.018). This finding suggests that mental health status is an important independent determinant of inaccurate oral health perception. It is consistent with previous evidence indicating that stress, anxiety, or depressive symptoms may distort subjective health evaluations [16,21,22]. Clinically, this may manifest as mismatch wherein individuals with relatively healthy periodontal status perceive their oral health as poor due to psychological influences. These results highlight the need for patient education strategies that incorporate psychological considerations in clinical practice.

Second, individuals who reported undergoing a dental check-up within the past year exhibited a 1.164-fold higher probability of mismatch (p<0.001) than those without such experience. This unexpected result suggests that dental examinations do not necessarily improve patient's understanding of their periodontal health. Possible explanations include insufficient explanation of asymptomatic early stage periodontal disease or a lack of patient comprehension regarding the clinical information provided [20]. Therefore, dental hygienists should reinforce post examination communication by delivering clear, personalized, and literacy appropriate information to enhance patient's understanding of their periodontal status.

Conversely, several characteristics were associated with reduced mismatch. Men were less likely to experience mismatch than women (OR=0.598, p<0.001), consistent with literature suggesting that women tend to be more sensitive or pessimistic in their subjective health assessments. Increasing age was associated with a gradual decline in mismatch (OR=0.982 per year, p<0.001), possibly reflecting greater exposure to symptoms and disease progression among older adults, resulting in more accurate recognition of their periodontal condition [12].

Among behavioral factors, smokers showed a lower likelihood of mismatch than non-smokers (OR=0.847, p=0.024). Individuals with chronic disease also had lower mismatch odds (OR=0.849, p<0.001), suggesting that those with systemic conditions may possess greater health awareness and thus more accurate oral health perception. Notably, unmet dental needs were strongly associated with lower mismatch (OR=0.771, p<0.001), indicating that individuals who perceive a need for dental treatment frequently present with actual clinical periodontal problems, resulting in more accurate perception.

Overall, these results demonstrate that subjective oral health perception does not adequately reflect clinical periodontal status among a large proportion of Korean adults. The findings also indicate that mismatch is particularly prevalent among individuals with poor mental health or those who undergo routine dental check-ups, highlighting the need for enhanced patient provider communication in these groups. Dental hygienists should assess patients' subjective oral health beliefs and utilize objective clinical data such as intraoral photographs, radiographs, and periodontal probing depths to provide clear explanations and strengthen patient understanding of the necessity of preventive care.

This study contributes to the literature by identifying sociopsychological and behavioral determinants of mismatch between perceived and clinical periodontal health, offering implications for both clinical practice and public health policy. However, several limitations should be noted. First, this study used data from the Seventh Korea National Health and Nutrition Examination Survey (2016–2018), which represents the most recent cycle that included nationwide clinical periodontal examinations. Because periodontal clinical measurements have not been publicly released in KNHANES since 2016–2018, more up to date nationally representative periodontal data were not available. Although these data are approximately 8–10 years old, they remain the latest and only comprehensive source of nationwide periodontal clinical indicators and are therefore appropriate for examining factors associated with mismatch between clinical periodontal status and subjective perception. In addition, the cross sectional design of KNHANES limits the ability to infer causal relationships between the identified factors and the mismatch. Together, these structural constraints of the dataset should be considered when interpreting the study findings. Second, subjective oral health perception was dichotomized into "good" and "poor," which may not fully capture the nuanced perceptions of those responding "average." Third, this study did not include other subjective oral health related variables such as toothache, chewing discomfort, perceived gingival bleeding, or OHIP scores. Future studies should incorporate these variables to provide a more comprehensive understanding of the mismatch between subjective and clinical periodontal status. Fourth, periodontal status was assessed using the Community Periodontal Index,

which evaluates only index teeth and may therefore underestimate the true severity of periodontal disease. In addition, grouping CPI codes 0–2 as"no disease"may oversimplify early or mild periodontal conditions. These structural limitations of CPI should be taken into account when interpreting the findings of this study. Fifth, because this study employed a cross sectional design, causal inferences cannot be made regarding the association between oral health examination and the likelihood of mismatch. Rather, possible explanation such as limited understanding of dental examination results, insufficient awareness of early asymptomatic periodontal conditions should be considered. Longitudinal or qualitative research is needed to clarify these mechanisms.

