

Amsterdam University of Applied Sciences

The effect of musculoskeletal TMD-treatment for temporomandibular disorders on headache

a systematic review

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Publication date
2018

[Link to publication](#)

Citation for published version (APA):

van der Meer, H. A., Calixtre, L. B., Engelbert, R. H. H., Visscher, C. M., Nijhuis-van der Sanden, M. W. G., & Speksnijder, C. M. (2018). *The effect of musculoskeletal TMD-treatment for temporomandibular disorders on headache: a systematic review*. Poster session presented at World Congress on Pain from the IASP, Boston.

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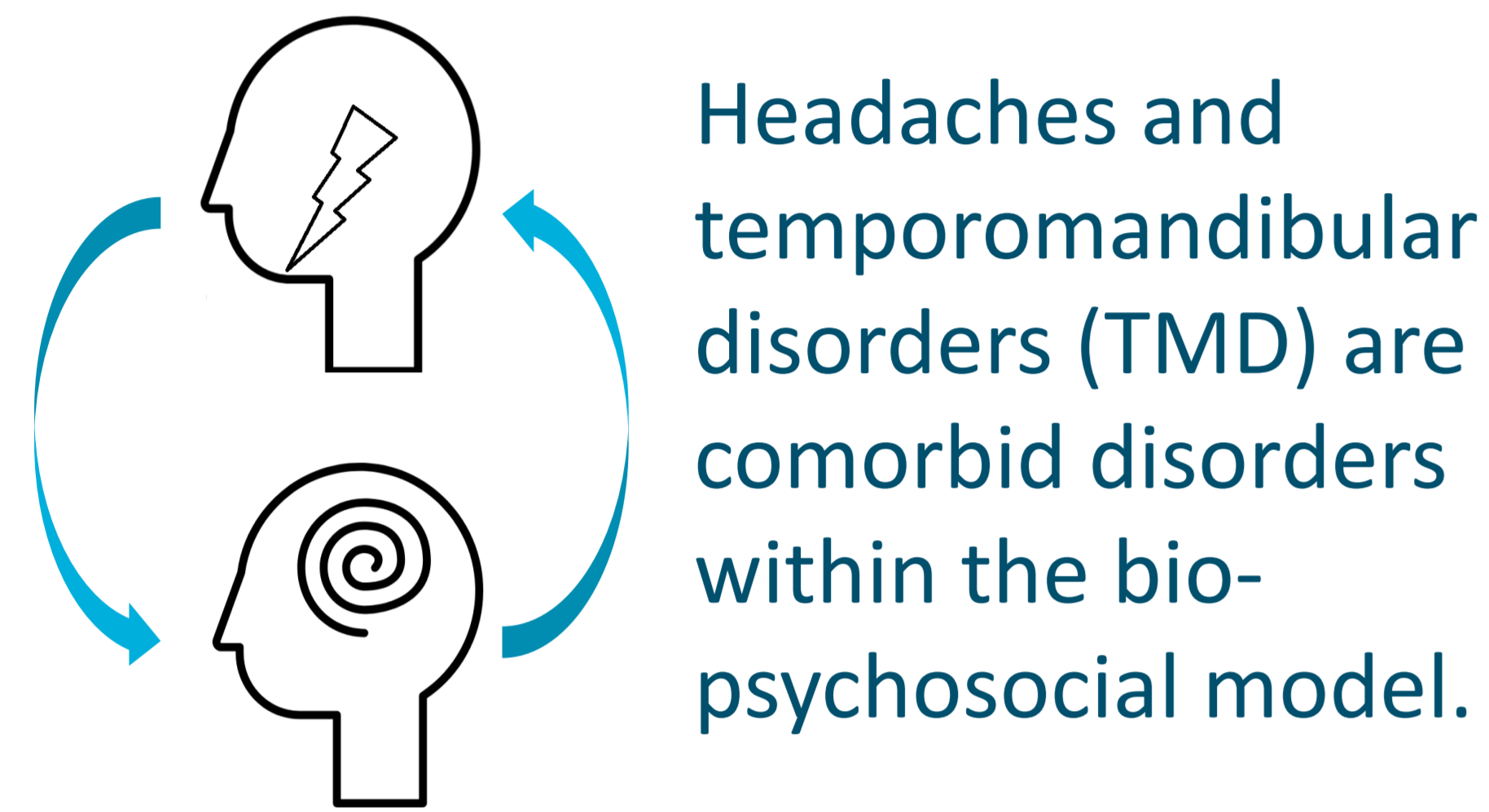
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The effect of musculoskeletal TMD-treatment for temporomandibular disorders on headache: a systematic review.

