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Trigger-Point Self-Care for Chronic Neck Pain: Pilot and Feasibility

Massage is a non-pharmacological approach for neck pain with building evidence. Trigger points (TrPts) are thought to be associated with chronic neck pain (CNP) and can be treated with massage techniques. Due to massage's out-of-pocket costs, TrPt self-care (TrPtSC) may serve as a cost-effective treatment that may reach broader populations.

No study has examined a) feasibility of conducting TrPtSC training in a research setting, b) ability of such programs to meet stated training objectives, c) adherence to personalized TrPtSC plans, and d) TrPtSC outcomes for CNP.

A pilot observational, pre- post-intervention cohort study with 1-, 4-, and 8-week follow-ups was implemented. Participants: self-identified adults with CNP and Neck Disability Index (NDI) ≥ 4 . Measures: pre-/post-TrPtSC training objectives survey, TrPtSC daily self-report log, NDI and 11-point pain rating scale. Intervention: three-hour TrPtSC training with interactive lecture, demonstration, supervised practice, and private assessment with individualized TrPtSC plan development. Handouts and tools were provided for training and home TrPtSC. Participants documented their individualized TrPtSC plan adherence daily.

Five participants (women=3; ages 22-58; White=5) enrolled in the study and two separate group training sessions occurred (n=3 & 2, respectively). By the end of the TrPtSC training, all participants agreed or strongly agreed they achieved all intended training objectives. Baseline NDI categorized all participants as mild neck pain with disability (mean NDI=10.4 \pm 2.1). Week-1 follow-up: 1 participant had no NDI change, 1 participant worsened, and 3 reported 23-50% improvement. All participants had improved NDI at week-4 and week-8 compared to baseline. Three participants reported 23-30% improvement by study's end.

Our TrPtSC group training approach met objectives and our study design is feasible for larger scale trials. Results suggest TrPtSC may improve CNP outcomes. More robust studies with greater than mild neck pain and disability participants are needed to estimate effect sizes and adequately power larger comparison trials.