Journal of
Oral Health and Oral Epidemiology
https://johoe.kmu.ac.ir
doi:10.34172/johoe.2505.1743
JOHOE. 2026;15:2505.1743

Original Article

Oral health-related quality of life, needs, and barriers among drug addicts referred to Shahid Beheshti psychiatric hospital in Kerman, Iran

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Abstract

Background: Drug addiction is one of the most challenging and complex health issues, with direct adverse consequences, including mental disorders, depression, and various physical problems. It also impacts oral and dental health. The objective of this study was to investigate the impact of oral health on the quality of life of individuals with substance use disorders seeking maintenance methadone therapy (MMT) at MMT centers in Kerman City in 2024.

Methods: This cross-sectional study was conducted at the Shahid Beheshti Psychiatric Hospital and MMT centers in Kerman City in 2024. Data were collected from 203 individuals with a history of substance use disorder using a structured questionnaire consisting of three sections: demographic and contextual information, the Persian version of the Oral Health Impact Profile (OHIP-14), and an assessment of health service needs and barriers to oral health promotion among individuals with addiction.

Results: The mean OHIP-14 score was 27.9, indicating a significant negative impact of poor oral health on daily life, particularly in the psychological and physical domains. The most prevalent barriers to accessing dental care among individuals with addiction were the cost of services (70%) and a lack of perceived need for care (35%). The highest reported need was for treatment of tooth decay (72%).

Conclusion: The average OHIP-14 score obtained in this study indicates a substantially poor oral health status among the participants. Therefore, it is imperative to enhance oral and dental health services for individuals with addiction, as well as to implement policies that promote oral and dental health within this population, to improve their oral health-related quality of life (OHRQoL).

Keywords: Substance use disorder, Oral health-related quality of life, Needs, Barriers to treatment, Dental care

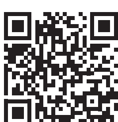
Citation: AKakooei S, Momen N, Mostafavi M, Nekouei AH, Rezaeyan Z, Kakoei S, et al. Oral health-related quality of life, needs, and barriers among drug addicts referred to Shahid Beheshti psychiatric hospital in Kerman, Iran. J Oral Health Oral Epidemiol 2026;15:2505.1743. doi:10.34172/johoe.2505.1743

Received: May 19, 2025, **Revised:** August 31, 2025, **Accepted:** January 31, 2026, **ePublished:** April 29, 2026

Introduction

Drug use and substance use disorders represent some of the most severe public health challenges globally, with a markedly increased prevalence in recent decades.[1] According to the World Drug Report of 2010, opium is the most commonly used illicit drug in Iran, which is the largest consumer of opium, accounting for 42% of global consumption.[2] The United Nations Office on Drugs and Crime (UNODC) reported that in 2019, the prevalence of use of at least one illicit drug, excluding alcohol, in Iran was 2.44%, affecting approximately 1.12 million individuals aged 15 to 64. Among these, opioids had the highest prevalence at 2.23%.[3]

Drug addiction constitutes a complex health issue, leading to a range of direct consequences, including mental disorders, depression, and numerous physical health problems, such as cardiovascular diseases, liver cirrhosis, and infectious diseases, including hepatitis, HIV/AIDS, and tuberculosis. Furthermore, drug addiction adversely affects oral and dental health.[4] Moreover, addiction is associated with various oral lesions, including leukoedema, hyperkeratosis, pigmentation, and tobacco



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pouch keratosis.[5]

Oral and dental health issues rank among the most prevalent health complications associated with substance addiction.[6] There exists a bidirectional relationship between addiction and oral health problems: addiction can exacerbate oral complications, and oral pain may trigger relapse and diminish the success rates of addiction treatment. Consequently, dental care is a critical component of public health services for individuals grappling with drug addiction.[7] Additionally, drug addiction often diminishes self-esteem, and psychological issues such as depression further lead individuals to neglect oral and dental care and to avoid seeking dental treatment except in emergencies.[8]

Individuals with substance use disorders frequently exhibit poor oral and dental health.[9] Conditions such as bruxism and extensive tooth decay are prevalent in this population.[10] Furthermore, reduced saliva production can lead to xerostomia, which in turn decreases the salivary pH and promotes the accumulation of dental plaque. Other oral health issues associated with addiction include mucosal infections, periodontal disease, taste disturbances, burning mouth syndrome, eating difficulties, candidiasis, tooth erosion, and mucosal dysplasia.[6,11] A prior study indicated that addiction is associated with lower dental visit rates, resulting in dental hypersensitivity.[12]