Future research should employ refined classifications of mismatch types and investigate the underlying psychological and behavioral mechanisms contributing to these discrepancies. Additionally, intervention studies evaluating communication strategies designed to reduce mismatch may provide evidence for developing patient centered periodontal health education and public oral health policies aimed at improving preventive care engagement and health equity.

Conclusions

This study examined 10,146 adults aged 35 years and older who participated in the Seventh Korea National Health and Nutrition Examination Survey (2016–2018) to identify factors associated with the mismatch between clinical periodontal status (CPI) and subjective oral health perception.

1. A total of 59.7% of participants demonstrated a mismatch between their clinical periodontal condition and perceived oral health status, indicating that Korean adults generally have limited awareness of their actual periodontal health.

2. Multivariable logistic regression analysis revealed that mismatch was significantly associated with several sociodemographic and behavioral characteristics, including female, younger age, non-smoking status, absence of chronic disease, and absence of unmet dental needs.

3. Notably, individuals who had undergone a dental check-up within the past year (OR=1.164, 95% CI: 1.051–1.289) and those with a history of mental health counseling (OR=1.496, 95% CI: 1.072–2.086) showed a significantly higher likelihood of mismatch. These findings suggest that routine dental examinations or mental health challenges may hinder accurate recognition of one's periodontal condition.

Overall, the results highlight the importance of assessing both subjective perception and psychological characteristics when planning dental hygiene interventions for periodontal disease prevention and management. Individuals with poor mental health or those who regularly undergo dental examinations represent high risk groups for mismatch; therefore, enhanced explanation using objective clinical information, personalized communication strategies, and educational approaches to improve oral health literacy are needed to promote accurate health perception. This study provides foundational evidence to inform future public oral health strategies aimed at improving periodontal disease prevention and advancing health equity.

Notes

Author Contributions

Conceptualization: HJ Cho, IS Chang, IS Jung; Data collection: SH Lee, EJ Choi; Formal analysis: YS Jung, SH Lee; Writing-original draft: SH Lee, EJ Choi; Writing-review&editing: HJ Cho, IS Chang, YS Jung

Conflicts of Interest

YS Jung is a member of the Editorial Committee of the Journal of the Korean Society of Dental Hygiene, but was not involved in the review process of this manuscript. The authors declare no other conflicts of interest.

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Ethical Statement

Non-human or animal research.

Data Availability

The data are held by the corresponding author and are available upon request if needed.

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한국 성인에서 임상적 치주상태와 주관적 구강건강 인식 불일치에 영향을 미치는 요인

초록

연구목적: 본 연구는 35세 이상 한국 성인의 임상적 치주상태와 주관적 구강 건강 인식 간의 불일치 유병률을 파악하고 이러한 불일치와 관련된 사회인구학적, 건강관련 요인을 파악하고자 한다. **연구방법:** 제7기 국민건강영양조사에 참여한 성인 10,146명의 자료를 복합표본 카이제곱 검정과 다변량 로지스틱 회귀 분석을 사용하여 분석하였다. 임상적 치주상태와 주관적 구강 건강 상태 변수를 이용하여 일치 및 불일치를 평가하였다. **연구결과:** 총 59.7%의 참가자가 임상 상태와 주관적 인식 간에 불일치를 보였다. 다변량 분석결과, 지난 1년간 정신 건강 상담을 받은 경우가 그렇지 않은 경우보다 불일치가 발생할 위험비(OR: Odds ratio)가 1.496(95% CI: 1.496-1.072)으로 유의하게 높았다. **결론:** 상당수의 한국 성인이 자신의 치주 건강을 부정확하게 인식하는 것으로 나타났다. 특히, 정신 건강 문제로 인해 자신의 구강 상태를 부정확하게 인식할 위험이 높은 집단에 대한 세심한 치과위생 중재가 필수적이다.

색인: 정신 건강, 구강 건강, 구강 건강 상태, 치주 질환, 주관적 구강 건강 상태, 치료 필요성