Patient-centered preferences for autonomy and information-seeking among periodontal patients in dental decision-making

Jung, Ji-Young

Department of Dentistry

Graduate School

Yonsei University

Patient-centered preferences for autonomy and information-seeking among periodontal patients in dental decision-making

Advisor Lee, Jung-Seok

The Doctoral Dissertation

submitted to the Department of Dentistry

and the Graduate School of Yonsei University

in fulfillment of the requirements for the degree of

Ph.D. in Dental Science

Jung, Ji-Young

July 2025

Patient-centered preferences for autonomy and information-seeking among periodontal patients in dental decision-making

This certifies that the Doctoral Dissertation of Jung, Ji-Young is approved.

Committee Chair	**Lee, Jung-Seok**
Committee Member	**Jung, Ui-Won**
Committee Member	**Paik, Jeong-Won**
Committee Member	**Park, Seung-Hyun**
Committee Member	**Hong, In-Pyo**

Department of Dentistry
Graduate School
Yonsei University
December 2024

TABLE OF CONTENTS

List of table

Abstract

Patient-centered preferences for autonomy and information-seeking among periodontal patients in dental decision-making

Jung Ji-Young

Department of Dentistry
The Graduate School, Yonsei University

(Advisor Lee Jung-Seok, D.D.S., M.S.D., Ph.D.)

Aim: Managing periodontal disease often involves complex decisions involving multiple treatment options, and patient autonomy significantly influences this decision-making process. This study aimed to characterize the autonomy and information-seeking preferences among patients with periodontal disease diagnosed with stage III/IV periodontitis, and to identify the factors influencing these preferences.

Materials and Methods: The survey included 96 patients diagnosed with periodontal disease, all of whom underwent periodontal treatment or tooth extraction between May 2021 and February 2022. Participants completed a self-administered questionnaire incorporating the Autonomy Preference Index (API) to assess their decision-making and information-seeking preferences, along with demographic information, using a five-point Likert scale.

Results: Decision-making preferences were centrally distributed, with a score of 2.87±0.47 (mean±SD), indicating that most periodontal patients favored a collaborative decision-making model. In contrast, information-seeking preferences were skewed, with a strong concentration toward the higher end of information preferences; the score was 4.55±0.08. Lower age (p=0.008) was associated with a preference for greater autonomy, while the financial burden (p=0.034) was linked to reduced information-seeking preferences. Patients' autonomy remained relatively consistent across different periodontal clinical scenarios.

Conclusions: These findings suggest that periodontitis patients prefer to be well-informed and share decision-making responsibilities with healthcare professionals after their diagnosis. Factors such as age and financial burden affect their autonomy, involvement, and desire for information.

Keywords: Patient autonomy; Patient preferences; Patient decisions; Dentistry; Periodontitis

Patient-centered preferences for autonomy and information-seeking among periodontal patients in dental decision-making

Jung Ji-Young

Department of Dentistry
The Graduate School, Yonsei University

(Directed by Professor Lee Jung-Seok, D.D.S., M.S.D., Ph.D.)

I. INTRODUCTION

Determining the prognosis of teeth is a critical aspect of the care of periodontitis patients, since this directly influences treatment planning (Kwok & Caton, 2007). Medical/dental decision-making is complex, rather than being a simple binary choice. In particular, managing periodontal disease often involves difficult decisions such as whether to pursue periodontal treatments to maintain a tooth or to opt for tooth extractions to facilitate prosthodontic or implant treatment. In many cases, different clinicians would make different prognoses for the same patient, as the assessments involve choosing from various

available options, with the choices often being somewhat subjective (J. S. Lee, Lim, Kim, Choi, & Jung, 2016). Achieving a consensus in treatment planning requires various clinical parameters to be considered, such as the level of periodontal attachment/bone loss, tooth mobility, furcation involvement, and probing depths, alongside patient-based factors such as their preferences and socioeconomic conditions (Nunn et al., 2012). These complexities make it essential to explore different approaches for integrating patient and clinical factors into the decision-making process.

Clinical decision-making is made by mutual agreement between the clinician and the patient, with various models proposed to define the roles of each party. In the 'paternalistic' approach, the view of clinicians as being experts results in them suggesting the preferred option for the patient (Murgic, Hébert, Sovic, & Pavlekovic, 2015). However, this approach often overlooks the patient's preference for autonomy (Sandman & Munthe, 2010). On the other hand, the 'consumeristic' approach reinforces the patient's rights by placing full authority and responsibility for treatment decisions on the patient, with minimal input from a clinician (Shutzberg, 2021). This approach can also be problematic due to it neglecting the clinician's expertise, potentially compromising the quality of the decision made in the patient's best interests. To address these challenges, the collaborative model—also known as 'shared decision-making' (SDM)—promotes equal authority and shared power between the patient and clinician, treating the patient as an active partner in the decision-making process (Shutzberg, 2021). This approach aims to promote the involvement of both parties, ensuring that decisions are made collectively for achieving the best possible health outcomes (Kriksciuniene & Sakalauskas, 2022).

Clinicians often believe that patients are already well involved in their treatment decisions, whereas patients may perceive their involvement differently (Driever, Stiggelbout, & Brand, 2020; Reissmann, Bellows, & Kasper, 2019). To reduce this perception gap, research has focused on identifying factors related to patients' preferences for autonomy. Patients' desires for involvement or information-seeking tend to vary

according to certain characteristics, such as demographic factors and the nature of the disease or treatment (Chewning et al., 2012). The type of dental procedures also plays a significant role in shaping these preferences, such as the invasiveness of the treatment (Thoma, Strauss, Mancini, Gasser, & Jung, 2023) and its long-term health implications (Reissmann et al., 2019). While preferences for involvement may vary, patients have consistently expressed a desire for information regardless of the disease type, stage, or demographic-related features (Burns, da Silva, & John, 2021; Tariman, Doorenbos, Schepp, Singhal, & Berry, 2014). Although patient-centered care does not necessarily mean fulfilling all of their expectations, simply understanding their preferences for autonomy and their desire for information can improve patient satisfaction (Nwachokor et al., 2024).

While considerable research exists in the medical field (Chewning et al., 2012; Nease & Brooks, 1995), studies on patients' autonomy preferences in dentistry remain limited. Given the complexities of periodontal decision-making—where multiple treatment options exist and clinical judgments can be subjective—research in this area is particularly crucial. Therefore, the aim of this study was to characterize the autonomy preferences in decision-making and information-seeking related to dental treatment among patients diagnosed with periodontal disease, and to identify the factors influencing these preferences.

