ACT with Chronic Illnesses

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Background

ACT has proven successful in managing chronic pain (McCracken et al., 2006[1]), smoking (Gifford et al., 2004[2]), substance use (Hayes et al., 2004[3]), anxiety and depression (Ost, 2014[4]), and somatic problems (A-Tjak et al, 2015[5]).

Recently, our team conducted a randomized controlled trial of a manualized ACT intervention vs supportive psychotherapy for individuals living with HIV/AIDS and depressive symptoms (ACT with HIV).

Concurrently, our team conducted an open trial of ACT adapted for people living with cystic fibrosis (ACT with CF), delivered in person or via telehealth.

In addition, we applied a similar 6-week intervention, loosely based on our above manuals, to a single case study of a patient with end-stage pancreatic cancer (ACT with PanCan).

All three of these chronic illnesses are typically associated with painful inner experiences, including anxiety, depression, and shame, the latter of which patients often seek to avoid via medication non-adherence, non-disclosure of illness, and other maladaptive avoidance practices. Therefore, ACT, with its focus on acceptance of painful inner states in the service of increasing psychological flexibility and valued living, seems an ideal treatment for people experiencing these chronic heath conditions.

Methods

ACT with HIV: 54 patients (28 women) with HIV/AIDS were recruited from Drexel's Center City Clinic for Behavioral Medicine, with a BDI-II score of 13 or greater. Patients were randomly assigned to 6 weeks of either the ACT with HIV[6] protocol or TAU. Participants completed self-report questionnaires at the time-points indicated in Study Procedures.

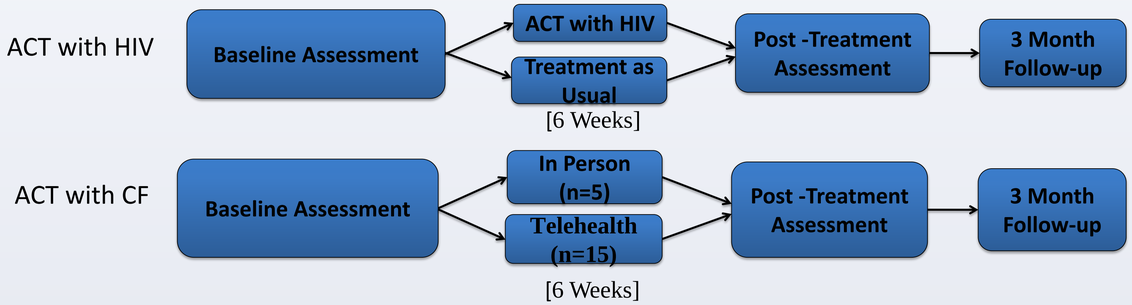
Measures: Participants completed the Beck Depression Inventory (BDI-II[7]), Beck Anxiety Inventory (BAI[8]), Internalized Shame Scale (ISS[9]), HIV and Abuse Related Shame Inventory (HARSI[10]), Cognitive Fusion Questionnaire (CFQ-13[11]) at baseline, end of treatment (6 weeks), and at 3 month follow-up.

ACT with CF: 20 patients with cystic fibrosis (13 women) were referred from Drexel's Adult CF Clinic and given 6 weeks of ACT with CF[12] protocol, either in person or via HIPPA-compliant WebEx webcam, at the patient's choice (15 chose telehealth.

Measures: Participants completed the BDI-II[7], BAI[8], and CFQ-13[11] at baseline, end of treatment (6 weeks), and at 3 month follow-up. Lung function was assessed by FEV_1/FVC ratio at 3 months pre- and 3 months post-study.

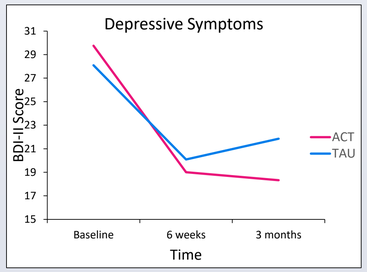
ACT with PanCan: This single case study was of a 54 year-old Caucasian divorced mother who was referred for support during end-stage pancreatic cancer. She received 5 sessions of a less structured ACT intervention, guided by our manuals.

