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Format: Abstract

Effects on pain of a stepwise multidisciplinary intervention (STA OP!) that targets pain and behavior in advanced dementia: A cluster randomized controlled trial.

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Abstract

BACKGROUND: Pain in nursing home residents with advanced dementia remains a major challenge; it is difficult to detect and may be expressed as challenging behavior. STA OP! aims to identify physical and other needs as causes of behavioral changes and uses a stepwise approach for psychosocial and pharmacological management which was effective in improving challenging behavior.

AIM: To assess whether implementation of the stepwise multidisciplinary intervention also reduces pain and improves pain management.

DESIGN: In a cluster randomized controlled trial (Netherlands National Trial Register NTR1967), healthcare professionals of intervention units received the stepwise training, while training of the control group focused on knowledge and skills without the stepwise component. Observed and estimated pain was assessed at baseline and at 3 and 6 months post-intervention. Logistic generalized estimating equations were used to test treatment and time effects.

SETTING/PARTICIPANTS: A total of 21 clusters (single nursing home units) in 12 Dutch nursing homes included 288 residents with advanced dementia (Global Deterioration Scale score 5, 6, or 7): 148 in the intervention and 140 in the control condition.

RESULTS: The multilevel modeling showed an overall effect of the intervention on observed pain but not on estimated pain; Pain Assessment Checklist for Seniors with Limited Ability to Communicate-Dutch version, mean difference: -1.21 points (95% confidence interval: -2.35 to -0.06); Minimum Dataset of the Resident Assessment Instrument pain scale, mean difference: -0.01 points (95% confidence interval: -0.36 to 0.35). Opioid use increased (odds ratio = 3.08; 95% confidence interval: 1.08-8.74); paracetamol use did not (odds ratio = 1.38; 95% confidence interval: 0.71-2.68).

CONCLUSION: STA OP! was found to decrease "observed" pain but not estimated pain. Observing pain-related behavior might help improve pain management in dementia.

KEYWORDS: Pain; dementia; nursing homes; pain management; randomized controlled trial