II. METHODS

1. Study design and population

A questionnaire-based study was carried out between May 2021 and February 2022 at Yonsei University Dental Hospital. After obtaining ethical approval from the Institutional Review Board of the hospital (IRB no. 2-2021-0018), 96 patients were recruited on a voluntary basis. All participants provided written informed consent before being enrolled in the study. The study focused on patients with periodontal disease, specifically those diagnosed with stage III/IV periodontitis, including those who had undergone periodontal treatment or tooth extraction due to this disease. The exclusion criteria included (1) failure to provide written informed consent, or (2) presence of a mental illness such as schizophrenia, depression, or drug/alcohol addiction. This study followed the CROSS (Checklist for Reporting of Survey Studies) guidelines (Sharma et al., 2021).

2. Sample size

The purpose of this pilot study was to gather preliminary data using the Autonomy Preference Index (API) in patients diagnosed with periodontitis. Given the exploratory nature of this study and its experimental setting, the sample size was pragmatically determined to provide relevant point estimates and effect sizes for informing future sample-size calculations when performing confirmatory randomized controlled trials. A total sample size of 96 was calculated based on a previous study using the API (Colombet, Rigal, Urtizberea, Vinant, & Rouquette, 2020; O'Neal et al., 2008; Zizzo, Bell, Lafontaine, & Racine, 2017).

3. Questionnaires

Questionnaires were distributed to patients who agreed to participate before performing

clinical examinations, during which face-to-face data collection took place. The six-page self-administered questionnaire included the following components: (a) demographic information, which was based on the Adult Oral Health Standard Set (AOHSS), and (b) the API developed by (Ende, Kazis, Ash, & Moskowitz, 1989) to assess patients' desire for autonomy. The vignette-scenario content was tailored to dental situations; a vignette is a carefully written description of a situation designed to simulate key aspects of a real-world scenario, such as diagnosing a specific disease (e.g., periodontal disease) (Evans et al., 2015; Gould, 1996). All questionnaires underwent a Korean language validation process, in addition to referencing the validated Korean version of the API (J. Lee & An, 2021). All questionnaire-related procedures, including explanations of the clinical and research aspects, were conducted by a single examiner (J.Y.J.). A structured communication protocol was implemented for the person-to-person questionnaire administration, ensuring that all participants received the same questions in a consistent manner. This approach aimed to minimize potential biases by maintaining uniformity in data collection.

3.1 Demographic information

The demographic questionnaire included the following components: sociodemographic data (age, sex, education level, financial burden associated with care, smoking habits, alcohol consumption, oral hygiene habits, sugar consumption, and experiences of tooth extraction), chronic medical conditions (cardiovascular disease, diabetes mellitus, respiratory disease, cancer, and other diseases), and oral-health-related conditions (craniofacial abnormalities, oral cancer, oral infection, mucosal diseases, other oral diseases, visible plaque, dental appliances, and types of treatments) (Table 1).. The following additional items related to patients' individual oral health, oral function, and pain were also included: general oral health status, ability to eat, food alteration, ability to speak, ability to sleep, productivity, self-confidence, smiling, social participation, aesthetic satisfaction, oral pain, dry-mouth experiences, and sensitivity experiences (Riordain et al., 2021) (Supplementary Table 2).

3.2 Decision-making and information-seeking preferences

The questionnaire included the API, which consists of two scales: (i) patient autonomy preferences in decision-making and (ii) information-seeking preferences. Specifically, it comprised (1) a 15-item scale for decision-making preferences (6 general items and 9 vignettes), and (2) a 7-item scale for information-seeking preferences. These scales have been widely used in health settings to examine patients' autonomy preferences and other types of preference (Chewning et al., 2012).

The first scale on decision-making preferences assesses the involvement preferences of patients about whether major medical/dental decisions should be made by clinicians or by patients themselves. This scale consists of six general items and three modified dental vignettes (simulated clinical scenarios) focusing on periodontal considerations. Based on the preexisting vignettes related to respiratory diseases in the original API (Ende et al., 1989), dental vignettes were carefully modified to address periodontitis cases following the severity of disease as outlined in the original questionnaire. Five additional clinical professors specializing in periodontics reviewed these vignettes for verification. (Table 2). In our study, three clinical vignettes from the original scale were adapted to explore the autonomy preferences of periodontitis patients regarding dental treatment decisions based on the severity of the disease: (1) decision-making prior to diagnostic awareness of periodontal disease, (2) decision-making in the presence of periodontal disease with a stable prognosis, and (3) decision-making in cases of severe periodontitis with teeth deemed to be 'hopeless'.

The second scale on information-seeking preferences measures the extent to which patients wish to receive information about their medical/dental issues. It assesses their preference for receiving explanations from clinicians and their interest in being informed about different treatment options. One item was excluded from this subscale since it was irrelevant to dental situations.

Responses for the decision-making preferences scale, which included six general items, and the information-seeking preference were collected using a five-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. For the three modified dental vignettes, responses were gathered based on five decision-making preferences scales: 'the doctor alone', 'mostly doctor', 'the doctor and you equally', 'mostly you', and 'you alone' (Supplementary Table 1).

4. Statistical analyses

The demographic characteristics including the AOHSS and the categories of decisions made were analyzed descriptively, and quantified using frequencies and percentages. For linear regression analyses, categorical variables were refined into binary or ordinal variables. Response options for the decision-making preference and the information-seeking preference ranged from 1 ('strongly agree') to 5 ('strongly disagree'), with higher scores indicating a stronger preference for autonomy. Total scores were then adjusted to a linear scale ranging from 0 (low autonomy, corresponding to a lack of desire for decision-making or information-seeking) to 1 (high autonomy, corresponding to a strong desire for decision-making or information-seeking). A general linear model was employed to estimate the contribution of each potential demographic variable to the two autonomy preference scales (i.e., decision-making and information-seeking preferences). Variables that were significant at the 10% level in the univariate model were included in the multivariate analyses.

The consistency of responses for the two autonomy preference scales was assessed using the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity, with cutoffs of a KMO value of 0.6 and a factor loading of 0.3. Both scales were further tested for internal consistency reliability, with a Cronbach's alpha coefficient cutoff of 0.6. Additionally, the three vignettes or clinical scenarios were compared using the Friedman test to identify significant differences. Post-hoc analyses were conducted using the Wilcoxon rank test to further explore differences between items within each vignette. All analyses were

performed with the STATA/BE statistical software package (version 18 for Windows), with the significance cutoff set at 0.05.

III. RESULTS

1. Demographic results

The baseline demographic information is presented in Table 1. The patients were aged 52.4±13.2 years (mean±SD) and comprised twice as many females than males (64 females, 32 males). Education levels were as follows: 46 patients (47.9%) had a high-school education or lower, while 50 patients (52.1%) were college graduates or held higher degrees, indicating that approximately half had a high school education or lower and the other half had a higher level of education. An influencing financial burden was reported by 14 patients (14.6%), whereas 82 patients (85.4%) reported no financial burden. Most patients were nonsmokers (90 patients, 93.8%). Their alcohol consumption varied, with 29.2% (28 patients) of patients reporting no alcohol consumption. Regarding oral hygiene practices, 42 patients (43.7%) used fluoride toothpaste. The frequency of consuming sugary foods varied, with the highest proportion (32 patients, 33.3%) reporting consuming them two to three times a day. Most patients reported no chronic diseases (69 patients, 71.8%) and no history of tooth extraction due to periodontal disease (63 patients, 65.6%). Additionally, almost all of the patients reported a good oral health status (94 patients, 97.9%).

