

Correlation of Nutritional Status and Cognitive Function with Oral Health Related Quality of Life among Elderly with Edentulism in a Tertiary Care Dental Setting, Jodhpur: Reg No: 315

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ABSTRACT

Introduction: Oral health is a crucial determinant of overall well-being in elderly. Edentulism can adversely affect nutrition and cognition, which in turn may influence oral health-related quality of life (OHRQoL). This study assessed nutritional status and cognitive function among elderly with edentulism and examined their correlation with OHRQoL. **Methodology:** A hospital based cross-sectional study was conducted among 290 elderly individuals (≥ 60 years) with complete or partial tooth loss attending the dental OPD of a tertiary care centre in Jodhpur from January to March 2025. Validated Hindi versions of the Mini Nutritional Assessment–Short Form, Indian Elderly Dietary Index, Mini-Cog, and Geriatric Oral Health Assessment Index were used, along with a 24-hour dietary recall questionnaire. Proportions and Spearman’s rank correlation were applied for analysis. **Results:** Majority (85.5%) had partial tooth loss, and 57.6% reported poor OHRQoL. Nutritional assessment showed 13% malnourished and 34.5% at risk, with deficiencies in calories ($>60\%$), protein ($>80\%$), calcium ($>80\%$), and vitamin C (99%). Less than half (43%) had a “healthy diet” score. Cognitive impairment was high in 36.2% of participants. OHRQoL correlated positively with nutritional status ($p = 0.371$, $p < 0.001$) and cognitive function ($p = 0.307$, $p < 0.001$). Moderate positive correlations were observed with calorie and vitamin C intake, as well as diet quality. **Conclusion:** Poor OHRQoL among elderly with edentulism is significantly influenced by nutritional status and cognitive function, highlighting the need for integrated oral, nutritional, and cognitive health interventions.

KEYWORDS

aged, cognition, nutritional status, oral health, quality of life, tooth loss