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Oral Health Related Quality of Life Following Extraction of Impacted Third Molar: A Prospective Analytical Study

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ABSTRACT

Introduction: Surgical extraction of impacted mandibular third molars is among the most frequently performed oral surgical procedures, often associated with postoperative pain, swelling, and functional limitations, adversely affecting patient's oral health-related quality of life. Although this procedure is widely practiced, limited evidence exists regarding its impact on daily functioning and well-being in the Nepali context.

Objective: To assess effect of surgical removal of impacted mandibular third molars on oral health-related quality of life and to examine the influence of age, gender, and surgical difficulty on postoperative recovery.

Methods: A prospective analytical study was conducted among 50 patients aged 18-40 years undergoing extraction of partially or completely impacted mandibular third molars. Oral health-related quality of life was measured preoperatively and on postoperative days 1, 3, 5, and 7 using

14-item Oral Health Impact Profile. Surgical difficulty was classified based on clinical and radiographic criteria. Data were analyzed with R statistical software (version 4.0.2), with significance set at $p<0.05$.

Results: Oral health-related quality of life significantly worsened during the first three postoperative days, peaking on day 1 and improving toward baseline by day 7 (mean 14-item Oral Health Impact Profile score: pre-op 3.49±0.37 vs. day 1 post-op 3.70±0.42, $P<0.001$). The most affected domains were physical pain, functional limitation, and psychological discomfort. Higher surgical difficulty was associated with longer operation time ($P=0.03$). No significant differences were found across age groups, while females showed slightly slower recovery without statistical significance.

Conclusions: Third molar surgery briefly impairs oral health-related quality of life, highlighting the need for counseling and tailored postoperative care.

Keywords: Impacted mandibular molars; oral health impact profile-14; oral health-related quality of life; third molar surgery; surgical difficulty.

INTRODUCTION

Oral health-related quality of life (OHRQoL) is a multidimensional concept that evaluates the impact of oral health on an individual's physical, psychological, and social well-being.[1]

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Among the various oral surgical procedures, the surgical extraction of impacted mandibular third molars is one of the most commonly performed interventions worldwide.[2] Despite being routine, it is associated with significant postoperative complications, including pain, swelling, trismus, and limited oral function, which can temporarily impair a patient's daily life and overall well-being.[3,4]

The complexity of third molar impaction, often requiring invasive procedures like bone removal and mucoperiosteal flap elevation, leads to an inflammatory response that affects patient comfort and functionality during the immediate postoperative period.[2] As a result, the evaluation of patient-centered outcomes such as OHRQoL has gained importance in oral surgery.[5] Unlike clinical indicators, which may not fully reflect patient experiences, OHRQoL tools offer insight into the personal and social effects of dental treatments.[6]

The 14-item Oral Health Impact Profile (OHIP-14) is a validated instrument widely used to assess OHRQoL.[7] Its Nepali version has demonstrated reliability and cultural relevance, making it suitable for use in Nepalese populations.[8]

The rationale of the study is that although several studies have explored postoperative morbidity after third molar surgery, few have focused on its effect on OHRQoL in the Nepali context.[2,3,9-11] This study aims to assess the changes in OHRQoL before and after surgical removal of impacted mandibular third molars using the Nepali version of OHIP-14 and to identify demographic and clinical factors such as age, sex, and difficulty of surgery that may influence the pattern of recovery.

METHODS

A prospective analytical study was conducted over a period of one year (November 2020 to November 2021) at the Department of Dental Surgery, Oral and Maxillofacial Surgery Unit, National Academy of Medical Sciences (NAMS), Bir Hospital, Kathmandu, Nepal. Patients aged 18 to 40 years who presented with partially or completely bony impacted mandibular third molars requiring surgical extraction were included. A convenience sampling technique was used. Based on Cochran's formula with a 95% confidence interval, an estimated 87% improvement in OHRQoL by the 7th postoperative day, and a 10% allowable error, the minimum sample size was calculated as 43.[12] After accounting for a 15% loss to follow-up, the final sample size was set at 50 patients.

The Inclusion Criteria included patients aged 18-40 years, presence of partially or completely bony impacted mandibular third molars, American Society of Anesthesiologists (ASA) Physical Status Classification I or II, who provided informed written consent, and literate in the Nepali language for self-administration of OHIP-14. The exclusion Criteria included pregnant women, individuals with psychiatric illness, chronic use of sedatives or analgesics, patients unable to understand or complete the questionnaire and who refused to give consent.