2. Validity and reliability

Validity results for the item of decision-making preferences indicated that most items had commonalities exceeding 0.6, suggesting an acceptable level of consistency. The overall validity and reliability assessments for decision-making preference yielded a KMO value of 0.707 and Cronbach's alpha coefficient of 0.703.

Among the seven items for the information-seeking preferences, item 4 ("information should only be provided upon request") displayed a significantly low commonality of 0.008,

which resulted in it being excluded from the analysis. After excluding this item the recalculated KMO value was 0.699, and the reliability estimate improved to a Cronbach's alpha coefficient of 0.749.

3. Decision-making and information-seeking preferences

Table 2 presents the scores on the API subscales for decision-making and information-seeking preferences. The decision-making preference score was 2.87±0.47 and had a central distribution pattern, with most responses clustered near the center and fewer at both extremes ('you alone' and 'doctor only'). The score was highest (indicating the greatest autonomy) for item 4 ("you should feel free to make decisions about everyday medical problems"), at 3.72±1.14, and lowest (indicating the lowest autonomy) for item 5 ("if you were sick, as your illness became worse you would want your doctors to take greater control"), at 2.27±1.16.

The score for information-seeking preferences was 4.55±0.08. These preferences exhibited a rightward distribution, with most responses concentrated at the higher end of the scale (indicating a strong desire for information). The highest score of 4.72±0.51 was recorded for item 3 ("your doctor should explain the purpose of your laboratory tests").

Patient responses for both decision-making and information-seeking preferences were measured on an adjusted scale ranging from 0 (indicating low autonomy preference) to 1 (indicating high autonomy preference and greater desire for information). The adjusted scores for decision-making and information-seeking preferences were 0.46±0.20 and 0.89±0.12, respectively.

4. Patient's characteristics affect their decision-making and information-seeking preferences

Table 3 presents the associations of decision-making and information-seeking preferences with sociodemographic variables. Determinants of patient decision-making

and information-seeking preferences that were significant at the 10% level included age, frequency of consuming sugary foods, number of chronic diseases, and financial burden. The other variables that were significant included sex, education level, smoking status, alcohol consumption, frequency of toothbrushing, use of fluoride toothpaste, experiences of tooth extraction, oral health status, and the AOHSS.

The univariate analyses indicated that lower age (p=0.001) and fewer chronic diseases (p=0.015) were negatively associated with a preference for decision-making. The trends for information-seeking preferences differed, with these increasing with age (p=0.069) and financial burden (p=0.062), and decreasing with a higher frequency of alcohol consumption.

In the multivariate analyses, higher age (p=0.008), financial burden (p=0.034), and frequency of alcohol consumption (≥4 times per week) (p=0.006) were associated with a decreased decision-making preference (p=0.008). In other words, being older, having a higher financial burden, and consuming alcohol were more frequently were associated with a lower interest in decision-making and a decrease desired for information.

5. Decision-making preferences in assessments of periodontitis-simulation vignettes

To evaluate how the severity of periodontal disease affected the preferences of patients to be involved in dental treatment decisions, scores were compared across the vignettes. The score for Vignette 1, which involved decision-making before the diagnostic awareness of periodontal disease, was 2.69±0.94, making it the highest among the three vignettes. The score was 2.53±0.11 for both Vignette 2 (in which periodontal disease had a stable prognosis) and Vignette 3 (corresponding the advanced stages of periodontitis with teeth deemed to be unsalvageable).

Patients indicated a greater preference for involvement in decision-making in Vignette 1 (decision-making prior to diagnosis: “Suppose your gums have been swollen and there’s been mobility in your teeth for the past 3 days. You are about to call a dental hospital. Who

should make the following decisions?") than in the other two vignettes focused on decision-making after diagnosis. The first question in Vignette 1 had a score of 3.42±1.02, which was significantly higher than the scores for all of the other questions. However, the overall scores did not differ significantly across the three vignettes.

IV. DISCUSSION

This study aimed to assess patients' decision-making preferences regarding dental treatment and their information-seeking behaviors, specifically focusing on patients diagnosed with periodontal disease. The main findings of this study are as follows: (1) most of the periodontal patients exhibited a strong preference for a collaborative decision-making model, (2) nearly all of the participants expressed a strong desire to be informed, regardless of their level of autonomy, (3) a lower age was associated with a greater preference for autonomy, while the financial burden was linked to a reduced preference for information-seeking, and (4) patients' autonomy preferences remained relatively consistent regardless of the periodontal condition, even in scenarios where some teeth were diagnosed as being unsalvageable.

Most of the periodontal patients in the current study preferred a collaborative decision-making model, which is consistent with findings from various medical fields (Clayman, Bylund, Chewning, & Makoul, 2016; Say, Murtagh, & Thomson, 2006; Tlach et al., 2015). A systematic review has revealed that the proportion of patients preferring collaborative or autonomous decision-making has gradually increased over time, from under 50% between 1974 and 1999 to over 70% in studies published after 2000, highlighting a growing desire for patients to be involved (Chewning et al., 2012). Autonomy in decision-making is influenced by the medical/dental issues, particularly for periodontal patients, who have multiple teeth, each with its own treatment plan and prognosis. This complexity should be addressed by considering the variety of treatment options alongside the various specific types of evidence produced by experts. This might explain why periodontitis patients are more likely to want to share the decision-making responsibilities.

Regarding information-seeking preferences, most of the participants in the current

study expressed a strong desire to be well-informed. This is consistent with findings across various medical settings with diverse diseases and treatments (Connelly et al., 2019; Gaston & Mitchell, 2005). Unlike autonomy preferences, the less-life-threatening nature of dental decisions did not diminish the desire of patients to be informed. Even when preferring a passive role, the patients still sought comprehensive information. Providing complete information empowers patients to make informed decisions and enhances their involvement in their decision-making process (Entwistle, Prior, Skea, & Francis, 2008). This focus on adequate information may help to explain the gap between preferences and actual experiences, as patients often express higher expectations for involvement than they receive (Brom et al., 2014). Ensuring patients receive adequate information is key to reducing this gap, decreasing decisional conflict, improving treatment compliance, and also creating more-realistic expectations (Hölzel, Kriston, & Härter, 2013).

