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ABSTRAK

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Penerapan *Pursed Lip Breathing Exercise* Terhadap Saturasi Oksigen dan Frekuensi Pernapasan pada Pasien Penyakit Paru Obstruktif Kronis di Ruang Mawar RSUD Dr. Adhyatma, MPH Provinsi Jawa Tengah

Pendahuluan: Penyakit Paru Obstruktif Kronis (PPOK) merupakan penyakit paru progresif yang mengancam nyawa dengan mordibitas dan mortalitas yang tinggi. Gejalanya berupa batuk, sesak napas, dan meningkatnya produksi sputum yang menyebabkan masalah pada pola napas dan bersihan jalan napas. Intervensi nonfarmakologis yang dapat digunakan untuk mengurangi frekuensi pernapasan dan meningkatkan saturasi oksigen pada pasien PPOK salah satunya latihan napas dengan mengerutkan bibir (*pursed lip breathing exercise*). Studi kasus ini bertujuan untuk mengetahui penerapan *pursed lip breathing exercise* terhadap saturasi oksigen dan frekuensi pernapasan pada pasien PPOK.
Metode: Studi kasus ini menggunakan metode asuhan keperawatan berdasarkan *evidence-based practice* (EBP) pada 1 pasien PPOK dengan masalah keperawatan pola napas tidak efektif, bersihan jalan napas tidak efektif, dan defisit nutrisi. Implementasi keperawatan yang dilakukan adalah penerapan *pursed lip breathing exercise* dengan pengukuran SpO2 dan RR sebelum (*pretest*) dan (*post-test*). Penerapan *pursed lip breathing exercise* dilakukan selama 3 hari dengan durasi 15 menit.
Hasil: Hasil studi kasus ini menunjukkan bahwa penerapan *pursed lip breathing exercise* merupakan intervensi nonfarmakologis yang efektif untuk meningkatkan saturasi oksigen dan menurunkan frekuensi pernapasan pada pasien PPOK.
Simpulan: Penerapan *pursed lip breathing exercise* efektif untuk meningkatkan saturasi oksigen mencapai 98% dan menurunkan frekuensi pernapasan mencapai 20x/menit. Perawat diharapkan dapat menerapkan intervensi nonfarmakologi *pursed lip breathing exercise* untuk meningkatkan saturasi oksigen dan mengurangi frekuensi pernapasan pada pasien PPOK.

Kata Kunci: *Frekuensi Pernapasan, PPOK, Pursed Lip Breathing Exercise, Saturasi Oksigen*

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ABSTRACT

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The Implementation *of Pursed Lip Breathing Exercise* on Oxygen Saturation and Respiratory Frequency in Patients with Chronic Obstructive Pulmonary Disease in the Rose Room of Dr. Adhyatma Hospital, MPH Central Java Province

Introduction: Chronic Obstructive Pulmonary Disease (COPD) is a life-threatening, progressive lung disease with high morbidity and mortality. The symptoms include coughing, shortness of breath, and increased sputum production, which cause problems with breathing patterns and airway clearance. Nonpharmacological interventions that can be used to reduce breathing frequency and increase oxygen saturation in COPD patients include *pursed lip breathing exercises*. This case study aims to determine the implementation of *pursed lip breathing exercise* on oxygen saturation and respiratory frequency in COPD patients.
Methods: This case study employed evidence-based practice (EBP) nursing care methods in a patient with COPD who exhibited ineffective breathing patterns, inadequate airway clearance, and nutritional deficits. The implementation of nursing carried out involves the application of pursed lip breathing exercises, with SpO2 and RR measurements taken before (pre-test) and after (*post-test*). The pursed lip breathing exercise was applied for 3 days, with a duration of 15 minutes each day.
Results: The results of this case study demonstrated that the implementation of pursed lip breathing exercises is an effective nonpharmacological intervention for increasing oxygen saturation and reducing respiratory frequency in COPD patients.
Conclusion: The implementation *of pursed lip breathing exercise is effective in increasing oxygen saturation by up to 98% and decreasing breathing frequency by 20 breaths per* minute. Nurses are expected to apply nonpharmacological interventions, such as pursed lip breathing exercises, to increase oxygen saturation and reduce respiratory frequency in COPD patients.

Keywords: *Respiratory Frequency, COPD, Pursed Lip Breathing Exercise, Oxygen Saturation*