Ethical clearance was obtained from the Institutional Review Board (IRB) of NAMS. All patients provided written informed consent prior to participation. Demographic and clinical data were recorded, including age, sex, impaction type, and surgical difficulty based on Pell and Gregory classification on Orthopantomogram (OPG). Surgical extractions were performed by a single experienced oral surgeon using a standardized protocol. Duration of surgery was recorded from incision to suturing. The validated Nepali version of the OHIP-14 questionnaire was administered preoperatively and on postoperative days 1, 3, 5, and 7. Patients completed the questionnaire independently. Follow-up reminders were given via telephone, and day 7 data were collected during suture removal visits. Data were entered into Microsoft Excel and analyzed using R statistical software (version 4.0.2). Descriptive statistics were used to summarize patient characteristics. Paired t-tests were employed to compare OHIP-14 scores between pre-surgery scores and scores at day 1, 3, 5, and 7 post-surgery (Table 3). Analysis of Covariance (ANCOVA) was used to assess the impact of age, gender, and surgical difficulty on OHRQoL (Table 4 and 6). A p-value <0.05 was considered statistically significant.

RESULTS

A total of 50 patients undergoing surgical extraction of impacted mandibular third molars were enrolled in the study. Of them, 29 (58%) were female and 21 (42%) were male. The mean age of participants was 26.74 ± 4.74 years, with 37 (74%) patients aged between 18–29 years and 13 (26%) between 30–39 years. Mesioangular impaction was observed in 22 patients (44%), horizontal impaction in 16 (32%), vertical in 7 (14%), and distoangular in 2 (4%). According to the surgical difficulty index minimally difficult were 5 cases (10%), moderately difficult were 41 cases (82%) and very difficult were 4 cases (8%). The mean duration of surgery was significantly associated with the difficulty level as minimally difficult was 28 ± 2.74 minutes, moderately difficult was 36.78 ± 9.48 minutes, and very difficult was 44.25 ± 9.94 minutes. This difference was statistically significant ($P = 0.03$), suggesting more complex cases required longer operating time.

The pre-operative assessment of the baseline data showed the deterioration of OHRQoL due to the impacted mandibular third molar that necessitated the surgical removal (Table 1). The Post-Operative Assessment on day 1st, 3rd, 5th, 7th day using OHIP 14 questionnaires is given in Table 2. The overall mean OHIP-14 score increased postoperatively, peaking on Day 1 and gradually declining toward Day 7 (Table 3), as preoperative: 3.49 ± 0.37, Day 1: 3.70 ± 0.42 ($p < 0.001$ vs. baseline), Day 3: 2.68 ± 0.57 ($p < 0.001$), Day 5: 2.33 ± 0.54 ($p < 0.001$), and Day 7: 1.32 ± 0.20 ($p < 0.001$). This represents a statistically significant improvement in OHRQoL from postoperative Day 1 to Day 7.

Functional Limitation and Physical Pain were the most severely affected domains on Day 1 (Table 3). Psychological Discomfort remained elevated on Day 3 but significantly declined by Day 7. Social Disability and Handicap domains showed relatively modest changes but followed a similar declining trend. Physical Disability also remained high on Day 3 but dropped by Day 5 and normalized by Day 7.

Females consistently reported slightly lower scores across most time points and domains, indicating a trend toward faster subjective recovery (Table 4). For instance in Day 1 mean OHIP-14 for female was 3.61 ± 0.54; and male was 3.82 ± 0.85; and in Day 7 mean OHIP-14 for female was 1.29 ± 0.21; and male was 1.37 ± 0.19. *P*-value = 0.02 for overall OHIP-14 comparison by gender, showing statistical significance, suggesting that male patients experienced slightly more perceived postoperative discomfort overall, but only in

select subdomains i.e. physical pain (P=0.04), physical disability (0.02) and social disability (P=0.01).

