COMPASSION, ACCEPTANCE AND MINDFULNESS FOR PSYCHOSIS: A REVIEW AND META-ANALYSIS

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ABSTRACT

Background: An increasing number of third-wave cognitive behavior (3rdW) interventions are being used with individuals with psychosis or schizophrenia however no meta-analysis has investigated their effectiveness. Objective: To evaluate the efficacy of 3rdW interventions for psychotic disorders in reducing distress and symptoms of psychosis and compare this with effect size analysis. Data sources: A systematic review of studies published in peer-reviewed journals in PsycINFO, PsycARTICLES, and MedLine from the first available date until March 14th, 2013. Review Methods: A total of 14 studies (n = 468) were included. Results: Effect-size estimates suggested that 3rdW interventions are moderately effective in pre-post analyses (r = 12; Hedge’s g = .52). When compared with a control group, we found a smaller effect size (r = 9; Hedge’s g = .35). The obtained results were maintained at follow-up when data were available (n = 6; Hedge’s g = .28). However, results suggested higher effects on negative symptoms compared with positive ones. Mindfulness, acceptance, and compassion moderately reduced the clinical effect size. However, heterogeneity was significant among the trials, probably due to the diversity of interventions and outcome assessed. Conclusion: 3rdW interventions are moderately effective in treating negative symptoms and can be useful adjunct to pharmacotherapy; however more research is warranted to identify the most effective elements of 3rdW interventions.

Introduction

Two recent systematic reviews found that meditation and mindfulness techniques are useful adjuncts to usual care for psychotic disorders in reducing distress, hospitalization rates, and increasing functioning, outcomes (Langer et al., 2012; Haddock and Sains, 2013). Another more general meta-analysis found that mindfulness generally moderate the effectiveness of mindfulness-based treatments for multiple psychiatric disorders and medical conditions (Khoury et al., submitted).

A growing number of interventions are using these emotion regulation strategies as well as compassion and acceptance with individuals with psychosis or schizophrenia under what is called third-wave CBT (3rdW) treatments; however, no meta-analysis has investigated their effectiveness. Moreover the role of mindfulness, compassion and acceptance components in these interventions remains unknown.

Method

Eligibility criteria

Based on the early state of the literature, any study examining the pre-post or controlled effects of a clinical intervention using one of the 3rdW strategies for any psychotic disorder was considered in our analysis. Studies were excluded if (1) they did not aim to examine treatment effects, (2) reported no clinical outcome, (3) separated information to compute an effect size (e.g., only follow-up data were available), (4) reported data that overlapped with the data from other included studies.

Search

We used the term mindfulness alone or combined with the term meditation or acceptance or de-acceptance and combined with the terms psychosis or psychotic or psychoses/acceptance.

Risk of bias in individual studies

We assessed the characteristics of data collection:

- All outcomes were included, namely positive symptoms, negative symptoms, affective symptoms, thought disorder, functioning, re-hospitalization, quality of life, and mindfulness/acceptance/comparison.
- A study quality score was created based on: adherence of the treatment to an established protocol (ACT, MBCT, LMK, CBT or CBT with mindfulness/acceptance), administration of measures at follow-up, use of validated mindfulness/acceptance/comparison measures, clinical training of therapists, quality of RCT (blind, control condition, randomization...).

Results

Results suggest higher effects in pre-post analyses (r = 12; Hedge’s g = .52, 95% CI [.40, .64], p < 0000) in comparison with controlled analyses (n = 7, Hedge’s g = .41, 95% CI [.23, .58], p < .0000), however heterogeneity was moderate to high, suggesting caution in drawing definite conclusions.

Higher effects were also found for negative symptoms compared with positive ones in both the pre-post and controlled analyses with moderate heterogeneity.

Acceptance-based treatments showed higher effects (r = 5; Hedge’s g = .59, 95% CI [.46, .76], p < 000) in pre-post analyses but not in controlled ones (r = 4, Hedge’s g = .35, 95% CI [.12, .58], p < .005). The type of the control treatment (waitlist, TAU, or active treatment) might have played a role in that difference.

Pre-post analyses at follow-up support maintenance of the effects; however heterogeneity was very high making it difficult to draw definite conclusions about the long term effectiveness of the interventions. Only three controlled trials had follow-up data available so statistical power was even lower in this analysis.

At the end of treatment, the average pre-post effect size of clinical outcomes was positively moderated by the effects on mindfulness outcomes (r = 5; β = .31, SE = .11, p < .005). The effects on acceptance outcomes, without reaching significance perhaps due to lower statistical power for this analysis (r = 3; β = .14, SE = .21, p = .22, ns), and strongly by the effects on 3rdW strategies combined (n = 6; β = .52, SE = .13, p < .0000). Only one study used a measure of compassion, rendering it impossible to verify whether compassion separately was a moderator of the clinical effect size. Finally, the effect size on clinical outcomes was very high and moderated by the study quality score (p = .47, ns).

Conclusion

This meta-analysis examined 14 studies with a combined total of 668 inpatients or outpatients with different psychotic disorders. The results showed that 3rdW interventions are moderately effective in pre-post studies. When compared with a control group (waitlist, TAU, or other treatments), the effect sizes were moderate to small. Even though 3rdW interventions do not target symptoms reduction but distress resulting from these symptoms, results showed that 3rdW interventions were moderately effective in reducing negative and affective symptoms and in increasing functioning and quality of life.

For individuals with the largest effects, further studies with larger sample sizes are needed to confirm the results. The current meta-analysis provides a useful summary of the existing research and suggests that 3rdW interventions are promising and have potential for future research.