



Service Priorities and Programmes
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The effectiveness of integrative non-pharmacologic interventions for breathlessness in oncological and palliative care: An evidence-based pilot program

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Introduction

Breathlessness is one of the most commonly reported symptoms in lung cancer. It is an extremely distressing symptom and can completely dominate a patient's life, causing physical disability, loss of independence and psychosocial distress. The main approaches for breathlessness management in context of lung cancer include anti-cancer treatments, drugs and oxygen therapy. However, overall breathlessness is still difficult to manage. As breathlessness is defined as a subjective experience which arises from interactions among physiological, psychological, social and environmental factors, the evidence of non-pharmacological approaches for breathlessness is accumulating.

Objectives

To design, implement and evaluate a multi-centre interventional trial in breathlessness, and to suggest a standardized, rational approach to non-pharmacological breathlessness program with reference to recent evidences and National Cancer Research Institute.

Methodology

A pretest–posttest design was employed. Patients with diagnosis of lung cancer who were experiencing the symptom of breathlessness for not less than one month after completion of any active treatment (e.g., chemotherapy, radiotherapy or surgery) were recruited. The interventions consisted of a range of strategies, including physical, behavioural, psychological support and educational components such as breathing control, activity pacing, relaxation techniques, anxiety management, use of handheld fan. The patients were empowered through the educational booklet.

Result

36 patients were recruited (27 male, 9 female; mean age: 70.1±6.7; mean Karnofsky Performance Scale score: 56.6±9.4; 34 in-patient, 2 out-patient). 17 completed the whole program. Pair t-test showed significant improvement in breathlessness at rest by 64% ($p<0.05$), breathlessness at worst by 52% ($p<0.001$), resting respiratory rate by 20% ($p<0.05$), symptom-related distress by 37% ($p<0.001$) and quality of life (health domain) by 26% ($p<0.05$) after the completion of program. In addition, a significant correlation (Pearson's $r=0.55$, $p<0.001$) between breathlessness and symptom-related distress was observed during the study which has not been explored in literature. Lung cancer patients suffering from breathlessness appear to benefit from this integrated approach. Oncological and palliative care teams are recommended to explore the potential of adapting similar approaches.