Patients undergoing very difficult extractions showed higher mean OHIP-14 scores postoperatively, especially on Days 1 and 3 (Table 5). However, by Day 7, the scores across all difficulty groups approached baseline. Despite this trend, the differences were not statistically significant, suggesting that surgical difficulty influences early recovery but not overall 1-week OHRQoL outcomes. When patients were grouped by age (<30 and ≥30 years), there was no statistically significant difference in OHIP-14 score progression from baseline through Day 7 ($p > 0.05$) (Table 6). Both groups followed a similar pattern of deterioration and gradual recovery.

Table 1: Pre-operative assessment of baseline data on day 1st using OHIP-14 questionnaires.

Components	Items	Pre-operative Assessment Day 1		
		Yes	No	Can't Say
Functional Limitation	Difficulty in pronouncing words	50	0	0
	Taste has worsened	50	0	0
Physical Pain	Pain in mouth	40	10	0
	Uncomfortable eating food	48	2	0
Psychological Discomfort	Self-consciousness	50	0	0
	Tense feeling	48	2	0
Physical Disability	Unsatisfactory diet	42	8	0
	Interruption of meals	16	34	0
Psychological Disability	Difficult to relax	24	26	0
	Feeling embarrassed	39	11	0
Social Disability	Irritable with others	23	27	0
	Difficulty doing usual jobs	28	22	0
Handicap	Life less satisfying	32	18	0
	Totally unable to function	10	40	0

Table 2: Post-Operative Assessment on day 1st, 3rd 5th, 7thday using OHIP 14 questionnaires.

Components	Items	Day 1			Day 3			Day 5			Day 7		
		Yes	No	Can't Say	Yes	No	Can't Say	Yes	No	Can't Say	Yes	No	Can't Say
Functional Limitation	Difficulty in pronouncing words	19	31	0	50	0	0	50	0	0	50	0	0
	Taste has worsened	1	7	42	50	0	0	50	0	0	50	0	0
Physical Pain	Pain in mouth	14	36	0	49	1	0	50	0	0	50	0	0
	Uncomfortable eating food	9	4	37	49	1	0	44	6	0	28	22	0
Psychological Discomfort	Self-consciousness	48	2	0	50	0	0	50	0	0	50	0	0
	Tense feeling	46	4	0	50	0	0	50	0	0	50	0	0
Physical Disability	Unsatisfactory diet	33	14	3	35	15	0	17	33	0	50	0	0
	Interruption of meals	16	34	0	17	33	0	5	45	0	50	0	0
Psychological Disability	Difficult to relax	23	26	1	27	23	0	47	3	0	50	0	0
	Feeling embarrassed	39	11	0	37	13	0	50	0	0	50	0	0
Social Disability	Irritable with others	22	27	1	21	29	0	50	0	0	50	0	0
	Difficulty doing usual jobs	27	22	1	28	22	0	50	0	0	50	0	0
Handicap	Life less satisfying	30	19	1	29	21	0	50	0	0	50	0	0
	Totally unable to function	10	40	0	9	41	0	50	0	0	50	0	0

Table 3: OHIP-14 scores (mean± S.D) from pre-surgery to 7 days post-surgery and paired t-test between pre-surgery scores and scores at day 1, 3, 5 and 7 post-surgery.

	Pre-surgery		Post-operative Day 1			Day 3			Day 5			Day 7		
	Mean	SD	Mean	SD	P	Mean	SD	P	Mean	SD	p	Mean	SD	p
OHIP-14 Total	3.49	0.37	3.70	0.42	<0.001	2.68	0.57	<0.001	2.33	0.54	<0.001	1.32	0.20	<0.001
Functional Limitation	2.51	0.79	3.20	0.55	<0.001	1.30	0.42	<0.001	1.00	0.00	<0.001	1.00	0.00	<0.001
Physical Pain	4.08	0.40	4.38	0.43	0.01	3.30	0.76	<0.001	2.40	0.69	<0.001	1.04	0.137	<0.001
Psychological Discomfort	5.00	0.00	5.00	0.00	NA	5.00	0.00	NA	4.30	0.78	NA	2.36	0.63	NA
Physical Disability	3.12	0.37	3.50	0.74	<0.001	2.34	0.71	<0.001	2.34	0.88	<0.001	1.80	0.65	<0.001
Psychological Disability	3.52	0.62	3.70	0.58	0.08	2.34	0.71	<0.001	2.12	0.62	<0.001	1.04	0.13	<0.001
Social Disability	3.40	0.37	3.34	0.71	0.43	2.48	0.67	<0.001	2.40	0.69	<0.001	1.04	0.13	<0.001
Handicap	2.81	0.41	2.78	0.43	0.47	2.06	0.86	<0.001	1.80	0.65	<0.001	1.00	0.00	<0.001

***Paired t-test; Level of significance at p<0.05**

Table 4: Comparison of OHIP-14 among male and female.

