Temporomandibular disorders among Sami women
Perspectives based on an epidemiological survey with mixed methods

Christina Storm Mienna

Akademisk avhandling
som med vederbörligt tillstånd av Rektor vid Umeå universitet för avläggande av odontologie doktorsexamen framläggs till offentligt försvar i Sal B, byggnad 1 D, 9tr, Tandläkarhögskolan, Norrlands universitets sjukhus, fredagen den 3 oktober, kl. 09:00.

Avhandlingen kommer att försvaras på svenska

Fakultetsopponent: Professor emeritus, Martti Helkimo, Odontologiska Institutionen, Jönköping, Sverige.
Abstract

Introduction The aim of the research project was to examine prevalence, co-morbidity, and impact on daily life of pain and dysfunction in the jaw–face, head, and neck–shoulder regions among adult Sami women in northern Sweden. The aim of the qualitative part of the study was to explore, thoughts, experiences, and beliefs regarding temporomandibular disorders (TMD) among Sami women with and without TMD, to gain insights into their health care experiences.

Methods The research project used a mixed methods approach including questionnaire analysis, a case–control study, and thematic interviews. The study population (Papers I and III) included 487 women living in the Arctic region of northern Sweden and enrolled in the register of the Swedish Sami Parliament or registered as reindeer owners or reindeer herders in the Swedish Board of Agriculture. Two years after the questionnaire study, 22 women (cases) with longstanding, intense, and frequent symptoms indicative of TMD, together with 46 age-matched women (controls) without any symptoms in the jaw–face region, underwent a clinical examination of the function of the temporomandibular joint, jaw and neck muscles, mandibular mobility, and dental occlusion. The examiner was blind to the women's affiliation (Paper II). Thematic interviews with a strategic subsample of 17 Sami women (Paper IV) were thereafter conducted and analyzed with a grounded theory approach.

Results The prevalence of frequent symptoms indicative of TMD was 17%, of headaches 19%, and of neck–shoulder pain (NSP) 30%. Seventeen percent reported that their TMD affected daily life. Duration of jaw pain, troublesome impaired jaw opening, and neck pain, together with a low education level, affected the statement of whether TMD influenced daily life or not. Factors related to pain had the greatest influence when these Sami women rated the related impairment. There was a statistically significant relationship between TMD, frequent headaches, and frequent NSP (P < 0.0001). Longstanding, intense, and frequent symptoms indicative of TMD remained essentially unchanged over the two-year follow-up period. Cases reported impaired general health and awareness of clenching teeth significantly more frequently than did controls. Variations in dental occlusion did not distinguish cases from controls. In the qualitative part of the project the core category, “Grin(d) and bear it,” summarizes the participants’ various ways and stages of processing and handling the interacting categories: (1) triggers, (2) strains, (3) distrust, and (4) reconciliation with pain and/or difficulties in life. Perpetuating factors were described as mental–physical strain and stress, and also a teeth clenching behavior. Women without TMD expressed factors that helped them to handle strains, reconcile, and stay healthy. They relied on helpful social support.

Conclusion Disabling TMD, headaches, and NSP are common in Sami women. Women with TMD commonly expressed that tooth clenching was a familiar habit related to strains in life; they described an impaired general state of health and distrust in the care providers’ competence and ability to manage their problems. Women without TMD expressed confidence in their self-efficacy and were generally less concerned with strains in their lives. Rehabilitation strategies aiming at empowerment and improved self-efficacy may be a successful approach in women with disabling TMD.

Keywords
epidemiology, gender, headache, indigenous, pain, quality of life, temporomandibular, qualitative