Understanding the factors influencing autonomy and information-seeking can help to provide personalized approaches, since preferences differ among patients. In the analyses on AOHSS dataset, lower age was associated with a desire for greater autonomy, which is consistent with the findings of other medical fields (Cullati, Courvoisier, Charvet-Bérard, & Perneger, 2011; Welford, Murphy, Rodgers, & Frauenlob, 2012). Many studies have found that older patients tend to prefer a more-traditional, clinician-led approach to healthcare (Lindsay et al., 2020; Schneider et al., 2006), but it is particularly interesting that some studies have found the opposite. A systematic review of mental health found that older patients had a greater desire for involvement (Burns et al., 2021) though the extent of their involvement varied across the evidence. The authors concluded that it was challenging to determine preferences for involvement with complete confidence, particularly due to the limited number and quality of studies (Burns et al., 2021). This may be due to the higher prevalence of mental health conditions among older adults driving them to seek more control over their healthcare decisions (Ekdahl, Andersson, Wiréhn, & Friedrichsen, 2011). The results of the self-reported AOHSS indicated good oral health status in the present study, but it did not demonstrate a significant relationship with the desire for involvement.

Although periodontitis is similarly highly prevalent among older adults, it also affects younger individuals, which explains their stronger autonomy preferences (Trindade et al., 2023).

The financial burden influenced the patients' involvement and information-seeking in the current study, with the individuals facing financial difficulties being less likely to seek necessary dental care, which would adversely affect both their oral health and their overall health. Financial hardship creates barriers to accessing information about available dental services and options (Locker, 2000; Molarius, Engström, Flink, Simonsson, & Tegelberg, 2014). Restrictions to financial resources can lead to worse health outcomes due to a lack of information and fewer options. It is essential to implement strategies that encourage patient involvement in dentistry, regardless of financial circumstances, and provide suitable tools such as evidence based decision aids for all age groups.

A trend observed in the current dental-related clinical vignettes was that patients expressed a stronger preference for autonomy during the initial dental visits than after the diagnosis, regardless of their symptoms. While oral diseases can be painful, the symptoms are often bearable, which can delay the first dental visit. This can in turn result in missed signs of periodontal disease, worsening their condition due to inadequate oral hygiene. The delays have broader health implications, such as worsening glycemic control in diabetes mellitus (Petersen & Ogawa, 2012). Regular checkups can be encouraged by providing a supportive environment that motivates patients to prioritize their oral health, which might increase the early detection and management of dental diseases. A possible explanation for the decrease in autonomy after a diagnosis is the decision-making responsibility being perceived as having shifted to the clinician. Dental professionals can promote patient engagement through SDM approaches that foster collaboration between patient and clinician.

This research explored the relatively understudied area of dentistry of autonomy preferences among periodontitis patients, but several limitations should be considered. First,

this study was conducted at a dental university hospital with a relatively small number of patients, which could affect the generalizability of the findings. However, the associations identified between preferences and demographic factors are consistent with previous findings. Second, this study focused on autonomy preferences in the decision-making process, without addressing subsequent actions or behaviors. Future research should explore SDM approaches in clinical practice for better fulfilling patients' preferences. Third, potential biases inherent in questionnaire-based studies should be carefully considered, including midpoint bias, which may arise from uncertainty, social desirability, or a tendency to select neutral responses to avoid extreme positions. To validate the present findings, further studies should employ diverse evaluation methods for assessing patient preferences. Fourth, much of the data were obtained using self-report measures, which has a risk of response bias. Future studies could incorporate objective measures, such as behavioral observations or physiological assessments, alongside self-report data.

V. CONCLUSION

Periodontitis patients appear to prefer to be well-informed and share the decision-making responsibilities equally with healthcare professionals after receiving a diagnosis. The patient's age and financial burden may be potential factors influencing their preferences for autonomy and information-seeking.

REFERENCE

Brom, L., Hopmans, W., Pasman, H. R., Timmermans, D. R., Widdershoven, G. A., & Onwuteaka-Philipsen, B. D. (2014). Congruence between patients' preferred and perceived participation in medical decision-making: a review of the literature. BMC Medical Informatics and Decision Making, 14, 25. doi:10.1186/1472-6947-14-25

Burns, L., da Silva, A. L., & John, A. (2021). Shared decision-making preferences in mental health: does age matter? A systematic review. Journal of Mental Health (Abingdon, England), 30(5), 634-645. doi:10.1080/09638237.2020.1793124

Chewning, B., Bylund, C. L., Shah, B., Arora, N. K., Gueguen, J. A., & Makoul, G. (2012). Patient preferences for shared decisions: a systematic review. Patient Education and Counseling, 86(1), 9-18. doi:10.1016/j.pec.2011.02.004

Clayman, M. L., Bylund, C. L., Chewning, B., & Makoul, G. (2016). The Impact of Patient Participation in Health Decisions Within Medical Encounters: A Systematic Review. Medical Decision Making, 36(4), 427-452. doi:10.1177/0272989x15613530

Colombet, I., Rigal, L., Urtizberea, M., Vinant, P., & Rouquette, A. (2020). Validity of the French version of the Autonomy Preference Index and its adaptation for patients with advanced cancer. PLoS One, 15(1), e0227802. doi:10.1371/journal.pone.0227802

Connelly, K., Segan, J., Lu, A., Saini, M., Cicuttini, F. M., Chou, L., . . . Wluka, A. E. (2019). Patients' perceived health information needs in inflammatory arthritis: A systematic review. Seminars in Arthritis and Rheumatism, 48(5), 900-910. doi:10.1016/j.semarthrit.2018.07.014

Cullati, S., Courvoisier, D. S., Charvet-Bérard, A. I., & Perneger, T. V. (2011). Desire for autonomy in health care decisions: a general population survey. Patient Education and Counseling, 83(1), 134-138. doi:10.1016/j.pec.2010.04.025

Driever, E. M., Stiggelbout, A. M., & Brand, P. L. P. (2020). Shared decision making: Physicians' preferred role, usual role and their perception of its key components.