OHIIP Dimensions	Preoperative Day		Post-Operative Day 1		Post-Operative Day 3		Post-Operative Day 5		Post-Operative Day 7		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	*p-Value
OHIP-14 Overall	3.62±0.30	3.39±0.39	3.82±0.85	3.61±0.54	2.79±0.56	2.60±0.57	2.47±0.42	2.23±0.60	1.37±0.19	1.29±0.21	0.02
Functional Limitation	2.70±0.64	2.32±0.85	3.35±0.23	3.08±0.68	1.35±0.45	1.25±0.41	1.00±0.00	1.00±0.00	1.00±0.00	1.00±0.00	0.05
Physical Pain	4.21±0.40	3.98±0.38	4.45±0.35	4.32±0.48	3.47±0.69	3.17±0.80	2.57±0.57	2.27±0.76	1.04±0.15	1.03±0.12	0.04
Psychological Discomfort	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	4.50±0.38	4.15±0.95	2.52±0.51	2.24±0.68	NA
Physical Disability	3.26±0.33	3.01±0.36	3.71±0.46	3.37±0.88	2.47±0.69	2.24±0.71	2.52±0.81	2.20±0.93	1.92±0.63	1.70±0.66	0.02
Psychological Disability	3.66±0.55	3.41±0.65	3.83±0.33	3.60±0.71	2.47±0.69	2.24±0.71	2.26±0.56	2.01±0.66	1.04±0.15	1.03±0.12	0.15
Social Disability	3.54±0.31	3.29±0.38	3.54±0.15	3.18±0.90	2.61±0.63	2.37±0.70	2.57±0.57	2.27±0.76	1.04±0.15	1.03±0.12	0.01
Handicap	2.92±0.32	2.72±0.45	2.90±0.20	2.68±0.52	2.19±0.88	1.96±0.84	1.92±0.63	1.70±0.66	1.00±0.00	1.00±0.00	0.08

***ANCOVA test; Level of significance at p<0.05**

Table 5: OHIP-14 Scores based on the difficulty index.

Difficulty Index	OHIP Dimensions	Preoperative Day		Post-Operative Day 1		Post-operative Day 3		Post-Operative Day 5		Post-Operative Day 7	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Minimally Difficult (N=5)	OHIP-14 Overall	3.34	0.61	3.17	0.81	2.14	0.23	1.72	0.57	1.11	0.10
	Functional Limitation	2.10	1.08	2.60	1.02	1.00	0.00	1.00	0.00	1.00	0.00
	Physical Pain	4.00	0.50	4.00	0.61	2.50	0.50	1.70	0.75	1.00	0.00
	Psychological Discomfort	5.00	0.00	5.00	0.00	5.00	0.00	3.40	1.34	1.60	0.54
	Physical Disability	3.00	0.61	2.60	1.08	1.70	0.27	1.60	0.82	1.20	0.27
	Psychological Disability	3.40	0.89	3.20	1.09	1.70	0.27	1.50	0.50	1.00	0.00
	Social Disability	3.20	0.67	2.50	1.36	1.90	0.54	1.70	0.75	1.00	0.00
	Handicap	2.70	0.67	2.30	0.75	1.40	0.22	1.20	0.27	1.00	0.00
Moderately Difficult (N=41)	OHIP-14 Overall	3.46	0.32	3.73	0.33	2.65	0.52	2.33	0.48	1.31	0.17
	Functional Limitation	2.43	0.68	3.29	0.46	1.21	0.25	1.00	0.00	1.00	0.00
	Physical Pain	4.01	0.32	4.41	0.41	3.28	0.68	2.42	0.66	1.00	0.00
	Psychological Discomfort	5.00	0.00	5.00	0.00	5.00	0.00	4.34	0.64	2.39	0.58
	Physical Disability	3.08	0.31	3.58	0.66	2.30	0.65	2.31	0.83	1.80	0.65
	Psychological Disability	3.53	0.62	3.68	0.45	2.30	0.65	2.06	0.46	1.00	0.00
	Social Disability	3.37	0.31	3.37	0.54	2.45	0.62	2.42	0.66	1.00	0.00
	Handicap	2.80	0.40	2.81	0.36	2.04	0.87	1.80	0.65	1.00	0.00
Very Difficult (N=4)	OHIP-14 Overall	3.94	0.03	4.00	0.00	3.64	0.00	3.07	0.00	1.71	0.00
	Functional Limitation	3.75	0.50	3.00	0.00	2.50	0.00	1.00	0.00	1.00	0.00
	Physical Pain	4.87	0.25	4.50	0.00	4.50	0.00	3.00	0.00	1.50	0.00
	Psychological Discomfort	5.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	3.00	0.00
	Physical Disability	3.62	0.25	4.00	0.00	3.50	0.00	3.50	0.00	2.50	0.90
	Psychological Disability	3.50	0.00	4.50	0.00	3.50	0.00	3.50	0.00	1.50	0.00
	Social Disability	3.87	0.25	4.00	0.00	3.50	0.00	3.00	0.00	1.50	0.00
	Handicap	3.00	0.00	3.00	0.00	3.00	0.00	2.50	0.00	1.00	0.00

