

Breaking the cycle of mental health-driven frailty in cancer survivors: The role of functional training and relaxation exercises

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Dear Editor,

We would like to share our experience with the *Psychiatria Danubina* audience regarding the potential benefits of task-oriented functional training combined with relaxation exercises in addressing frailty exacerbated by mental health challenges, particularly in older cancer survivors. Frailty is a complex and multifaceted issue often worsened by anxiety, depression, and reduced physical activity, which together form a self-perpetuating cycle of physical decline and emotional distress. This relationship between mental health and frailty is particularly evident in cancer survivors, whose psychological well-being often suffers as a result of their diagnosis and treatment (Wang et al., 2022).

We recently encountered a case that demonstrated the impact of frailty driven by poor mental health and how targeted interventions were efficient in breaking this cycle. This study was approved by the institutional ethical committee on human subjects (04/018/2024/ISRB/PGSR/SCPT) and according to Helsinki Declaration of 1995 (revised in Edinburgh 2000). Procedure of the study was explained to the patient and her caregiver and written informed consent was obtained. A 63-year-old female breast cancer survivor, who had undergone surgery and chemotherapy, was referred to the physiotherapy department to improve her physical activity level. During the initial evaluation, we used the Cancer-Specific Geriatric Assessment (CSGA), which included assessments for functional mobility using the Timed Up and Go (TUG) test, the Hospital Anxiety and Depression Scale (HADS), and the Social Activities Limitation measure was used to evaluate her mental health and quality of life. The assessments revealed significant impairments in functional mobility, with the patient reporting symptoms of depression, anxiety, and a reduced motivation to engage in physical activity, all of which contributed to her frailty.

This is consistent with existing evidence showing that older adults with poor emotional health are less likely to engage in physical activities, thereby increasing their risk of frailty. Mental health symptoms, such as depression or anxiety, may prevent patients from participating in social or meaningful activities, further contributing to isolation and physical inactivity (Gilmore et al., 2021). Similarly, frailty may exacerbate mental health conditions, creating a negative feedback loop that worsens both physical and emotional outcomes (Lund et al., 2020).

To counteract this cycle, we initiated an 8-week functional task-oriented training program, complemented by relaxation exercises and motivational techniques, which focus on real-world tasks and meaningful activities. This combined approach aimed to improve physical function by simulating daily tasks that cancer survivors typically struggle with, such as standing, walking, or carrying items. Moreover, these interventions target physical frailty while also promoting emotional engagement, fostering a sense of independence and self-efficacy. The inclusion of relaxation exercises such as abdominal breathing and Jacobson's guided relaxation technique helped manage anxiety and stress, which are often comorbid with frailty, and the motivational techniques supported sustained participation, addressing the mental and emotional barriers that often prevent cancer survivors from engaging in physical activity (Glinac & Sinanović, 2024).

At the end of the 8-week program, her physical performance improved, as did her mental health, with reduced symptoms of anxiety and depression. The patient's CSGA scores showed significant improvements with a p value <0.005 indicating the efficacy of positively influencing mental health related frailty through functional task-oriented training and relaxation exercises. These results suggest that addressing the underlying emotional health issues can significantly enhance the effectiveness of interventions aimed at reducing frailty.

Studies also suggest that combining physical rehabilitation with psychological support can lead to better overall outcomes for frail older adults. Older cancer survivors, especially those undergoing treatment, may find it difficult to engage in activities that promote physical and mental well-being. Understanding the mechanisms of this relationship could lead to refined interventions that combine both mental health and frailty management, offering a holistic approach to patient care (Erić & Petek Erić, 2024). This case underscores the importance of integrating physical and mental health interventions in the treatment of frailty in older cancer survivors. By addressing both the psychological and physical aspects of frailty through functional training, we can improve the overall well-being and quality of life in this population (Balog et al., 2024).

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