The concept of Oral Health-Related Quality of Life (OHRQoL) is a multidimensional construct grounded in the World Health Organization's definition, encompassing an individual's perception of how oral and dental conditions affect various aspects of life, including psychological, physical, and social well-being.[13,14] Research has indicated that addiction negatively impacts oral and dental health, thereby reducing quality of life.[15]

Despite the significant oral health challenges faced by individuals with substance use disorders, access to dental care remains limited among this population. Several barriers hinder both preventive and therapeutic dental services.[16] Key obstacles include socioeconomic status, access to insurance-covered dental clinics, fear of dental procedures, and transportation difficulties.[16] Additionally, acceptance of proposed treatment plans can be problematic, exacerbated by insufficient collaboration between dental and public health services catering to individuals with addiction.[6,17]

Several studies in Iran have highlighted the negative impact of substance use disorders on OHRQoL, particularly among those undergoing methadone maintenance treatment. For instance, Saki et al. reported high OHIP-14 scores among opioid users in Ahvaz, signaling serious functional and psychological issues.[18] Similarly, Akbari et al. found poor oral health among substance-dependent individuals in Mashhad, linking it to limited access to preventive care and low motivation for treatment.[19] National studies from regions such as Kerman and Bojnurd have also consistently demonstrated that substance use is associated with poor oral health outcomes, particularly elevated DMFT indices and extensive tooth loss.[20,21] Together, these findings reveal significant regional disparities in oral health among people with addiction in Iran and underscore the need for further investigation in understudied areas. This study addresses that gap by exploring OHRQoL, self-perceived dental needs, and treatment barriers among individuals in methadone clinics in southeastern Iran – an area that has received little attention so far.

Therefore, the present study aimed to investigate the impact of oral health on the quality of life, as well as the needs and barriers related to oral health services among individuals referred to maintenance methadone therapy (MMT) centers in Kerman City, located in southeastern Iran.

Methods

Ethical Approval

All participants were thoroughly informed about the study's objectives and assured of the confidentiality of their data. To maintain anonymity, all questionnaires were completed anonymously. Informed consent was obtained from all participants. This study received approval from the Ethics Committee of Kerman University of Medical Sciences, with the ethical code IR.KMU.REC.1402.484.

Study Design

This cross-sectional study was conducted at the MMT centers in Kerman City in 2024. A random sampling method was employed, involving 203 individuals with a history of substance abuse who sought care at these centers. Inclusion criteria included willingness to participate, age 18 years or older, and the ability to respond to the questionnaire. Exclusion criteria comprised unwillingness to continue cooperation and inability to answer the questions. If necessary, the researcher assisted participants in completing the questionnaire. Data were collected through questionnaires divided into three sections.

Sample Size Determination

The required sample size was calculated using Cochran's formula for finite population studies. A 95% confidence level ($Z = 1.96$), a margin of error of 5% ($d = 0.05$), and an assumed prevalence of 50% ($P = 0.5$) were used to ensure maximum variability and statistical power. This yielded a minimum sample size of 196 participants. To account for potential non-response and incomplete data, the final sample was increased to 203 individuals, thereby enhancing the reliability and generalizability of the study findings.

Demographic Information and Contextual Factors

The first section gathered demographic and baseline

characteristics, including age, gender, marital status, employment status, educational background, insurance coverage, underlying medical conditions, number of children, economic status, history of visits to addiction treatment centers, number of attempts at cessation of substance use, and status of toothbrush and toothpaste usage, as well as the number of missing teeth. Additionally, participants' last dental visit was recorded.

To measure economic status, individuals typically view a ladder with ten rungs and mark where they view themselves on the ladder compared to the "worst off" people at the bottom (those who have the least money) and the "best off" people at the top (Those who have the most money)

Oral Health Impact Profile (OHIP-14)

The self-assessment of oral health status and its perceived impact on quality of life was evaluated using the OHIP-14 questionnaire, which constituted the second phase of the data collection instrument. The Persian version of the Oral Health Impact Profile (OHIP-14), which was used in this study, has demonstrated a Cronbach's alpha coefficient of 0.85.[22] This section assessed oral health-related quality of life based on participants' self-assessment. The OHIP-14 consists of 14 items, i.e., seven domains, each represented by two items. The domains include functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability, and handicap.[23,24]

Responses were recorded on a five-point Likert scale (ranging from "never" to "very often," with scores from 1 to 5). The overall score, which ranges from 14 to 70, indicates the intensity of impact, with higher scores reflecting lower perceived quality of life.