Table 6: Comparison of OHIP-14 among age groups.

OHIIP Dimensions	Preoperative Day		Post-Operative Day 1		Post-operative Day 3		Post-Operative Day 5		Post-Operative Day 7		
	<30 yrs	30 yrs	<30 yrs	30 yrs	<30 yrs	30 yrs	<30 yrs	30 yrs	<30 yrs	30 yrs	*p-value
OHIP-14 Overall	3.45±0.39	3.59±0.30	3.69±0.43	3.71±0.44	2.66±0.56	2.75±0.61	2.31±0.54	2.39±0.56	1.31±0.19	2.39±0.56	0.25
Functional Limitation	2.41±0.77	2.76±0.83	3.20±0.55	3.19±0.56	1.27±0.38	1.38±0.54	1.00±0.00	1.00±0.00	1.00±0.00	1.00±0.00	0.17
Physical Pain	4.05±0.42	4.15±0.37	4.39±0.44	4.34±0.42	3.27±0.76	3.38±0.82	2.37±0.71	2.46±0.69	1.02±0.11	2.46±0.69	0.45
Psychological Discomfort	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	5.00±0.00	4.29±0.78	4.30±0.80	2.35±0.63	4.30±0.80	NA
Physical Disability	3.10±0.37	3.15±0.37	3.52±0.75	3.50±0.76	2.31±0.70	2.42±0.75	2.29±0.89	2.46±0.90	1.78±0.66	2.46±0.90	0.70

Psychological Disability	3.45±0.67	3.69±0.43	3.67±0.57	3.76±0.63	2.31±0.70	2.42±0.75	2.08±0.59	2.23±0.72	1.02±0.11	2.23±0.72	0.50
Social Disability	3.37±0.39	3.46±0.32	3.32±0.70	3.38±0.74	2.44±0.67	2.57±0.70	2.37±0.71	2.46±0.69	1.02±0.11	2.46±0.69	0.25
Handicap	2.77±0.45	2.92±0.27	2.77±0.43	2.80±0.43	2.04±0.86	2.11±0.86	1.78±0.66	1.84±0.65	1.00±0.00	1.84±0.65	0.25

***ANCOVA test; Level of significance at p<0.05**

DISCUSSION

This study explored the impact of surgical extraction of impacted mandibular third molars on oral health-related quality of life (OHRQoL) using the Nepali version of the OHIP-14 questionnaire. Our results demonstrated a significant, albeit temporary, deterioration in patients' OHRQoL in the immediate postoperative period, with gradual improvement by day seven. These findings reaffirm the importance of evaluating not only clinical outcomes but also patient-centered experiences following oral surgical procedures.