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Introduction



Headache and TMD have shared prognostic factors such as gender, psychosocial factors and bruxism.



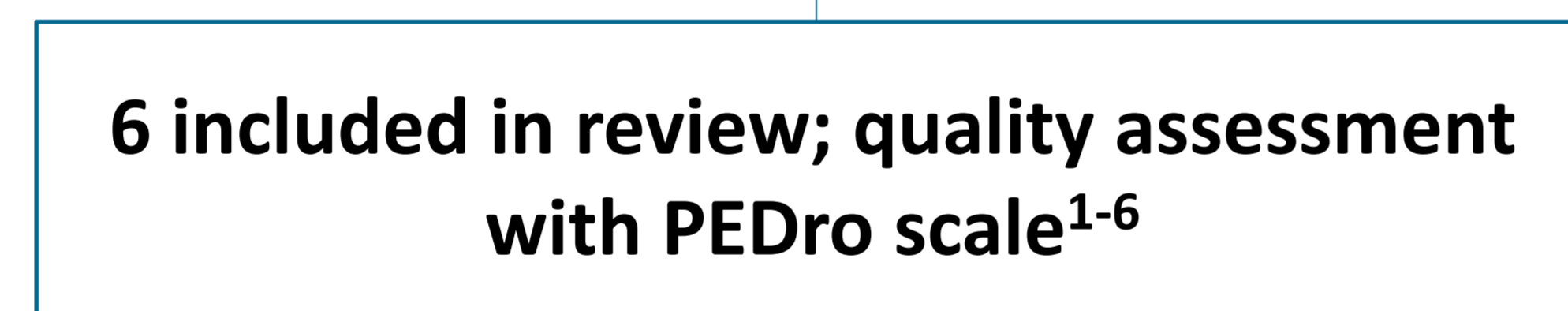
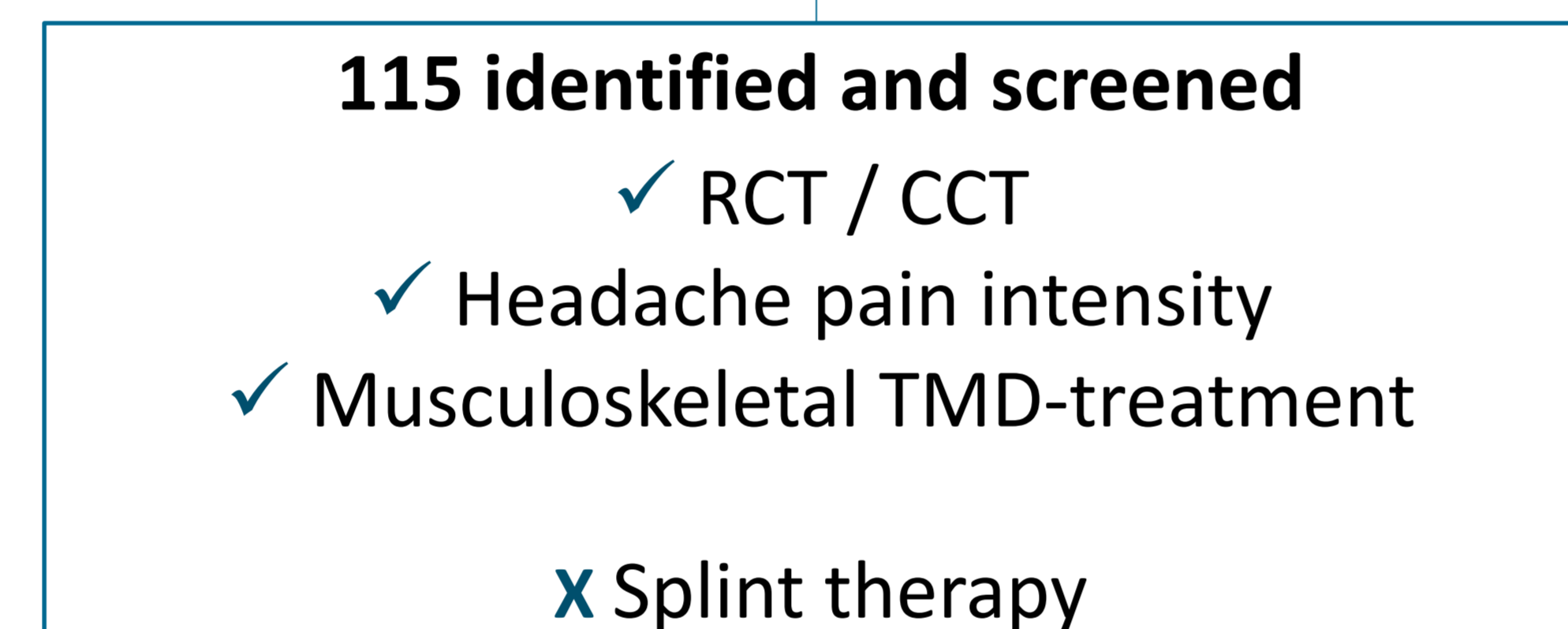
Will a musculoskeletal TMD-treatment decrease the headache?