Oral Health Services and Barriers

The third section addressed health services and barriers to oral health promotion among individuals with addiction. This part of the questionnaire was developed by Yaghoubi et al[25] and exhibited a Cronbach's alpha coefficient of 0.7. It assessed perceived oral health care needs, barriers to accessing oral health care, utilization, and preferences. This section included 12 questions on common oral problems experienced in the past year, answered with "yes" or "no." Participants also rated their perceived need for oral health care on a scale from 0 (not necessary) to 10 (severe need). Multiple-choice questions inquired about the individual's most recent dental visit and the location of dental services received. A binary question assessed whether all oral and dental needs had been met, while an additional six questions explored potential barriers to fulfilling these needs. These barriers were analyzed descriptively, without computing a cumulative score.

Analysis

Data were analyzed using SPSS version 25 (IBM Corp., Armonk, NY, USA). The relationship between oral health quality of life and demographic factors, including demographic characteristics, addiction features, brushing habits, and tooth loss, was investigated using univariate analysis. A multivariable analysis was performed using a multiple logistic regression model. Additionally, the frequency of dental needs and barriers was compared using chi-square tests, and the association between barriers and needs was assessed using Spearman correlation. All statistical tests were conducted at a significance level of 5%.

Results

Demographic Characteristics of Participants

The average age of participants was 36.9 years (SD = 0.7). The gender distribution revealed that 59.6% of the participants were male. Regarding marital status, 59.1% of the participants were married, and among the total participants, 54.7% had children. Educational attainment indicated that 45.8% held a high school diploma, 35% had less than a high school diploma, and 19.2% had completed a university education.

In terms of employment status, 54.2% of participants were unemployed, while 80.8% had health insurance. Regarding underlying health conditions, 15.8% reported having at least one comorbidity, whereas 84.2% reported no such conditions. Dental hygiene practices revealed that 55.7% of participants never brushed their teeth, while 44.3% brushed at least once a day. Regarding substance use, 77.8% reported using chemical substances, and 22.2% used natural substances. Additionally, 57.4% of participants were current cigarette smokers. The average duration of addiction was 8.8 years (SE = 0.5), while the average duration of rehabilitation was 3.0 years (SE = 5.1). The average socioeconomic status of participants was reported as 4.26 (SE = 0.14) (Table 1).

Oral Health Aspects Impacting Quality of Life

The analysis of the reported impact of oral health on various aspects of quality of life reveals that a significant proportion of individuals experienced effects across multiple domains. Psychological discomfort emerged as the most frequently reported area of impact, affecting 28.6% of participants, with a mean score of 4.1 (SE = 0.11). This was followed by psychological disability, reported by 22.7% of participants, with a mean score of 4.3 (SE = 0.15), and physical pain, affecting 16.3% of individuals, also with a mean score of 4.3 (SE = 0.14). Functional limitation and physical disability were reported by 11.3% and 12.3% of participants, respectively, both yielding a mean score of 4.0 (SE = 0.13). Social disability and handicap were less frequently reported, each affecting 6.4% of the population, with mean scores of 3.7 (SE = 0.12) and 3.5 (SE = 0.11), respectively. Overall, 41.4% of participants reported that oral health had an impact on their quality of life, with a cumulative mean score of 27.9 (SE = 0.75). These findings

Table 1. Demographics and their association with OHRQoL.