The OHIP-14, being a multidimensional instrument, captures these subjective outcomes across various domains, including functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. In our study, the mean OHIP-14 score decreased from a preoperative value of 3.49 ± 0.37 to 3.70 ± 0.42 on the first postoperative day. The score progressively declined over subsequent follow-up days—2.68 ± 0.57 on day 3**,** 2.33 ± 0.54 on day 5**,** and 1.32 ± 0.20 on day 7, approaching and improving beyond the baseline level. This recovery pattern aligns with the natural course of inflammatory healing and is consistent with findings from previous studies, including those by McGrath et al. and Sato et al., which reported similar trends of early postoperative morbidity followed by progressive improvement within one week.[13,14]

Among the OHIP-14 subdomains, physical pain**,** functional limitation**,** and psychological discomfort were the most severely affected in the early postoperative period. These domains reflect the most immediate and noticeable consequences of surgery—pain, inability to chew, and emotional distress resulting from swelling or aesthetic concerns.[3,4] Our results indicate that psychological discomfort and physical disability were the last to return to the preoperative levels. Females consistently reported slightly lower scores across most time points and domains, indicating a trend toward faster subjective recovery in our study. The influence of age on postoperative recovery was not statistically significant in our study. Both younger (<30 years) and older (≥30 years) participants showed comparable OHIP-14 scores and similar recovery trends. While patients undergoing very difficult surgeries showed slightly higher scores, especially on postoperative days 1 and 3, these differences diminished by day 7. This suggests that although more complex procedures take longer and may initially cause greater discomfort, the overall trajectory of recovery remains consistent when managed with proper surgical techniques and postoperative care.

Our results are consistent with studies by Chukwuneke et al, Alahmad et al, and Deepti et al who also reported that pain and eating limitations were the most common complaints following third molar surgery.[11,12,15] The findings of our study are in accordance with results reported by several investigators regarding the significant limitation in oral functions such as chewing and mouth opening/trismus in the immediate postoperative period.[9,16] The findings of our study is in contrast to the study by Phillips et al as their study found that female patients reported significantly higher postoperative pain and disability compared to males.[17] This might be because of the reason that men are less willing to report event as painful and also to avoid negative emotional consequences.[18] The findings of this study is supported by Haug et al, who found minimal impact of age on recovery after third molar extraction in healthy individuals.[17] However, some literature has suggested that older patients may experience prolonged healing, more postoperative complications, and slower return to normal function due to reduced tissue elasticity and healing potential.[19,20] The lack of significant difference in our study could be attributed to the relatively narrow age range (18–40 years) and exclusion of patients with systemic health issues. The findings of this study is in partial agreement with Negreiros et al, who observed increased morbidity with higher difficulty scores, particularly in the early recovery phase.[9] Our study was in contrast to the study by Sato et al as they found that the surgery duration and surgical difficulty during surgery were not related to postoperative pain.[14]

One of the key strengths of this study is the use of the validated Nepali version of the OHIP-14, ensuring cultural relevance and linguistic clarity in capturing patient-reported outcomes. The

OHIP-14 proved to be a practical and sensitive tool in detecting short-term changes in OHRQoL, as also supported by Kieffer et al., who emphasized the responsiveness of the instrument in surgical contexts.[21] Furthermore, the prospective design with multiple postoperative follow-up points allowed for an accurate assessment of the temporal changes in quality of life.

These findings have important clinical implications. Patients should be counseled preoperatively about the expected trajectory of discomfort and recovery. Understanding that pain and function are most affected in the first three days but generally resolve by one week can reduce anxiety, improve patient satisfaction, and enhance adherence to postoperative instructions. Clinicians should also consider additional pain control strategies or early interventions for high-risk patients, such as those with higher difficulty index or heightened pain sensitivity.

The limitation of the study include that the study assessed OHRQoL only up to seven days postoperatively. While this timeframe captures the acute recovery phase, it does not reflect longer-term outcomes or late complications such as infection, delayed healing, or neurosensory disturbances. Also, convenience sampling and single-center design were the limitations of this study.

CONCLUSION

Surgical extraction of impacted mandibular third molars temporarily impair OHRQoL, mainly within the first three postoperative days, but most patients recover by one week. Gender and surgical difficulty affect early outcomes, while age has little impact. Incorporating OHIP-14, preoperative counseling, and tailored pain management can optimize patient care. Larger studies with longer follow-up are recommended to validate and expand upon these findings. Patients should be informed about possible short-term impacts and strategies to reduce postoperative discomfort.

Conflict of Interest: None

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