AIM

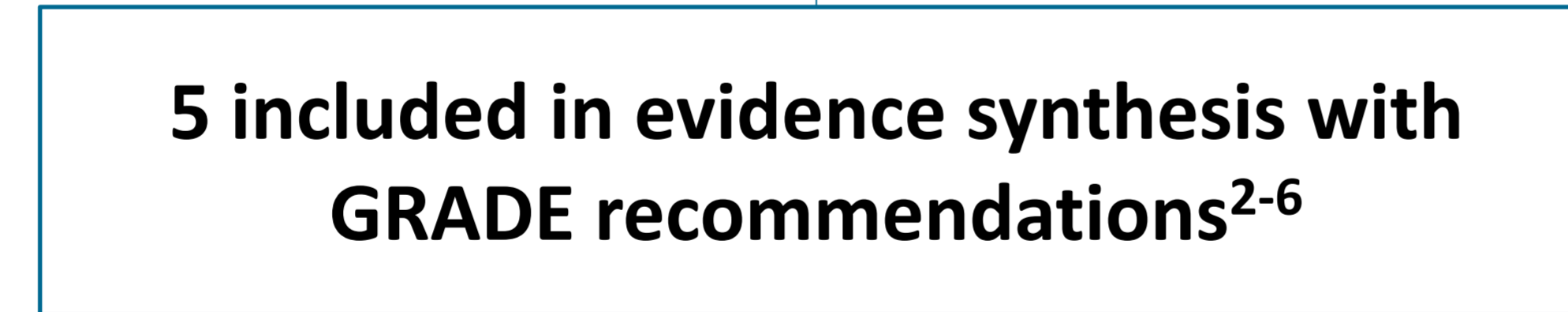
To systematically evaluate the literature on the effectiveness of musculoskeletal TMD-treatment on concomitant headache.

Methods

- Registration: PROSPERO (CRD42017062487)



≥4 PEDro score



References (bold references included in synthesis):

1. Krogstad ea *J Orofac Pain*. 1998;12:136-143
2. Costa ea *J Oral Facial Pain Headache*. 2015;29:323-330
3. Michelotti ea *J Orofac Pain*. 2004;18:114-125
4. Michelotti ea *JADA*. 2012;143(1):47-53
5. Maluf ea *J Manipulative Physiol Ther*. 2010;33:500-507
6. Von Piekartz & Hall *Man Ther*. 2013;18:345-350

TMD-treatment

	Biological	Psychosocial
Focus of therapy	Mechanical problems from the joints and / or muscles.	Psychosocial factors like stress and depression that are associated with perseverance of complaints.
Therapies in review	Manual therapy jaw / cervical spine; massage therapy; stretching; exercise.	Counseling, education, stress management.
Results	Biological focused (n=2)^{5,6} <ul style="list-style-type: none"> • Between-group effect size: 0.19 • High risk of bias • Very low level of evidence for no effect 	Psychosocial focused (n=3)²⁻⁴ <ul style="list-style-type: none"> • Between group effect size: 0.61 • High risk of bias • Very low level of evidence for a medium effect
	Overall TMD-treatment (n=5)²⁻⁶ <ul style="list-style-type: none"> • Between-group effect size: 0.32 • High risk of bias, high inconsistency • Very low level of evidence for no effect 	

TAKE HOME MESSAGE

- ✓ There is currently a very low level of evidence that counseling has a medium effect on headache complaints in patients with TMD.
- ✓ Future research should describe the efficiency of combined interventions within the biopsychosocial model and the underlying construct.