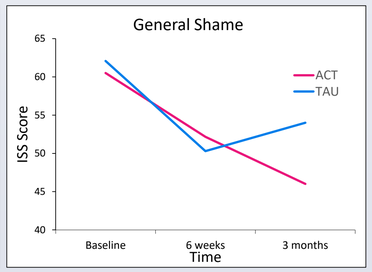
Study Procedures

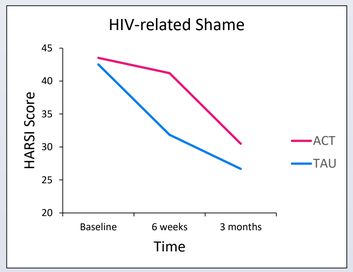


Results

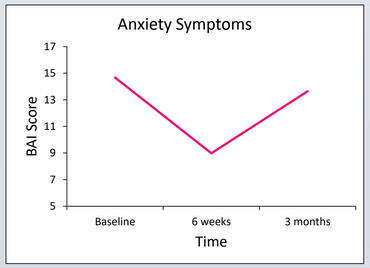
ACT with HIV

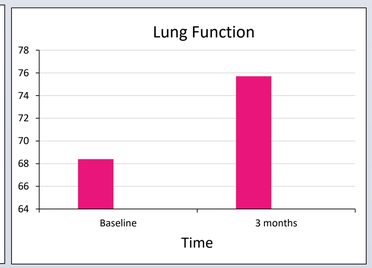


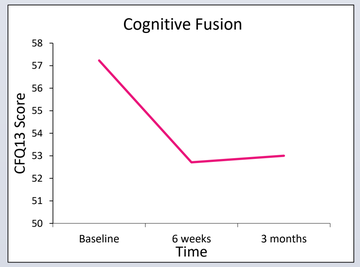




ACT with CF
no sig diffs in person vs telehealth







ACT with Pancreatic Cancer

Session	ACT Targets	Clinical Examples
1	Creative hopelessness, identification of values & obstacles	Binder in face: Pt acknowledged avoidance of feeling depressed & anxious, avoiding thinking about cancer, & informing only her son of her diagnosis. Values card sort: Pt identified values of being a loving mother & grandmother, having close relationships, & being responsible. Pt is skeptical of treatment & engages primarily in avoidant coping.
2	Acceptance, being present with emotions & committed action	Pt hosted her granddaughter for a sleepover & brass band. Pt was able to be present in session with emotions associated with her own mortality. Tp encouraged prioritizing committed action in the service of her values during the time she has left. Pt identified wanting to spend time w/her son.
3	Contact with the present moment & committed action	Pt arranged time off work to visit her son. Tp encouraged pt to be present with emotions associated with the thoughts "I don't' have much time left", and "I don't believe in God since cancer" Pt was present with emotions regarding urges to discontinue cancer treatments. Tp encouraged patient to take committed action in the service of her value of investing in relationships.
4	Defusion & acceptance	Pt spent holidays with family. Pt took committed action steps: planning to disclose her diagnosis to her girlfriends & daughter; planning to see an attorney to get will in order. Pt voiced accepting that remission is no longer possible & was present with associated emotions. Tp used defusion strategies re. pt's strong belief that her "cancer is a punishment from God". Tp encouraged patient to talk with her priest. Pt demonstrated more psychological flexibility: rather than quitting chemo altogether, she is engaging in treatment as a form of palliative care.
5	Acceptance & committed action	Pt informed her girlfriends & co-workers about her diagnosis & prognosis. Pt noticed feeling "less depressed and emotional" and "more grounded". Pt contacted her priest and discussed her plan to re-engage with her Catholic faith. Pt again voiced accepting that remission is impossible & was present with associated emotions. Pt reflected on proud moments, regrets, & hopes for her remaining time. Pt planned to engage in cancer treatments as a means of palliative care.

Conclusions

- ACT was associated with decreased depression, anxiety, shame, cognitive fusion, and increased engagement among patients living with HIV (ACT with HIV), Cystic Fibrosis (ACT with CF), and Pancreatic Cancer (ACT with PanCan).
- Manualized ACT was well-received by our patients living with HIV and our patients living with Cystic Fibrosis.
- Retention has been high, with nearly all patients requesting a continuation of ACT beyond the 6 scheduled sessions.
- Telehealth was particularly well-received for our CF population, who may not live near clinic, and/or may fear exposure.
- No differences were found on any measures between telehealth- and in-person-delivered ACT with CF. Moreover, telehealth was a popular, feasible and effective modality for delivering brief ACT interventions to patients whose chronic health conditions may prevent them from attending in-person sessions.

Future Directions

- Applications of manualized ACT to other chronic illnesses, including other cancers, diabetes, and COPD.
- Delivery of manualized ACT interventions via telehealth to a larger sample of patients to examine efficacy.
- Examination of the mechanisms by which ACT might improve lung function among CF patients (e.g., by increasing medication adherence)
- Delivery of ACT with CF to patients further along in their disease progression, including those awaiting lung transplantation.

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Acknowledgements

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