			Oral health-related quality of life	
		N (%), mean (se)	Mean (SE), correlation	*P* value
Age		36.9 (0.7)	0.142	0.043
Gender	Male	121 (59.6%)	28.3 (1)	0.490
	Female	82 (40.4%)	27.3 (1.1)	
Marital status	Married	120 (59.1%)	28.9 (1)	0.094
	Others	83 (40.9%)	26.4 (1.1)	
Children	Not have	92 (45.3%)	26.7 (1.1)	0.138
	Have	111 (54.7%)	28.9 (1)	
Education	Below Diploma	71 (35%)	29 (1.3)	0.441
	Diploma	93 (45.8%)	27.7 (1.1)	
	University	39 (19.2%)	26.4 (1.6)	
Employment	Unemployed	110 (54.2%)	27.6 (1)	0.708
	Employed	93 (45.8%)	28.2 (1.1)	
Insurance	Have	164 (80.8%)	26.9 (0.8)	0.005
	Not Have	39 (19.2%)	32.2 (1.7)	
Underlying disease	Have	32 (15.8%)	30.7 (1.8)	0.103
	Not Have	171 (84.2%)	27.4 (0.8)	
Brushing	Never	113 (55.7%)	30.1 (1)	0.001
	Yes, one or more times a day	90 (44.3%)	25.1 (1)	
Illicit drug type	Chemical	158 (77.8%)	27.9 (0.8)	0.964
	Natural	45 (22.2%)	27.8 (1.7)	
Cigarette Smoking	Yes	111 (57.4%)	27.5 (1)	0.524
	No	92 (45.3%)	28.4 (1.1)	
Number of missing teeth		7.3 (0.6)	0.055	0.055
Addiction duration (years)		8.8 (0.5)	0.104	0.140
Rehabilitation duration (years)		3.0 (5.1)	0.132	0.531
Economic level		4.26 (0.14)	0.085	0.227

highlight the multifaceted impact of oral health on daily life, particularly in both psychological and physical domains (Table 2).

Participants with health insurance had a mean OHRQoL score of 26.9 (SE = 0.8), compared to a higher mean score of 32.2 (SE = 1.7) for those without insurance ($P = 0.005$). Participants who reported never brushing their teeth had a higher mean OHRQoL score of 30.1 (SE = 1) compared to those who brushed once or more times per day, who had a mean score of 25.1 (SE = 1) ($P = 0.945$). Furthermore, age demonstrated an indirect association with OHRQoL, with a correlation coefficient of 0.142 ($P = 0.874$). Additionally, economic levels exhibit a significant association with OHRQoL ($P = 0.029$). Other demographic factors did not show significant associations with OHRQoL (Table 3).

Individuals without health insurance were significantly more likely to report an impact of oral health on their quality of life compared to those with insurance (OR = 0.27, $P = 0.001$). Underlying diseases also showed a trend toward a higher impact on quality of life, although this was not statistically significant (OR = 2.04, $P = 0.079$) (Table 3).

Table 2. Distribution of OHIP-14 dimensions and overall mean scores reflecting quality of life impact.

Area	Impacted the quality of life	Mean score of area (SE)
Functional limitation	11.3% (2.2)	4(0.13)
Physical pain	16.3% (2.6)	4.3(0.14)
Psychological discomfort	28.6% (3.2)	4.1(0.11)
Physical disability	12.3% (2.3)	4(0.13)
Psychological disability	22.7% (2.9)	4.3(0.15)
Social disability	6.4% (1.7)	3.7(0.12)
Handicap	6.4% (1.7)	3.5(0.11)
Total	41.4% (3.5)	27.9(0.75)

Barriers and Needs in Dental Care

The most significant barrier to dental care, as reported by participants, was the high cost of services, cited by 70% of respondents. This was followed by fear of dental procedures (30%), lack of sufficient time (15%), indifference toward oral health (15%), and a perceived lack of need for treatment (35%). It should be noted that

Table 3. Factors associated with the impact of oral health on quality of life, including addiction profile and oral hygiene behaviors.

		Impacted the quality of life		
	Category	**% (SE of %)**	**OR**	***P* value**
Age			0.998	0.874
Gender	Male	38.8% (4.5)	0.771	0.373
	Female	45.1% (5.5)	Ref.	
Marital status	Married	45% (4.6)	1.448	0.246
	Others	36.1% (5.3)	Ref.	
Children	Not have	35.9% (5)	0.657	0.155
	Have	46% (4.8)	Ref.	
Education	Below Diploma	42.3% (5.9)	0.948	0.906
	Diploma	39.8% (5.1)	0.855	
	University	43.6% (8)	Ref.	
Employment	Unemployed	40.9% (4.7)	0.959	0.887
	Employed	41.9% (5.1)	Ref.	
Insurance	Have	35.4% (3.7)	0.273	0.001
	Not Have	66.7% (7.7)	Ref.	
Underlying disease	Have	56.3% (8.9)	2.049	0.079
	Not Have	38.6% (3.7)	Ref.	
Brushing	Never	41.6% (4.7)	1.020	0.945
	Yes, one or more times a day	41.11a5.22)	Ref.	
Illicit drug type	Chemical	40.5% (3.9)	0.852	0.732
	Natural	44.4% (7.5)	Ref.	
Cigarette Smoking	Yes	42.3% (4.7)	1.090	0.776
	No	40.2% (5.1)	Ref.	
Number of missing teeth			0.989	0.490
Addiction duration (years)			0.998	0.932
Rehabilitation duration (years)			1.022	0.943
Economic level			1.182s	0.029

the least frequently reported barrier was fear of infection transmission (10%)($P<0.001$)(Figure 1).

