

Tinnitus-related distress and pain perceptions in patients with chronic tinnitus - Do psychological factors constitute a link?

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Abstract:

Objective: To investigate the co-occurrence of tinnitus-related distress and pain experiences alongside psychological factors that may underlie their association.

Method: Patients with chronic tinnitus (N = 1238) completed a questionnaire battery examining tinnitus-related distress and affective and sensory pain perceptions. A series of simple, parallel- and serial multiple mediator models examined indirect effects of psychological comorbidities as well as -process variables including depressivity, perceived stress and coping attitudes. Moderator and moderated mediation analyses examined differential relational patterns in patients with decompensated vs. compensated tinnitus. **Results:** There were significant associations between tinnitus-related distress and pain perceptions. These were partially mediated by most specified variables. Psychological comorbidities appeared to influence tinnitus-pain associations through their impact on depressivity, perceived stress, and coping attitudes. Some specific differences in affective vs. sensory pain perception pathways emerged. Patients with decompensated tinnitus yielded significantly higher symptom burden across all measured indices. Tinnitus decompensation was associated with heightened associations between [1] tinnitus-related distress and pain perceptions, depressivity and negative coping attitudes; and [2] most psychological comorbidities and sensory, but not affective pain perception. Moderated mediation analyses revealed stronger indirect effects of depressivity and anxiety in mediating affective-, and anxiety in mediating sensory pain perception in patients with decompensated tinnitus.

Conclusion: Psychological constructs mediate the co-occurrence of tinnitus- and pain-related symptoms across different levels of tinnitus-related distress. Psychological treatment approaches should conceptualize and address individualised interactions of common cognitive-emotional processes in addressing psychosomatic symptom clusters across syndromatic patients with varying distress levels.

Related links:

Online publication: [Tinnitus-related distress and pain perceptions in patients with chronic tinnitus – Do psychological factors constitute a link? \(nih.gov\)](https://doi.org/10.1371/journal.pone.0234807)

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