Management of painful temporomandibular disorders: Methods and overview of The National Dental Practice-Based Research Network prospective cohort study

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INTRODUCTION

Patients often seek consultation with dentists for temporomandibular disorders (TMDs). The objectives of this article were to describe the methods of a large prospective cohort study of painful TMD management, practitioners' and patients' characteristics, and practitioners' initial treatment recommendations conducted by The National Dental Practice-Based Research Network (the "network").

METHODS

Participating dentists recruited into this study treated patients seeking treatment for painful TMDs. The authors developed self-report instruments based on well-accepted instruments. The authors collected demographics, biopsychosocial characteristics, TMD symptoms, diagnoses, treatments, treatment adherence, and painful TMDs and jaw function outcomes through 6 months.

RESULTS

Participating dentists were predominately White (76.8%) and male (62.2%), had a mean age of 52 years, and were general practitioners (73.5%) with 23.8% having completed an orofacial pain residency. Of the 1,901 patients with painful TMDs recruited, the predominant demographics were White (84.3%) and female (83.3%). Patients' mean age was 44 years, 88.8% self-reported good to excellent health, and 85.9% had education beyond high school. Eighty-two percent had pain or stiffness of the jaw on awakening, and 40.3% had low-intensity pain. The most frequent diagnoses were myalgia (72.4%) and headache attributed to TMDs (51.0%). Self-care instruction (89.4%), intraoral appliances (75.4%), and medications (57.6%) were recommended frequently.
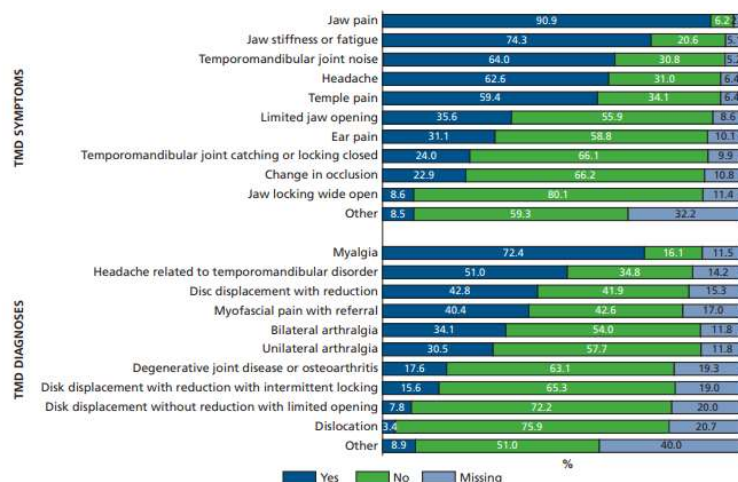

Figure 2. Temporomandibular disorder (TMD) symptoms and diagnoses for study patients. Percentage of total sample (n = 1,901 patients).
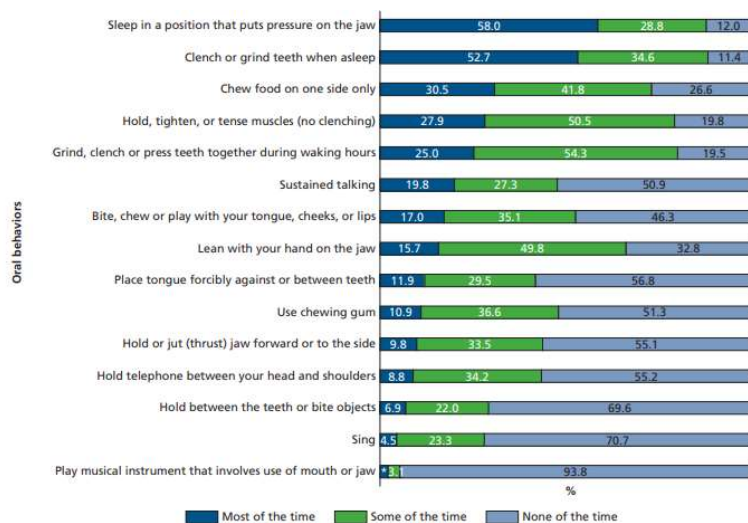

Figure 3. Oral behaviors checklist for study patients. Percentage of total sample (n = 1,901 patients). *: 0.9%. Missing: < 2.3%.

DISCUSSION & CONCLUSION

The characteristics of this TMD cohort include those typical of US patients with painful TMDs. Network practitioners typically managed TMDs using conservative treatments. This study provides credible data regarding painful TMDs and TMD management provided by network practitioners across the United States. Knowledge acquired of treatment recommendations and patient reports may support future research and improve dental school curricula.