In terms of expressed needs, the highest reported need was for treatment of tooth decay (72%), followed by concerns about halitosis (bad breath) at 69% and tooth sensitivity at 65%. Conversely, the lowest reported needs were for treatment of improper or loose dentures (8%) and fractures in natural teeth or dentures (9%) ($P<0.001$) (Figure 2).

Table 4 presents the correlations between various barriers to dental care utilization and self-reported dental care needs. Fear of dental procedures exhibited a significant negative correlation with dental examinations ($P=0.022$), improper dentures or loose dentures ($P=0.038$), and fractures in natural or artificial teeth ($P=0.006$). Participants who identified high costs as a barrier were more likely to report tooth sensitivity ($P=0.014$) and less likely to report tooth gaps ($P=0.041$), toothaches ($P=0.012$), and bad breath ($P=0.004$).

Fear of infection transmission was positively correlated with the need for treatment of impacts or fractures in natural or artificial teeth ($P=0.006$) and improper or loose dentures ($P=0.036$). Additionally, individuals with time constraints were more likely to report impacts or fractures ($P=0.030$) and toothaches ($P=0.032$). Participants who expressed indifference toward dental care demonstrated a statistically significant negative correlation with reported needs for bad breath ($P=0.000$), gum problems

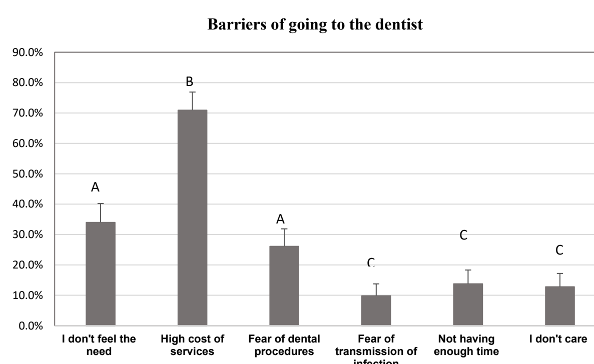

Figure 1. Perceived barriers to dental care utilization for addicted attendance to the rehabilitation centers (each variable that *shares* a mean that *is not statistically different* from another one will *share* the *same letter* (A, B, C))

Table 4. Correlation between barriers to dental care and self-reported needs

		I don't feel the need	High cost of services	Fear of dental procedures	Fear of infection transmission	Not having enough time	I don't care
Dental examination	Correlation	−0.006	−0.012	0.161*	0.089	−0.018	0.143*
	P-value	0.938	0.863	0.022	0.208	0.801	0.042
Tooth sensitivity	Correlation	−0.009	−0.173*	−0.046	−0.137	−0.070	−0.100
	P-value	0.897	0.014	0.515	0.051	0.319	0.155
Tooth decay	Correlation	0.111	−0.112	0.023	−0.066	−0.030	−0.032
	P-value	0.115	0.113	0.744	0.346	0.671	0.654
Bad breath	Correlation	0.017	−0.201*	−0.109	−0.173	−0.080	−0.277*
	P-value	0.808	0.004	0.122	0.414	0.258	0.000
Tooth filling	Correlation	0.173*	0.129	0.087	0.126	−0.020	0.209*
	P-value	0.014	0.066	0.215	0.073	0.772	0.003
Improper dentures or loose dentures	Correlation	0.107	0.023	0.146*	0.004	0.044	0.185*
	P-value	0.130	0.741	0.038	0.952	0.531	0.008
fracture in a natural or artificial tooth	Correlation	0.040	0.024	0.193*	0.217*	0.152*	0.314*
	P-value	0.566	0.732	0.006	0.002	0.030	0.000
loose teeth	Correlation	0.090	−0.014	0.020	−0.045	−0.099	0.162*
	P-value	0.204	0.846	0.773	0.528	0.159	0.021
Toothache	Correlation	0.075	−0.175*	−0.072	−0.134	0.150*	−0.047
	P-value	0.290	0.012	0.308	0.057	0.032	0.508
Appearance of teeth	Correlation	0.091	−0.094	0.001	−0.071	−0.099	−0.152*
	P-value	0.196	0.180	0.994	0.316	0.161	0.030
Gum problems	Correlation	−0.047	−0.083	−0.077	−0.169	−0.042	−0.262*
	P-value	0.507	0.241	0.272	0.316	0.554	0.000
Tooth gap	Correlation	0.016	−0.142*	−0.103	−0.143	−0.075	−0.157*
	P-value	0.824	0.043	0.142	0.241	0.284	0.025

