



“Cost-effectiveness of Mindfulness-Based Interventions”

Day:
Thursday 12th July 2018

Time:
9:00 – 10:15 am

Track:
Clinical Applications

Symposium overview

Presenter 1 **Janneke Grutters** – An introduction to cost-effectiveness

Presenter 2 **Lotte Janssen** - Cost-effectiveness of MBCT added to treatment as usual for adults with ADHD

Presenter 3 **Félix Compen** - Cost-effectiveness of Face-to-face and internet-based Mindfulness-Based Cognitive Therapy compared to Treatment As Usual in reducing psychological distress in cancer patients

Presenter 4 **Gert Jan van der Wilt** - Discontinuation of antidepressant medication after mindfulness-based cognitive therapy for recurrent depression: a cost-effectiveness analysis

Chair: **Janneke Grutters**



Mindfulness-Based Cognitive Therapy versus treatment as usual in adults with ADHD: A cost-effectiveness study

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Background and objectives: Adult ADHD has a considerable economic impact and cost-effective interventions are needed to increase not only the health benefits but also offer value for money. Mindfulness-Based Cognitive Therapy (MBCT) is an innovative psychosocial intervention for adult ADHD. The cost-effectiveness of MBCT added to treatment as usual (TAU) versus TAU in adults with ADHD was examined.

Methods: An economic evaluation with a time horizon of 9 months was conducted from the societal perspective in the intention-to-treat sample. Costs were assessed with a self-report questionnaire. Outcomes were expressed in Quality Adjusted Life Years (QALYs) and response rate. Bootstrap simulations were performed to estimate mean costs, QALYs, response rate, incremental cost-effectiveness ratios (ICERs) and associated uncertainty. Additional sensitivity analyses were done.

Results: Societal costs were €3,572 for MBCT+TAU (n=47; 95% CI 2,416 to 4,995) and €3,389 for TAU (n=49; 2,327 to 4,763). Average QALYs were 0.542 (0.522 to 0.563) per patient for MBCT+TAU and 0.534 (0.511 to 0.556) for TAU. In MBCT+TAU more patients responded than in TAU (31% versus 6%; M bootstrapped difference 25%, 12% to 40%). ICERs were €21,963 per QALY gained and €389 per responder. At a threshold of €30,000 per QALY, the probability of MBCT being cost-effective was 51%. All sensitivity analyses showed more favourable results for MBCT+TAU.

Conclusion: In most analyses MBCT was found to be more costly and effective, particularly in terms of disease-specific outcome, than TAU. If the threshold exceeds €30,000 per QALY and €1,000 per responder, MBCT seemed cost-effective in treating adult ADHD.



Cost-effectiveness of Face-to-face and internet-based Mindfulness-Based Cognitive Therapy compared to Treatment As Usual in reducing psychological distress in cancer patients

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Background and objectives: Mindfulness-Based Cognitive Therapy (MBCT) has increasingly been offered in hemato-oncological settings as treatment for psychological distress. However, attending group-based MBI is not always feasible for cancer patients. Similar to group-based MBCT, internet-based MBCT (eMBCT) was recently found to be significantly more effective in reducing psychological distress compared to TAU. The first studies demonstrate a tentatively positive view of the economic potential of MBIs. However, these studies included homogeneous samples of breast cancer patients and an economical evaluation of eMBCT for distressed cancer patients is yet to be conducted. Therefore, the aim of the current study was to evaluate the cost-effectiveness of both MBCT and eMBCT compared to TAU.

Methods: In total, 245 cancer patients were randomly assigned to MBCT (n=77), eMBCT (n=90) or TAU (n=78). Dropouts from the interventions were significantly higher in the eMBCT than in the MBCT group. An economical evaluation with a time-horizon of 3 months was conducted from the societal perspective in the intention-to-treat (ITT) sample. Healthcare utilization was assessed in an interview using the Trimbos iMTA questionnaire for costs associated with psychiatric illness (TiC-P). Health-related quality of life (QoL) was measured using EuroQoL-5D and transformed into Quality Adjusted Life Years (QALY). Cost-utility from the societal perspective was calculated as the incremental sum of healthcare costs and productivity losses over change in QALY. The payer perspective only included healthcare costs.

Results: QoL increased from .75 (sd=.21) to .86 (.13) after MBCT, from .77 (.19) to .85 (.17) in eMBCT and remained stable during TAU, from .76 (.17) to .75 (.19). Healthcare utilization during the intervention period was higher in TAU (€1508 (€2430)) compared to MBCT (€772 (€860)) and eMBCT (€1124 (1807)). Work-related absence costs and both formal and informal productivity loss-related costs were higher in TAU compared to the two MBCT interventions (definitive results in preparation).

Discussion and conclusion: Quality of life was higher and costs were lower after MBCT and eMBCT compared to TAU, assessing dominance over TAU. Both MBCT formats seem to be cost-effective compared to usual care. Important limitations are the lack of follow-up data in the TAU group and the self-selected nature of the sample.



Discontinuation of antidepressant medication after mindfulness-based cognitive therapy for recurrent depression: a cost-effectiveness analysis

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Background: For patients with a history of several depressive episodes who are currently in full or partial remission while receiving maintenance antidepressant medication (mADM), switching to mindfulness-based cognitive therapy (MBCT) may be an attractive option. A key question is whether mADM can then be phased out without incurring the risk of recurrence or jeopardizing the patient's quality of life. Here, we report the results of an economic analysis conducted alongside an RCT addressing this issue.

Methods: Adult patients with recurrent depression in remission, using mADM for 6 months or longer and who were willing to switch to MBCT were randomly allocated to either discontinue or continue mADM. Quality adjusted life years (QALYs) and costs from a societal perspective were calculated and combined into an incremental cost-effectiveness ratio. A cost-effectiveness acceptability curve was constructed to estimate the probabilities of MBCT+Discontinuation being the more cost-effective option, given a range of Willingness To Pay rates for the gain of an extra QALY.

Results: Results suggest that MBCT+Discontinuation could be more effective in terms of QALYs, but also more expensive than MBCT+mADM. Differences were particularly observed in costs associated with inpatient and ambulatory care. However, differences were not significant, as differences within groups were large compared to the differences between groups. The probability that MBCT+Discontinuation is cost-effective compared to MBCT+mADM was estimated to be between 30% and 40%.

Conclusions: In patients who have experienced multiple episodes of depression who are currently in full or partial remission while receiving mADM, switching to mindfulness-based cognitive therapy (MBCT) resulted in a quality of life that is very much compatible with what is found in the general population. However, discontinuing mADM did not result in a significantly better quality of life as compared to continued mADM, while it tended to incur higher costs. From an economic perspective, the benefits that are associated with discontinuing mADM after starting MBCT do not seem to be outweighed by the associated costs.