The Two-Sided Face of Antidepressants: The Impact of Their Use on Real-Life Affective Change during Mindfulness-Based Cognitive Therapy

Jindra Myrthe Bakker, Ritsaert Lieverse, Nicole Geschwind, Frenk Peeters, Inez Myin-Germeys, Marieke Wichers.

Antidepressant medication (AD) is the most often used treatment for major depressive disorder (MDD), prescribed to an estimated 73.8% of the MDD patients in care in 2007 [1]. However, many patients with MDD who experience full symptomatic remission after AD treatment still have residual depressive symptoms, which have been associated with continued impaired functioning [2]. The sequential addition of psychotherapy to pharmacotherapy has therefore been considered, and shown, to offer a better possibility of improving long-term outcome in terms of reduced relapse/recurrence [3]. Since positive emotions play a crucial role in the development of long-term personal skills and resources through broadening awareness and behavioural repertoires [4], it is of interest to examine whether adding psychotherapy to AD treatment has beneficial effects on positive emotional experiences.

We explored this question in a randomized controlled trial of mindfulness-based cognitive therapy (MBCT) versus a waiting list control group (WLCG), based upon which it was previously shown that MBCT increases positive affect (PA) in people with residual depressive symptoms [5]. Participants in this randomized controlled trial were asked to continue any pharmacological treatment during participation in the study, hence providing us with a subgroup of people taking ADs. It was investigated whether this subgroup responded differently to MBCT treatment in terms of both PA and negative affect (NA).

Significant three-way interaction [MBCT/WLCG × time (pre/post) × AD (yes/no)] effects were found for both NA (b = –0.208, p = 0.001) and PA (b = –0.171, p = 0.031) and these effects remained significant after controlling for the interaction of antidepressant use with time and group (NA: b = –0.207, p = 0.002; PA: b = –0.187, p = 0.023). NA: When stratifying the analysis by use of ADs (i.e., two-way interaction: MBCT/WLCG × time), the impact of MBCT (compared to WLCG) on decrease in NA was stronger in AD+ (b = –0.424, p < 0.001) than in AD− (b = –0.216, p < 0.001). The results of the three-way interaction analysis (see above) indicated that this difference was statistically significant. PA: When stratifying the...
analysis by use of ADs, the impact of MBCT (compared to WLCG) on increase in PA was stronger in AD– (b = 0.543, \( p < 0.001 \)) than in AD+ (b = 0.372, \( p < 0.001 \)). The results of the three-way interaction analysis (see above) indicated that this difference was statistically significant.

The hypothesis concerning NA was therefore confirmed: MBCT with subjects taking AD (MBCT AD+) decreases NA more than only AD in combination with WLCG (WLCG AD+), indicating a beneficial effect of sequentially adding psychotherapy to AD. Additionally, the MBCT AD+, group showed a larger decrease in NA compared to people receiving MBCT while not taking AD (MBCT AD–). Hence it appears that AD and MBCT treatment have a synergistic effect in decreasing daily life negative emotions.

With regard to PA the hypothesis was additionally confirmed. Adding MBCT to AD (MBCT AD+) increased PA more than just AD in combination with WLCG (WLCG AD+), again indicating a beneficial effect of sequentially adding psychotherapy to AD. However, the MBCT AD– group showed a smaller increase in PA compared to people receiving MBCT while not receiving AD (MBCT AD–). These results are in line with the neuroimaging research showing that ADs seem to dampen the brain reward system responsible for the experience of these emotions [6].

In summary, sequentially adding psychotherapy to AD in the treatment of residual depressive symptoms seems beneficial in that it both decreases NA and increases PA. However, in terms of PA, the group that showed the largest increase were the participants without AD who received MBCT treatment. Since the generation of positive emotions is crucial in the initiation of a positive spiral towards recovery [4], long-term outcomes of this contingent inhibiting effect of AD on psychotherapy outcome in terms of PA will have to be investigated in more detail in experimental set-ups. If our findings are replicated it would implicate that the sequential addition of psychotherapy to AD could be less efficient than discontinuing AD before/during receiving psychotherapy especially for improving long-term outcomes.

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References