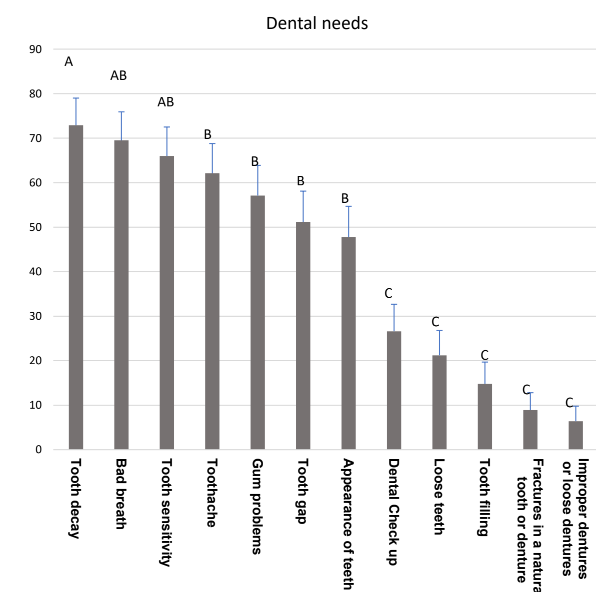

Figure 2. Self-reported dental needs among addicted attendees to the rehabilitation centers (each variable that *shares* a mean that *is not statistically different* from another one will *share* the *same letter* (A, B, C))

(*P* = 0.000), tooth gaps (*P* = 0.025), and concerns about the appearance of their teeth (*P* = 0.030). Furthermore, they showed a statistically significant negative correlation with reported needs for dental examinations (*P* = 0.042), improper dentures or loose dentures (*P* = 0.008), fractures in natural or artificial teeth (*P* = 0.000), and loose teeth (*P* = 0.021) (Table 4).

Discussion

Drug abuse is recognized as a global epidemic with serious physiological consequences. Among the various adverse effects of substance use, oral and dental problems are particularly significant. Numerous barriers to maintaining oral and dental health exist for individuals with addiction. Unfortunately, the negative impact of these health issues often detracts from the personal and social efficacy of affected individuals, as the unpleasant appearance resulting from oral health problems can exacerbate feelings of isolation. This intensified sense of isolation may further aggravate the severity of addiction, thereby diminishing the likelihood of recovery.[26]

In this study, we employed the OHRQoL measure to evaluate the self-perception of oral health among patients with addiction seeking treatment at addiction centers. Our findings indicate a strong association between drug addiction and poor OHRQoL, as evidenced by the average OHIP-14 score of 27.9, which reflects a significantly

compromised oral health status among these individuals. Notably, this score is lower than that reported by Saki et al. (2021) in Ahvaz (34.8), highlighting regional variation within Iran.[18] Nevertheless, it remains significantly higher than those found in international studies—such as in Brazil (10.5)[15] and Australia (20.95).[13,27] This disparity suggests that individuals in more developed healthcare systems may encounter fewer oral health challenges, likely due to greater access to preventive services. These regional comparisons underscore the importance of tailoring public oral health strategies to specific contexts, particularly within addiction care.

Our analysis identified several demographic factors that correlated with poor OHRQoL among participants. Specifically, poor OHRQoL was associated with having health insurance, infrequent toothbrushing, and age. A Brazilian study corroborated our findings, indicating that infrequent tooth brushing had a higher impact on OHRQoL The average age of our study population was 36 years, consistent with findings from a similar study in Ahvaz[18] and another in Mashhad, which reported an average age of 40 years.[19] Collectively, these studies reveal that most self-referred addicts fall within the 30–40-year age range, a period typically associated with peak productivity in society. At this stage of life, individuals often place a high value on their appearance, potentially increasing their likelihood of seeking addiction treatment services.

