

## ABSTRACT

**Title:** Use the fan to control Dyspnea in Patients with Advanced Cancer. Work Center: Foundation Pio XII - Hospital cancer Barretos - Sao Paulo - Brazil

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**Introduction:** Patients with advanced cancer have a variety of symptoms which dyspnea is one of the most common symptoms that compromise the quality of life of these patients. It is a difficult symptom to manage because of its complex biopsychosocial etiology. Current palliative strategies by pharmacological methods are partially effective in the management of this symptom due to the undesirable side effects of drugs. Therefore, it is very important to provide patients with non-pharmacological approaches for the dyspnea control. The use of the fan directed to the face considered a non-pharmacological method, but there is little evidence in the literature. **Objective:** This study was proposed to evaluate the effectiveness of the fan directed to the face in relief of dyspnea in patients with advanced cancer in a palliative care unit. **Methods:** We included 34 patients with head and neck cancer, digestive low, upper gastrointestinal, breast and lung with multiple metastases, which had grade IV dyspnea. It was positioned with the fan airflow directed to the patient's face. The intervention lasted five minutes, which were recorded degree of dyspnea, according to a numeric scale, SpO<sub>2</sub>, HR and RR before, immediately after and 15 minutes after. **Results:** It was found a statistically significant difference in dyspnea reported by the patients during the study period ( $p < 0.05$ ). Regarding the parameters listed SPO<sub>2</sub>, HR, and FR over the period of study, a statistically significant difference was observed ( $p > 0.05$ ). Anemic patients showed significant improvement of dyspnea. There was no difference between the improvement in breathlessness in patients using or not oxygen. Instead, it was observed that use of opioids associated with fan generated better results related to dyspnea. **Conclusion:** The air fan flow directed towards the face for 5 minutes reduces the intensity of dyspnea in patients with cancer in palliative care. But it showed no significant difference between SpO<sub>2</sub>, RR and HR throughout the study. We found that anemic patients with shortness of breath benefit from this therapy. We suggest that oxygen therapy during the fan therapy does not interfere in the results as long as the patients are using oxygen before dyspnea report. It was observed that use of opioids in combination with fan generates better results related to breathlessness, thus interfering in the isolated fan therapy.

**Keywords:** Dyspnea; Fan; Cancer; Palliative care