Patient Education and Counseling, 103(1), 77-82. doi:10.1016/j.pec.2019.08.004

Ekdahl, A. W., Andersson, L., Wiréhn, A. B., & Friedrichsen, M. (2011). Are elderly people with co-morbidities involved adequately in medical decision making when hospitalised? A cross-sectional survey. BMC Geriatrics, 11, 46. doi:10.1186/1471-2318-11-46

Ende, J., Kazis, L., Ash, A., & Moskowitz, M. A. (1989). Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. Journal of General Internal Medicine, 4(1), 23-30. doi:10.1007/bf02596485

Entwistle, V., Prior, M., Skea, Z. C., & Francis, J. J. (2008). Involvement in treatment decision-making: its meaning to people with diabetes and implications for conceptualisation. Social Science & Medicine (1982), 66(2), 362-375. doi:10.1016/j.socscimed.2007.09.001

Evans, S. C., Roberts, M. C., Keeley, J. W., Blossom, J. B., Amaro, C. M., Garcia, A. M., . . . Reed, G. M. (2015). Vignette methodologies for studying clinicians' decision-making: Validity, utility, and application in ICD-11 field studies. International Journal of Clinical and Health Psychology, 15(2), 160-170. doi:10.1016/j.ijchp.2014.12.001

Gaston, C. M., & Mitchell, G. (2005). Information giving and decision-making in patients with advanced cancer: a systematic review. Social Science & Medicine (1982), 61(10), 2252-2264. doi:10.1016/j.socscimed.2005.04.015

Gould, D. (1996). Using vignettes to collect data for nursing research studies: how valid are the findings? Journal of Clinical Nursing, 5(4), 207-212. doi:10.1111/j.1365-2702.1996.tb00253.x

Hölzel, L. P., Kriston, L., & Härter, M. (2013). Patient preference for involvement, experienced involvement, decisional conflict, and satisfaction with physician: a structural equation model test. BMC Health Services Research, 13, 231. doi:10.1186/1472-6963-13-231

Kriksciuniene, D., & Sakalauskas, V. (2022). Intelligent systems for sustainable person-centered healthcare: Springer Nature.

Kwok, V., & Caton, J. G. (2007). Commentary: prognosis revisited: a system for assigning

periodontal prognosis. Journal of Periodontology, 78(11), 2063-2071. doi:10.1902/jop.2007.070210

Lee, J., & An, B. (2021). Reliability and Validity of the Korean version of autonomy preference index among patients with chronic disease. Journal of the Korea Convergence Society, 12(8), 381-391.

Lee, J. S., Lim, H. C., Kim, M. S., Choi, S. H., & Jung, U. W. (2016). Preferences and flexibility in decision-making among dental clinicians regarding the treatment of multirooted teeth: an interactive communication device-based survey at two academic conferences. Journal of Periodontal & Implant Science, 46(3), 166-175. doi:10.5051/jpis.2016.46.3.166

Lindsay, S. E., Alokozai, A., Eppler, S. L., Fox, P., Curtin, C., Gardner, M., . . . Investigators, V. H. P. R. (2020). Patient Preferences for Shared Decision Making: Not All Decisions Should Be Shared. Journal of the American Academy of Orthopaedic Surgeons, 28(10), 419-426. doi:10.5435/JAAOS-D-19-00146

Locker, D. (2000). Deprivation and oral health: a review. Community Dentistry and Oral Epidemiology, 28(3), 161-169. doi:10.1034/j.1600-0528.2000.280301.x

Molarius, A., Engström, S., Flink, H., Simonsson, B., & Tegelberg, A. (2014). Socioeconomic differences in self-rated oral health and dental care utilisation after the dental care reform in 2008 in Sweden. BMC Oral Health, 14, 134. doi:10.1186/1472-6831-14-134

Murgic, L., Hébert, P. C., Sovic, S., & Pavlekovic, G. (2015). Paternalism and autonomy: views of patients and providers in a transitional (post-communist) country. BMC Medical Ethics, 16(1), 65. doi:10.1186/s12910-015-0059-z

Nease, R. F., Jr., & Brooks, W. B. (1995). Patient desire for information and decision making in health care decisions: the Autonomy Preference Index and the Health Opinion Survey. Journal of General Internal Medicine, 10(11), 593-600. doi:10.1007/bf02602742

Nunn, M. E., Fan, J., Su, X., Levine, R. A., Lee, H. J., & McGuire, M. K. (2012). Development of prognostic indicators using classification and regression trees for survival. Periodontology 2000, 58(1), 134-142. doi:10.1111/j.1600-0757.2011.00421.x

Nwachokor, J., Rochlin, E. K., Gevelinger, M., Yadav, M., Adams, W., Fitzgerald, C., . . . Pham, T. T. (2024). Physician awareness of patients' preferred level of involvement in decision-making at the initial urogynecology visit: a randomized trial. American Journal of Obstetrics and Gynecology, 230(1), 81.e81-81.e89. doi:10.1016/j.ajog.2023.06.024

O'Neal, E. L., Adams, J. R., McHugo, G. J., Van Citters, A. D., Drake, R. E., & Bartels, S. J. (2008). Preferences of older and younger adults with serious mental illness for involvement in decision-making in medical and psychiatric settings. American Journal of Geriatric Psychiatry, 16(10), 826-833. doi:10.1097/JGP.0b013e318181f992

Petersen, P. E., & Ogawa, H. (2012). The global burden of periodontal disease: towards integration with chronic disease prevention and control. Periodontology 2000, 60(1), 15-39. doi:10.1111/j.1600-0757.2011.00425.x

Reissmann, D. R., Bellows, J. C., & Kasper, J. (2019). Patient Preferred and Perceived Control in Dental Care Decision Making. JDR Clinical and Translational Research, 4(2), 151-159. doi:10.1177/2380084418811321

Riordain, R. N., Glick, M., Mashhadani, S., Aravamudhan, K., Barrow, J., Cole, D., . . . Williams, D. M. (2021). Developing a Standard Set of Patient-centred Outcomes for Adult Oral Health - An International, Cross-disciplinary Consensus. International Dental Journal, 71(1), 40-52. doi:10.1111/idj.12604

Sandman, L., & Munthe, C. (2010). Shared decision making, paternalism and patient choice. Health Care Analysis, 18(1), 60-84. doi:10.1007/s10728-008-0108-6

Say, R., Murtagh, M., & Thomson, R. (2006). Patients' preference for involvement in medical decision making: a narrative review. Patient Education and Counseling, 60(2), 102-114. doi:10.1016/j.pec.2005.02.003

Schneider, A., Körner, T., Mehring, M., Wensing, M., Elwyn, G., & Szecsenyi, J. (2006). Impact of age, health locus of control and psychological co-morbidity on patients' preferences for shared decision making in general practice. Patient Education and Counseling, 61(2), 292-298. doi:10.1016/j.pec.2005.04.008

Sharma, A., Minh Duc, N. T., Luu Lam Thang, T., Nam, N. H., Ng, S. J., Abbas, K. S., . . . Karamouzian, M. (2021). A Consensus-Based Checklist for Reporting of Survey

Studies (CROSS). Journal of General Internal Medicine, 36(10), 3179-3187. doi:10.1007/s11606-021-06737-1

Shutzberg, M. (2021). The Doctor as Parent, Partner, Provider… or Comrade? Distribution of Power in Past and Present Models of the Doctor-Patient Relationship. Health Care Analysis, 29(3), 231-248. doi:10.1007/s10728-021-00432-2

Tariman, J. D., Doorenbos, A., Schepp, K. G., Singhal, S., & Berry, D. L. (2014). Information Needs Priorities in Patients Diagnosed With Cancer: A Systematic Review. Journal of the Advanced Practitioner in Oncology, 2014(5), 115-122.

