

APPLICATION OF ACT TO CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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INTRODUCTION

This poster presents a preliminary conceptualization of how ACT could be applied in a psychosocial intervention for people with COPD as part of a larger pulmonary rehabilitation program.

What is COPD?

➤ **Chronic obstructive pulmonary disease (COPD)** is characterized by progressive irreversible airflow limitation, lung hyperinflation, and frequent respiratory tract infections [1].

➤ COPD is the **world's fourth leading cause of mortality** and a leading cause of hospital admission and readmission [1,2], thus, a huge burden on the healthcare system, patients and their families.

➤ The primary risk factor is smoking (≈87% of all cases) [3]

➤ The **main symptom is persistent shortness of breath** (dyspnea) and **fear** of this: Many patients get stuck ("fused") in their symptoms and illness self-concept and caught in a downward spiral of symptom (dyspnea) avoidance → isolation → physical deconditioning → increased dyspnea → depression, anxiety → decreasing quality of life.

Improving Psychosocial Interventions for COPD

➤ Identifying ways to improve treatment interventions that promote adaptation, functioning, and quality of life in COPD is vital.

➤ We believe that **Acceptance and Commitment Therapy's (ACT)** theoretical framework and clinical intervention strategies [4] can promote better functioning and quality of life for people living with COPD.

➤ To our knowledge **no application of ACT for COPD exists** in the literature.

Some Similarities Between Living with Chronic Pain and Living with Persistent Dyspnea

➤ Both symptoms can be affected by physical activity, emotions, cognitions

➤ Symptom avoidance and control are prevalent attempts to cope with both

➤ It is patients' relationship with and responses to pain and dyspnea, not these symptoms themselves, that can lead to poor functioning and quality of life

➤ **Therefore, we have drawn upon some theory and clinical strategies found in the literature on ACT for chronic pain [5-7] to develop an ACT-based intervention for COPD**

OBJECTIVE

Our objective is to present some preliminary ideas on how ACT's theoretical framework and clinical intervention strategies can be applied and contribute to psychosocial interventions that promote better functioning and quality of life for people living with COPD

THEORETICAL BASES OF ACT FOR COPD

Experiential Avoidance in ACT

➤ Is when a person is unwilling to experience her or his own private, emotions, thoughts, or bodily sensations [4] (e.g., dyspnea)

➤ May provide relief in the short term, but can increase suffering, restrict functioning and quality of life in the longer term [4,5,7]

Emphasis on Function over Form of Symptoms

➤ Consistent with *functional contextualism* (with its focus on the whole event, within a context, and emphasis on pragmatic truth criterion) [4], the function of symptoms (e.g., dyspnea) is more important than symptom features or form

Use of Values

➤ In ACT, the client's own values serve as a meaningful context to motivate action, to engage in and adhere to health promoting behaviors, and to promote quality of life [4,5,7]

➤ We find the *Motivational Interviewing* approach [8] to be highly consistent and useful with a client values-focused approach in ACT for chronic illness

Promotion of Psychological Flexibility

➤ Psychological flexibility is believed in ACT to be key to functional adaptation, vitality, and living a rich and meaningful life [9]

➤ Psychological flexibility is based on mindfulness (**defusion** from thoughts, **acceptance** of inner experience, **connection** to present experience through the senses, **self-as-context**), values clarification, and commitment to valued action [4,9]

PROPOSED CLINICAL INTERVENTIONS

The following ACT-based psychosocial interventions were developed to be provided as part of a hospital-based interdisciplinary pulmonary rehabilitation group program for COPD

Assessment

➤ **Focus on patient's relationship with her or his dyspnea:** is there fear-based experiential avoidance of physical activity, social interaction, and certain places related to dyspnea or other disease-related factors?

➤ Explore how much the patient struggles and tries to control dyspnea and how well this is working (creative hopelessness [4] is an intervention that can be used here to help the patient assess and let go of the struggle to control and avoid dyspnea)

The Function (or Use) of Dyspnea

➤ Psychoeducational discussion about the **function** (vs. control) of **dyspnea:** It is a useful signal the body is sending to inform persons of something (e.g., need to pause or slow down, that an infection is starting, that they are stressed) that they can respond to behaviorally. Dyspnea is not dangerous and can be used well rather than avoided.

PROPOSED CLINICAL INTERVENTIONS...

The Experience of Dyspnea "As it is"

➤ Introduce patients to and guide experiential learning of **mindfulness** for several targets initially (e.g., sound, sight, taste, or smell).

➤ Then, help patients **apply mindfulness to dyspnea:** Experiencing shortness of breath through the senses *as it is* as opposed to experiencing it *as the mind has come to conceptualize it* through the underlying processes of verbal relating.

➤ In pulmonary rehab, patients have ample opportunity to practice mindfulness of dyspnea during their endurance training sessions in physiotherapy which serve as a form repeated exposure.

➤ **Defusion techniques** can be taught to defuse from the verbally constructed catastrophic associations of dyspnea: e.g., "I can't breathe" is replaced by "I notice I am having sensations of shortness of breath."

➤ **Acceptance** is presented as a useful more functional stance towards symptoms than control or avoidance [5]

➤ Acceptance can lead to increased flexibility to pursue valued living [9]

➤ **Self as context** or as observer can be a useful perspective from which to relate to or live with COPD and its symptoms. Metaphor can be presented to convey this such as the patient living as the sky as opposed to weather systems [10] (symptoms) that come and go: their disease is not them.

Exploration and Identification of Values

➤ A focus on uncovering what a person values currently in their life can serve as a context for the effort needed to pursue and adhere to health promoting actions and behaviors [4,5,7]. Identifying the valued directions the person wants to work towards and the specific action steps (or tasks) to start with motivates and empowers.

➤ Many valued aspects of a person's life can emerge that do not depend on or require physical capacities (most limited by COPD), such as appreciation and interest in others, humor, spirituality, friendship...

➤ Creative problem solving and flexibility can allow people with physical limitations to pursue valued activities: e.g., A lady with COPD who could no longer bowl adopted the role of treasurer, organizer, and contact person for her team; a man who had a large garden transformed it into a balcony garden with several potted plants on tables to continue caring for and enjoying his plants.

EMPIRICAL FINDINGS

There is a growing body of research findings that support ACT for chronic pain [5-7,11-14] and we believe that some of the interventions for pain may be useful in promoting better functioning, greater psychological flexibility, valued living, and increased quality of life for people with COPD.

CONCLUSIONS

➤ COPD is a prevalent health concern whose main symptom is shortness of breath and fear of this often resulting in experiential avoidance and decreased quality of life (depression and anxiety)

➤ We have presented how ACT's theoretical basis and clinical intervention strategies, applied with good outcomes to people living with chronic pain, could promote improved functioning, valued living, and quality of life in people living with COPD

➤ To our knowledge this is the first application of ACT to living with COPD

➤ Research will be required to determine if ACT interventions provided in the context of pulmonary rehabilitation can effectively promote improvement functioning and quality of life in COPD, as they have been shown to do with chronic pain

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