ACT for behaviour change in adults with poor oral health

Akademisk avhandling

som för avläggande av odontologie doktorsexamen vid Sahlgrenska akademin, Göteborgs universitet kommer att offentligen försvaras i Hörsal Arvid Carlsson, Academicum, Medicinaregatan 3, Göteborg, torsdagen den 10 juni 2021, klockan 09.00

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Avhandlingen baseras på följande delarbeten

- I. Werner, H., Hakeberg, M., Dahlström, L., Eriksson, M., Sjögren, P., Strandell, A., Svanberg, T., Svensson, L., & Wide Boman, U. (2016). Psychological interventions for poor oral health: A systematic review. *Journal of Dental Research*, 95(5), 506-514.
- II. Werner, H., Young, C., Hakeberg, M., & Wide, U. (2016). A behavioural intervention for young adults with dental caries, using acceptance and commitment therapy (ACT): treatment manual and case illustration. *BMC Oral Health*, 20(1), 233.
- III. Wide, U., Hagman, J., **Werner, H.**, & Hakeberg, M. (2018). Can a brief psychological intervention improve oral health behaviour? A randomized controlled trial. *BMC Oral Health*, *18*(1), 163.
- IV. **Werner, H.**, Hakeberg, M., & Wide, U. (2021). Long-term effect of a psychological intervention on oral behaviors and attitudes: a randomized trial. Manuscript.

SAHLGRENSKA AKADEMIN INSTITUTIONEN FÖR ODONTOLOGI



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Abstract

The aim of this thesis is to contribute to the knowledge about psychological methods for behaviour change in adults with poor oral health. Study I is a systematic review of behavioural interventions for individuals (≥ 13 years of age) with poor oral health. Study II presents an adaptation of the modern behavioural intervention of Acceptance and Commitment Therapy (ACT) to young adults with poor oral health. Studies III and IV are based on a randomized controlled trial (RCT) including 135 caries-active 18-25-year-olds in public dental care and evaluate the effect of the intervention developed in Study II. The intervention included two individual ACT sessions provided by a licensed psychologist in addition to oral health information, whereas the control group only received oral health information. The outcomes were oral healthrelated behaviours +2w and +18w after baseline, health attitudes and psychological flexibility +18w after baseline. Results: Study I included eleven publications based on nine RCTs in the review. The meta-analyses found little to no effect of the psychological interventions on oral health, oral health-related behaviours and attitudes. The statistically significant findings found in favour of psychological interventions were on plaque index, oral hygiene behaviours and toothbrushing self-efficacy. Studies on adolescents and patients with dental caries were missing in the literature. Study II presents the treatment rationale and manual for a brief ACT intervention for young adults with poor oral health. Study III found the intervention group to have improved significantly with regard to more oral hygiene behaviours than the control group, immediately after the intervention. Study IV found the intervention group to have significantly improved in more oral health-related behaviours than the control group, after 18 weeks. However, there were no significant differences between the study groups in the measured outcomes after 18 weeks. Psychological interventions have the potential to be effective at changing behaviours, but new and current behavioural interventions need to be developed and tested further in adult individuals with poor oral health.

Keywords: Behavioural interventions, Acceptance and Commitment Therapy, Oral health, Oral health behaviours, Attitudes, Young adults, Meta-analysis, Treatment manual, Randomized controlled trial

ISBN: 978-91-8009-268-5 (PRINT) http://hdl.handle.net/2077/68052

ISBN: 978-91-8009-269-2 (PDF)