MUSIC MEDICINE: AN ALTERNATIVE TREATMENT FOR MANAGING TMD SYMPTOMS

Alicia Howard, M-MT, PhD Candidate
University of Toronto, Faculty of Music
Student/Trainee

INTRODUCTION / AIM

This study examines the effectiveness of music as medicine for patients with Myofascial Pain TMD. The rationale for the use of music as a complimentary treatment for Myofascial Pain TMD is that TMD is a multi-factorial disease, which affects mood, depression, and pain levels of the patient; previous studies have demonstrated the effectiveness of music for managing these factors.

METHODS

Patients with myofascial pain were recruited from a hospital dental unit to participate in the study. Data analysis is based on 8 patients who completed the study. The study examines the effectiveness of two interventions: 1) vibroacoustic chair, Sound Oasis VTS1000 and 2) sessions of listening to self-selected music. Treatments were randomly assigned. The study consists of 4 assessments and 2 treatments with a 1-month washout period between treatments. Assessment 1 (serves as pre-test) occurs before 1st treatment. Assessment 2 (serves as post-test) takes place before 2nd treatment and lasts 45 minutes. Assessment 3 follows the washout period and assessment 4 (the final session) totals 60 minutes and includes a participant treatment review interview. Pre/post assessments are utilized as a means to examine change in pain at the level of each participant, mood levels, depression and the perception of quality of life.

RESULTS

For the preliminary analyses, information about the specific type of treatment was not available due to blinding. Treatment effects were assessed by comparing outcome measures before treatment periods (Time 1 & 3) to after treatment periods (Time 2 & 4). The preliminary results suggest an improvement in depression, before M = 2.52 SD = 0.71, after M = 2.29 SD = 0.66, Cohen's d = 0.35, retest r = 0.91, t(7) = 2.25, p = 0.0589. 7 out of 8 patients reported subjective improvement at the end of the study on the Glasgow Benefit Inventory, M = 0.3 SD = 0.25, Cohen's d = 1.2, t(7) = 3.4 p = 0.0114. Treatment does not appear to have a similar effect on self-reported pain levels, before M = 0.33 SD = 0.29, after M = 0.34 SD = 0.25, Cohen's d = -0.06, retest r = 0.76, t(7) = -0.20, p = 0.8508.

DISCUSSION / CONCLUSIONS

Results provide preliminary support for the effectiveness of music medicine in the treatment of TMD patients. Music medicine may have limited effects on pain sensations, but can help patients to better manage pain and improve their quality of life.
OTHER AUTHORS

Michael Goldberg; BSc, MSc, DDS, Dip Perio, FRCDC

Howard Tenenbaum; DDS, PhD, FRCDC(C), FICD

Denise Paneduro; MA, PhD Candidate

Bruce V. Freeman; D.D.S., D.Ortho., M.Sc.

Allan Gordon; MD, FRCPC

Lee Bartel, PhD

Kethmini Amarasinghe, BA