Among the seven dimensions assessed by the OHIP-14, psychological discomfort and psychological disability emerged as the most impactful in our study, followed by physical pain. Similar findings have been reported in studies conducted in Amsterdam[28] and Brazil,[14] reinforcing the notion that individuals with addiction perceive the adverse psychological effects of oral and dental health as critical factors affecting their quality of life. Furthermore, research indicates that psychological discomfort is linked to illegal drug use among youth.[15] Notably, a recent Australian study identified depression as a significant mediator between substance use and oral health quality of life, suggesting that psychological distress may both influence and result from poor oral health among individuals with addiction.[23] Our findings, in which psychological dimensions dominated, align with these conclusions and suggest the need for integrated mental and dental health services in addiction programs.

Individuals with substance use disorders demonstrate a heightened need for access to dental services compared to non-users.[29] Despite the documented oral health challenges faced by this population, numerous barriers impede the provision of preventive and therapeutic services.[6] Dental professionals often exhibit reluctance to treat individuals with addiction due to negative perceptions.[30] Conversely, those with substance use disorders may prioritize their oral health less and show limited demand for non-emergency dental care.[31] In a study by Metsch et al financial hardship and lack of insurance coverage were the most frequently cited obstacles to accessing dental services, findings that were echoed in our study. This suggests that systemic issues are not unique to Iran, but rather represent a global challenge in achieving oral health equity.[32]

When the participants in this study were asked about barriers to receiving necessary dental services, the most frequently reported obstacles included systemic issues, such as high costs, and personal barriers, like a lack of perceived need for treatment. This aligns with findings from Metsch et al who identified barriers to treatment as including cost and the absence of health insurance, as well as personal factors such as procrastination and reluctance to seek treatment Additionally, financial constraints were identified as a primary barrier to accessing dental care in other studies.[32] For example, Bowes et al reported that some individuals with substance use disorders self-medicated oral pain with alcohol, further diminishing their perceived need for professional care. These insights underscore the complex interplay of psychological, behavioral, and financial factors in shaping oral health outcomes among drug-dependent populations.[16]

Conclusion

Drug abuse constitutes an epidemic with serious, detrimental effects on physical health. Among these, oral and dental health problems are significant side effects observed in individuals with substance use disorders. The average OHIP-14 score obtained in this study was notably high, indicating a poor oral health status among these individuals. These findings underscore the multifaceted impact of oral health on daily life, particularly in psychological and physical domains.

In our study, the most commonly reported barriers to accessing dental care included high treatment costs and a lack of perceived need for treatment. Despite the severity of oral and dental health issues faced by individuals with substance use disorders, the provision of dental services to this population encounters numerous challenges. These include inadequate policies to enhance access to dental care and low demand for non-emergency dental services among this group.

Study Limitations

While this study contributes valuable insights into the oral health-related quality of life and barriers to care among individuals with substance use disorders, several methodological limitations should be acknowledged. The cross-sectional design restricts the ability to establish causal relationships between oral health parameters and quality of life outcomes. The reliance on self-reported data may have introduced response biases, including recall bias and social desirability bias, which could potentially affect the accuracy and objectivity of participants'

responses. Furthermore, the study was conducted in a single psychiatric hospital and affiliated methadone maintenance treatment centers in Kerman, which may limit the generalizability of the findings to broader or rural populations. Additionally, the absence of clinical dental examinations prevented objective verification of self-reported oral health conditions. To enhance the external validity and robustness of future research, longitudinal study designs incorporating clinically validated assessments and more diverse population samples are recommended.

Implications for Further Investigation

To improve understanding in this field, future studies should adopt longitudinal designs to monitor changes in oral health status and service accessibility over time among individuals with substance use disorders. Incorporating clinical oral examinations alongside self-reported data is recommended to improve diagnostic validity. Additionally, interventional and multi-center studies targeting underserved populations are warranted to evaluate the effectiveness of tailored oral health promotion strategies in this high-risk group.

Acknowledgments

The authors wish to express their gratitude to Shahid Beheshti psychiatric hospital. They also extend their appreciation to the Vice Chancellor of Kerman University of Medical Sciences and the Oral and Dental Diseases Research Center for their support of this research.

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Competing Interests

The authors have declared that no conflict of interest exists.

Data Availability Statement

The datasets used and analyzed during the current study are available from the corresponding author upon reasonable request.

Ethical Approval

Informed consent was obtained from all participants.
This study received approval from the Ethics Committee of Kerman University of Medical Sciences, with the ethical code IR.KMU.REC.1402.484.

Funding

None.

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