Thoma, D. S., Strauss, F. J., Mancini, L., Gasser, T. J. W., & Jung, R. E. (2023). Minimal invasiveness in soft tissue augmentation at dental implants: A systematic review and meta-analysis of patient-reported outcome measures. Periodontology 2000, 91(1), 182-198. doi:10.1111/prd.12465

Tlach, L., Wüsten, C., Daubmann, A., Liebherz, S., Härter, M., & Dirmaier, J. (2015). Information and decision-making needs among people with mental disorders: a systematic review of the literature. Health Expectations, 18(6), 1856-1872. doi:10.1111/hex.12251

Trindade, D., Carvalho, R., Machado, V., Chambrone, L., Mendes, J. J., & Botelho, J. (2023). Prevalence of periodontitis in dentate people between 2011 and 2020: A systematic review and meta-analysis of epidemiological studies. Journal of Clinical Periodontology, 50(5), 604-626. doi:10.1111/jcpe.13769

Welford, C., Murphy, K., Rodgers, V., & Frauenlob, T. (2012). Autonomy for older people in residential care: a selective literature review. International Journal of Older People Nursing, 7(1), 65-69. doi:10.1111/j.1748-3743.2012.00311.x

Zizzo, N., Bell, E., Lafontaine, A. L., & Racine, E. (2017). Examining chronic care patient preferences for involvement in health-care decision making: the case of Parkinson's disease patients in a patient-centred clinic. Health Expectations, 20(4), 655-664. doi:10.1111/hex.12497

TABLES

Table 1. Demographic results

	N=96	%
Age (mean±sd)	52.4±13.2	
≤ 39	25	26.0
40-49	6	6.3
50-59	28	29.2
≥ 60	37	38.5
Sex		
Female	64	66.7
Male	32	33.3
Education		
High school graduate or lower	46	47.9
college graduate or higher	50	52.1
Financial burden		
No	82	85.4
Yes	14	14.6
Smoking status		
No	90	93.8
Yes	6	6.2
Drinking status		
None	28	29.2
≤1 time/ month	22	22.9

2-4 time/ month	26	27.1
2-3 time/ week	18	18.7
4 time/ week	2	2.1
Tooth brushing		
≤1 time/ day	8	8.3
≥2 time/ day	88	91.7
Use of fluoride tooth paste		
No or I don’t know	54	56.3
Yes	42	43.7
Frequency of consuming sugary foods		
None	4	4.2
1 time/ week	16	16.7
3-4 time/ week	24	25.0
1 time/ day	20	20.8
2-3 time/ day	32	33.3
Number of chronic disease		
No	69	71.8
1	24	25.0
2	4	4.2
Experience for tooth extraction		
No	63	65.6
Yes	33	34.4
Oral health conditions		
No	94	97.9
Yes	2	2.1

Table 2. Decision Making and Information-seeking Preference Scale

	Mean†	SD	Mean Score (SD)	Adjusted Total Score (SD)††
Decision making preference – General items *(6 items)*				
1. The important medical decisions should be made by your doctor, not by you	2.49	1.27		
2. You should go along with your doctor's advice even if you disagree with it	3.04	1.29		
3. When hospitalized, you should not be making decisions about your own care	2.63	1.42		
4. You should feel free to make decisions about everyday medical problems†††	3.72	1.14	2.87(0.47)	0.46(0.20)
5. If you were sick, as your illness became worse you would want your doctor to take greater control	2.27	1.16		
6. You should decide how frequently you need a check-up†††	3.06	1.17		
Decision making preference – Vignettes *(9 items)*				
Vignette1. *"Suppose your gums have been swollen and there's been mobility in your teeth for the past three days. You are about to call a dental hospital. Who should make the following decisions?"*				
1. Whether you should be seen by the doctor[a]	3.42	1.02		
2. Whether an oral x-ray should be taken	2.34	0.94	2.69(0.51)	0.42(0.19)
3. Whether you should try taking treatments/medications	2.31	0.96		
Vignette2. *"Suppose you visited a dental hospital intending to get scaling. Upon examination, you were told that you have progressive periodontitis. Who should make the following decisions?"*				
1. Whether you should initiate the treatments	2.64	0.94		
2. Whether an oral x-ray should be taken	2.57	0.91	2.53(0.11)	0.38(0.20)
3. Whether you should be treated with/without medication or diet	2.38	0.84		
Vignette3. *"Suppose you visited a dental clinic due to swollen gums and loose teeth. You were diagnosed with severe periodontitis (gum disease) and apical periodontitis (tooth disease), both present simultaneously. The prognosis for preserving your teeth through treatment was considered hopeless. Who should make the following decisions?"*				
1. Whether you should initiate the treatments	2.67	0.98		
2. Which treatment plans you should proceed with	2.53	0.76	2.53(0.11)	0.38(0.18)
3. Whether you should be treated with/without medication or diet	2.41	0.80		
Information-seeking preference *(7 items)*				
1. As you become sicker you should be told more and more about your illness	4.54	0.75		
2. You should understand completely what is happening inside your body as a result of your illness	4.56	0.66		
3. Your doctor should explain the purpose of your laboratory tests	4.72	0.51		
4. You should be given information only when you ask for it[b]	2.90	1.43	4.55(0.08)	0.89(0.12)
5. It is important for you to know all the side effects of your medication	4.49	0.87		
6. Information about your illness is as important to you as treatment	4.51	0.76		
7. When there is more than one method to treat a problem, you should be told about each one	4.46	0.85		

† Higher scores indicated a stronger preference for autonomy.
†† Total preference score for autonomy scaled linearly from 0 to 1.
††† These items are reverse-coded
[a] This question showed a statistically significant difference compared to the other questions, as revealed by repeated measures ANOVA.
[b] The item was excluded from analysis due to low commonality
SD = Standard Deviation

Table 3. Univariate and multivariate regression of Decision Making and Information-seeking Preference score with Sociodemographic Variables

