

# Science And Technology Community Based (IbM) Pursed Lips Breathing Exercises to Reduce Dypnea for Asma and COPD Patients in Al-Ihsan Hospital West Java

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Abstract. Background: This IbM activity is motivated by the high prevalence of asthma and COPD, in the world today there are 235 million people. In Indonesia the prevalence of asthma is 3.32%. Whereas COPD in Indonesia is 2.5% (Oemiati et al., 2010), (Patriani, et al., 2010). COPD and Asthma patients at the time of the attack will experience oxygen disorders due to narrowing of the airway where air is difficult to remove. To overcome this problem, treatment and breathing exercises need to be pursed lip correctly and continuously. The result of research showed that pursed lip breathing was beneficial to reduce

shortness of breath (Waluya, et al. 2013) (Avanji and Hajbaghery, 2011). Aim to Increasing the ability of nurses and asthma and COPD patients to breathe pursed lip. The target of the activity was nurses, COPD patients and asthma patients, the patient's family at Al Ihsan Hospital, West Java

**Method:** The method of implementation is discussion, demonstration and redemonstration with nurses and giving information, demonstrations to families or patients about pursed lip breathing techniques.

Result and Conclusion: The results of increasing knowledge and skills of patients and families of patients regarding pursed lip breathing for Asthma and COPD patients. Implementation of health education pursed lip breathing to asthma and COPD patients in Al Ihsan General Hospital with a target number: 16 nurses, patients: 114 people. Conclusion The benefits of pursed lip breathing have been socialized to patients, families of patients, nurses and PKMRS AL-Ihsan Hospital, Patients and families can demonstrate how to pursed lips breathing exercise. Suggestions This activity is expected to be continued, counseling media leaflets and posters can be officially recommended by the hospital in accordance with applicable regulations.

Keywords: Pursed lip, asthma, COPD

### Introduction

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#### Method

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Pursed Lip Breathing is a breathing technique where the echalation is made resistant by wrinkling the lips. It is known that pursed-lip breathing in patients with bronchospasm and dyspnea can improve oxygen transport by reducing airway resistance

# Pursed Lip Breathing Objective

Pursed-lip breathing aims to train expiratory muscles to extend exhalation and increase airway pressure during expiration, thereby reducing the number of airway traps and resistance

The benefits Pursed Lip Breathing

- 1) Increase the efficiency of breathing
- 2) Reducing shortness of breath during activities.
- 3) Reducing the frequency of breathing
- Improve oxygen saturation and respiratory function.

Pursed-lip breathing in patients with asthma and chronic obstructive pulmonary disease (COPD)

can improve oxygen transport by widening the airway

Pursed Lip Breathing Technique:

- Inhale through the nose while counting to 3 counts
- 2) Exhale air slowly and evenly with pursed lips while tightening the abdominal muscles.
- count to 7 while extending the ending by pursing lips

If done while sitting in a chair:

- 1) Fold your arms over your stomach.
- 2) Inhale through the nose while counting to count 3.
- 3) Bend your body forward and exhale slowly through your pursed lips count to 7.

## Result

The results of increased knowledge and skills of patients and families of patients regarding respiratory pursed lip for asthma and COPD patients, as follows:

- Obtained IbM permission from Hospital Chair No: 0701723 / Ihsan Hospital Research Center.
- It was identified the need for a review for nurses regarding breathing techniques pursed lip and treatment of asthma and COPD patients at home
- Implementation of health education breathing techniques pursed lip asthma and COPD patients in Al Ihsan General Hospital with the target number: 16 nurses, patients: 114 people.

# Conclusion

- The benefits of pursed lip breathing have been socialized to patients, families of patients, nurses and PKMRS AL-Ihsan Hospital
- 2. Patients / families in the inpatient room and polyclinic understand the benefits of pursed lip breathing for asthma and COPD patients
- 3. Patients and families can demonstrate how to breathe pursed lips

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