	Univariate Analysis						Multivariate Analysis					
	Decision-Making Preference Score			Information-seeking Preference Score			Decision-Making Preference Score[a]			Information-seeking Preference Score[b]		
	Coef	95% CI	*P*-value	Coef	95% CI	*P*-value	Coef	95% CI	*P*-value	Coef	95% CI	*P*-value
Linear variables												
Age	-0.005	-0.007 to -0.002	0.001*	0.001	-0.003 to 0.003	0.069*	-0.004	-0.007 to -0.001	0.008**	0.001	-0.000 to 0.003	0.110
Tooth brushing	-0.031	-0.177 to 0.114	0.671	0.053	-0.371 to 0.143	0.245						
Frequency of consuming sugary foods	-0.006	-0.399 to 0.026	0.688	0.007	-0.012 to 0.028	0.450						
Number of chronic disease	-0.088	-0.159 to -0.017	0.015*	0.012	-0.032 to 0.058	0.582	-0.048	-0.123 to 0.026	0.199			
Categorical variables												
Gender												
Female	Ref											
Male	-0.058	-0.143 to 0.026	0.178	-0.028	-0.081 to 0.024	0.287						
Education												
High school graduate or lower	Ref											
College graduate or higher	0.056	-0.023 to 0.137	0.162	-0.024	-0.072 to 0.028	0.387						
Financial burden												
No	Ref											
Yes	0.053	-0.060 to 0.416	0.351	-0.066	-0.136 to 0.003	0.062*				-0.073	-0.141 to -0.005	0.034**
Smoking status												
No	Ref											
Yes	0.052	-0.114 to 0.219	0.534	-0.034	-0.138 to 0.068	0.508						
Drinking status												
None	Ref											
≤1 time/ month	-0.008	-0.121 to 0.104	0.880	-0.030	-0.098 to 0.038	0.381				-0.025	-0.092 to 0.041	0.454
2-4 time/ month	0.035	-0.072 to 0.143	0.513	-0.039	-0.104 to 0.026	0.236				-0.020	-0.086 to 0.046	0.546

2-3 time/ week	0.075	-0.044 to 0.194	0.214	-0.057	-0.130 to -0.014	0.115		-0.038	-0.114 to 0.036	0.309
4 time/ week	-0.138	-0.428 to 0.151	0.344	-0.230	-0.406 to -0.055	0.011*		-0.242	-0.413 to -0.071	0.006**
Use of fluoride tooth paste										
No or I don't know	Ref									
Yes	-0.039	-0.120 to 0.042	0.341	-0.028	-0.080 to 0.024	0.292				
Experience for tooth extraction										
No	Ref									
Yes	-0.031	-0.116 to 0.053	0.423	-0.036	-0.084 to 0.011	0.130				
Oral health conditions										
No	Ref									
Yes	0.227	-0.052 to 0.506	0.110	-0.079	-0.254 to 0.096	0.372				

* The mean difference is significant at the 0.10 level

** The mean difference is significant at the 0.05 level

[a] Adjusting for age, frequency of consuming sugary foods, number of chronic disease, Financial burden

[b] Adjusting for age, frequency of consuming sugary foods, Financial burden, drinking status

Ref = Reference

Supplementary table 1. Results of Decision Making and Information-seeking Preference

	Response (Decision-making preference score)				
Decision making preference – General items, n (%)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
1. The important medical decisions should be made by your doctor, not by you	28 (29.2)	24 (25.0)	19 (19.8)	19 (19.8)	6 (6.3)
2. You should go along with your doctor's advice even if you disagree with it	16 (16.7)	16 (16.7)	25 (26.0)	24 (25.0)	14 (14.6)
3. When hospitalized, you should not be making decisions about your own care	32 (33.3)	14 (14.6)	20 (20.8)	18 (18.8)	12 (12.5)
4. You should feel free to make decisions about everyday medical problems†	30 (31.3)	28 (29.2)	20 (20.8)	11 (11.5)	4 (4.2)
5. If you were sick, as your illness became worse you would want your doctor to take greater control	33 (34.4)	24 (25.0)	20 (20.8)	16 (16.7)	2 (2.1)
6. You should decide how frequently you need a check-up†	16 (16.7)	16 (16.7)	27 (28.1)	32 (33.3)	5 (5.2)
Decision making preference – Vignettes, n (%)	The doctor alone (1)	Mostly the doctor (2)	The doctor and you equally (3)	Mostly you (4)	You alone (5)
Vignette1. *"Suppose your gums have been swollen and there's been mobility in your teeth for the past three days. You are about to call a dental hospital. Who should make the following decisions?"*					
1. Whether you should be seen by the doctor	3 (3.1)	10 (10.4)	46 (47.9)	18 (18.8)	19 (19.8)
2. Whether an oral x-ray should be taken	21 (21.9)	30 (31.3)	38 (39.6)	5 (5.2)	2 (2.1)
3. Whether you should try taking treatments/medications	23 (24.0)	28 (29.2)	40 (41.7)	2 (2.1)	3 (3.1)
Vignette2. *"Suppose you visited a dental hospital intending to get scaling. Upon examination, you were told that you have progressive chronic periodontitis. Who should make the following decisions?"*					
1. Whether you should initiate the treatments	15 (15.6)	18 (18.8)	53 (55.2)	7 (7.3)	3 (3.1)
2. Whether an oral x-ray should be taken	16 (16.7)	20 (20.8)	49 (51.0)	9 (9.4)	1 (1.0)
3. Whether you should be treated with/without medication or diet	20 (20.8)	23 (24.0)	49 (51.0)	3 (3.1)	0 (0.0)
Vignette3. *"Suppose you visited a dental clinic due to swollen gums and loose teeth. You were diagnosed with severe periodontitis (gum disease) and apical periodontitis (tooth disease), both present simultaneously. The prognosis for preserving your teeth through treatment was considered hopeless. Who should make the following decisions?*					
1. Whether you should initiate the treatments	14 (14.6)	21 (21.9)	48 (50.0)	9 (9.4)	4 (4.2)
2. Which treatment plans you should proceed with	11 (11.5)	28 (29.2)	52 (54.2)	5 (5.2)	0 (0.0)
3. Whether you should be treated with/without medication or diet	16 (16.7)	28 (29.2)	49 (51.0)	3 (3.1)	0 (0.0)
Information-seeking preference, n (%)	Strongly agree (5)	Agree (4)	Neither agree nor disagree (3)	Disagree (2)	Strongly disagree (1)
1. As you become sicker you should be told more and more about your illness	64 (66.7)	23 (24.0)	6 (6.3)	3 (3.1)	0 (0.0)
2. You should understand completely what is happening inside your body as a result of your illness	61 (63.5)	30 (31.3)	3 (3.1)	2 (2.1)	0 (0.0)
3. Your doctor should explain the purpose of your laboratory tests	72 (75.0)	21 (21.9)	3 (3.1)	0 (0.0)	0 (0.0)
4. You should be given information only when you ask for it††	21 (21.9)	12 (12.5)	17 (17.7)	28 (29.2)	18 (18.8)
5. It is important for you to know all the side effects of your medication	60 (62.5)	26 (27.1)	5 (5.2)	2 (2.1)	2 (2.1)
6. Information about your illness is as important to you as treatment	60 (62.5)	29 (30.2)	4 (4.2)	2 (2.1)	1 (1.0)
7. When there is more than one method to treat a problem, you should be told about each one	60 (62.5)	26 (27.1)	5 (5.2)	4 (4.2)	1 (1.0)

† These items are reverse-scored question

†† The item was excluded from analysis due to low commonality

Supplementary table 2. Adult Oral Health Standard Set (AOHSS)

		Very poor	Poor	Fair	Good	Very good
General oral health status	How is the health of your mouth, teeth and gums?	10	33	33	17	2
		Never	Hardly never	Sometimes	Fairly often	Very often
Ability to eat	In the last six months, how often have you found it hard to eat because of problems with your teeth, gums or dentures?	32	35	22	6	1
Food alteration	In the last six months, how often have you had to change what you eat or drink because of problems with your teeth, gums or dentures?	51	31	8	6	0
Ability to speak	In the last six months, how often have you found it hard to speak clearly because of problems with your teeth, gums or dentures?	63	28	5	0	0
Ability to sleep	In the last six months, how often have you had trouble sleeping because of problems with your teeth, gums or dentures?	67	22	4	1	0
Productivity	In the last six months, how often have you found it hard to carry out your usual work activities or responsibilities because of problems with your teeth, gums or dentures? This includes at your job and in your home.	71	24	1	0	0
Self-confidence	In the last six months, how often have you felt embarrassed or self-conscious because of problems with your teeth, gums or dentures?	63	24	8	0	0
Smiling	In the last six months, how often have you felt embarrassed smiling, laughing, and showing your teeth because of problems with your teeth, gums, or dentures?	55	31	5	2	2
Social participation	In the last six months, how often have you found it hard to interact with others because of problems with your teeth, gums or dentures?	63	28	3	1	0
Aesthetic satisfaction	In the last six months, hos often have you been happy with the way your teeth, gums of dentures look?	8	14	25	28	19
Oral pain	In the last six months, how often have you had pain in your mouth?	0	3	22	34	37
Dry mouth experience	In the last six months, how often has your mouth felt dry?	4	11	30	21	30
Sensitivity experience	In the last six months, how often have your teeth been sensitive to hot or cold food of drinks?	5	10	40	26	15

국문요약

치주 환자의 치과 의사결정 과정에서 자율성과 정보 탐색에 대한 환자 중심 선호도

<지도교수 **이 중 석**>

연세대학교 대학원 치의학과

정 지 영

치주 질환 관리에는 여러 치료 옵션을 포함한 복잡한 의사결정 과정이 필요하며, 환자의 자율성은 이 과정에 중요한 영향을 미친다. 많은 임상의사들은 현재의 의료 의사결정 과정이 환자를 충분히 포함하고 있다고 믿지만, 환자들은 종종 의사결정에서 최소한의 역할만 한다고 느낀다. 이러한 인식 차이를 줄이고 환자의 자율성 및 선호도를 이해하는 것은 환자 만족도를 높이는 데 기여할 수 있다. 따라서 본 연구는 치주 질환 진단을 받은 환자들의 자율성과 정보 탐색 선호도를 특성화하고, 이러한 선호도에 영향을 미치는 요인을 규명하는 것을 목표로 하였다.

본 연구는 2021년 5월부터 2022년 2월 사이에 연세대학교 치과병원에서 치주 치료 또는 치아 발치를 경험한 96 명의 치주 질환 환자를 대상으로 진행되었다. 연구는 기관윤리위원회(IRB)의 승인을 받아 진행되었으며(승인번호: 2-2021-0018), 모든 참여자는 연구에 참여하기 전에 자발적으로 서면

동의를 하였다. 본 연구의 대상자는 치주 질환 진단을 받은 환자들로, 치주 치료를 받거나 치아 발치를 경험한 환자들이 포함되었다. 제외 기준으로는 서면 동의를 제공하지 않거나, 조현병, 우울증, 약물 또는 알코올 중독과 같은 정신 질환을 가진 환자가 포함되었다. 참여자들은 의사결정 선호도 및 정보 탐색 선호도를 평가하기 위해 다양한 의료환경에서 널리 활용되는 자율성 선호 지수(Autonomy Preference Index, API)를 리커트 5 점 척도를 통해 작성하였다. 이 척도는 환자들이 의사결정 과정에서 자율성을 얼마나 선호하는지를 측정하는 데 사용되며, 일부 문항은 치과 관련 상황에 맞게 수정하여 진행하였다. 또한, 인구통계학적 정보를 포함한 자가 보고식 설문지를 수집하여 환자의 연령, 성별, 교육 수준, 치료에 따른 경제적 부담 등 다양한 배경 정보를 확보하였으며, 이를 통해 환자들의 의사결정 선호도와 정보 탐색 행동 간의 연관성을 분석하였다.

의사결정 선호도는 2.87±0.47 (평균±표준편차)로 중앙 집중적으로 분포하여, 대부분의 치주 환자들이 협력적 의사결정 모델을 선호함을 나타내었으며, 이는 환자들이 치료 과정에 의료진과 함께 참여하고자 하는 경향이 있음을 시사하였다. 반면, 정보 탐색 선호도는 높은 정보 선호 요구의 방향으로 치우쳐 있었으며, 평균 4.55±0.08 이었다. 이는 환자들이 치료에 대한 충분한 정보를 원하고 있음을 나타내었다.

의사결정 선호도와 사회경제학적 요소와의 연관성 분석 결과, 낮은 나이(p=0.008)는 더 높은 자율성을 선호하는 것과 관련이 있는 것으로 나타났으며, 이는 젊은 환자일수록 의사결정에 더 많이 참여하고자 하는 경향이 있음을 보여주었다. 반면, 재정적 부담(p=0.034)은 정보 탐색 선호도를 감소시키는 요인으로 나타났다. 이러한 결과는 경제적 요인이 환자의 정보 탐색 행동에 영향을 미칠 수 있음을 시사한다. 환자의 자율성은

치주 질환의 중증도와 관계없이 다양한 치주 임상 상황에서도 비교적 일관되게 유지되었다.

결론적으로, 본 연구 결과는 치주염 환자들이 진단 후 충분한 정보를 얻고 의료 전문가와의 공동 의사결정 책임을 공유하기를 선호한다는 것을 시사한다. 이는 환자들이 그들의 자율성정도와는 상관없이 치료 과정에서 정보를 적극적으로 요구하며, 의사와의 협력을 통해 더 나은 결정을 내리고자 하는 경향이 있음을 보여준다. 또한, 나이와 재정적 부담과 같은 요인이 이들의 자율성, 참여 및 정보에 대한 욕구에 영향을 미친다는 결과를 얻었다. 젊은 환자일수록 자율성을 더 중시하며, 재정적 부담이 클수록 정보 탐색의 의욕이 감소하는 경향이 나타났다. 이러한 요소들은 환자의 치료 참여와 의사결정에 중요한 역할을 하며, 향후 환자 중심의 치료 접근 방식을 개발하는 데 기초 자료로 활용될 수 있다.

핵심되는 말: 환자 자율성, 환자 선호도, 환자 의사결정, 치과 치료, 치주염