

## **Appendix 1. Survey questions for the awareness of asthma guideline**

### **1. Questions on knowledge regarding asthma guideline**

Choose the option whether each of the following statements is correct or incorrect.

1-1 The clinical course of asthma is typically characterized by recurrent episodes of shortness of breath, wheeze, cough and chest tightness.

- Correct                       Incorrect                       Don't know

1-2 The prolonged (10 days or more) clinical courses accompanied by periodic worsening of respiratory symptoms after colds or flu suggest a diagnosis of asthma.

- Correct                       Incorrect                       Don't know

1-3 Wheezing episodes in asthma can worsen at night, especially at the time of inspiration.

- Correct                       Incorrect                       Don't know

1-4 Asthma is confirmed by allergy skin prick test or measuring the level of specific serum immunoglobulin.

- Correct                       Incorrect                       Don't know

1-5. Bronchodilator responsiveness is defined as over 12% increase of FEV1 and 200 ml.

- Correct                       Incorrect                       Don't know

1-6. Asthma is a chronic inflammatory airway disease and requires steady and ongoing care.

Correct                       Incorrect                       Don't know

1-7. For the proper management of asthma, it is necessary to classify asthma according to its severity and to determine its status.

Correct                       Incorrect                       Don't know

1-8. Asthma is defined as uncontrolled if patients report night-time respiratory symptoms or limited activities.

Correct                       Incorrect                       Don't know

1-9. Any exacerbation of asthma should be promptly reviewed whether current of maintenance treatment is adequate.

Correct                       Incorrect                       Don't know

1-10. The treatment step should be adjusted up until total asthma control was achieved if patients have persistent symptoms.

Correct                       Incorrect                       Don't know

1-11. Stepping down treatment should be promptly considered if patients have controlled asthma.

Correct                       Incorrect                       Don't know

1-12. Long-acting beta2-agonist inhalation alone can be used for asthma patients as a reliever medication.

Correct                       Incorrect                       Don't know

1-13. Medium or high dose ICS/LABA may be appropriate for initial treatment for some patients with persistent symptoms.

- Correct                       Incorrect                       Don't know

1-14. Short-acting beta2-agonists are highly recommended to relieve acute asthma symptoms, and anticholinergic bronchodilators may be used.

- Correct                       Incorrect                       Don't know

1-15. The current recommendation is to double or quadruple the ICS dose if asthma remains uncontrolled with low dose ICS treatment alone.

- Correct                       Incorrect                       Don't know

1-16. Anti-immunoglobulin E (anti-IgE) treatment is suggested for patients with moderate to severe asthma.

- Correct                       Incorrect                       Don't know

1-17. Long-term use of high dose inhaled corticosteroid (budesonide) at 800-1600ug/day can increase the risk of glucocorticoid-induced osteoporosis.

- Correct                       Incorrect                       Don't know

1-18. Patients with severe asthma exacerbation require esystemic corticosteroids in early strage of treatment.

- Correct                       Incorrect                       Don't know

1-19. Concomitant administration of combined inhalation with short-acting beta2-agonists and anticholinergic bronchodilators may yield enhanced responsiveness in acute asthma exacerbation.

- Correct                       Incorrect                       Don't know

1-20. Sedative agent can be used for the patients in acute asthma exacerbations.

- Correct                       Incorrect                       Don't know

## 2. Questions on attitude regarding asthma guideline

Choose your level of agreement with each of the following statements.

2-1. Asthma is a chronic inflammatory disease of the airways.

1)    2)    3)    4)

Strongly agree              Somewhat agree              Somewhat disagree              Strongly disagree

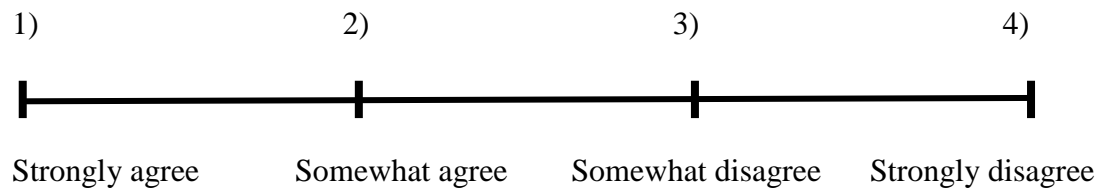
2-2. Asthma is an allergic disease, often accompanied by allergic rhinitis, and evaluation and treatment of allergic rhinitis are essential for the improvement of asthma symptoms.

1)    2)    3)    4)

Strongly agree              Somewhat agree              Somewhat disagree              Strongly disagree

2-3. Positive bronchodilator reversibility or metacholine bronchial challenge test are required to confirm although the diagnosis of asthma can be made by identifying a characteristic pattern of respiratory symptoms such as wheezing, shortness of breath, chest tightness or

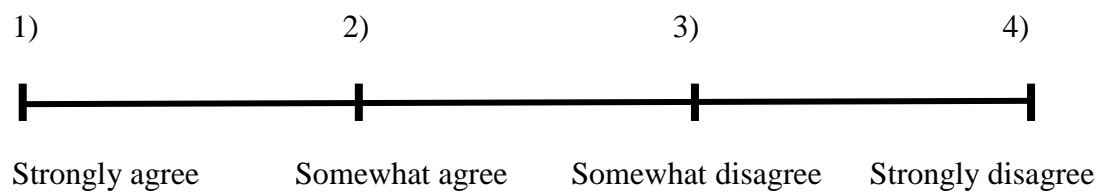
cough.



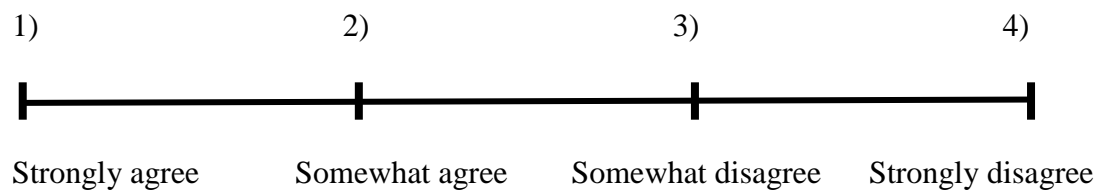
2-4. Most asthmatic patients with appropriate management can be expected to have normal life with minimal or no symptoms.



2-5. Inhaled corticosteroids are the most effective drugs for long-term control of asthma.



2-6. Oral medications generally have better efficacy with fewer side effects than inhaled medications for treatment of asthmatic patients.



2-7. Asthma known as a chronic disease requires long-term management and follow-up.





Strongly agree          Somewhat agree          Somewhat disagree          Strongly disagree

2-8. The symptoms of asthma are often exacerbated by allergen or irritant exposure, respiratory viral infections, air pollutants and drugs, and avoiding exposure to these risk factors can improve symptom control as well as dosage adjustment of medications in asthmatic patients.

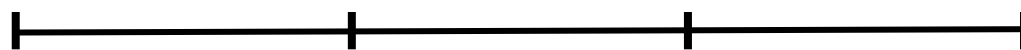
- 1)                                      2)                                      3)                                      4)



Strongly agree          Somewhat agree          Somewhat disagree          Strongly disagree

2-9. The minimum dose of medications should be used during pregnancy with general concern about risk of fetal complications.

- 1)                                      2)                                      3)                                      4)



Strongly agree          Somewhat agree          Somewhat disagree          Strongly disagree

2-10. Acute exacerbations of asthma are commonly caused by short exposure of risk factors, and treatment can be discontinued if acute symptoms are controlled.

- 1)                                      2)                                      3)                                      4)

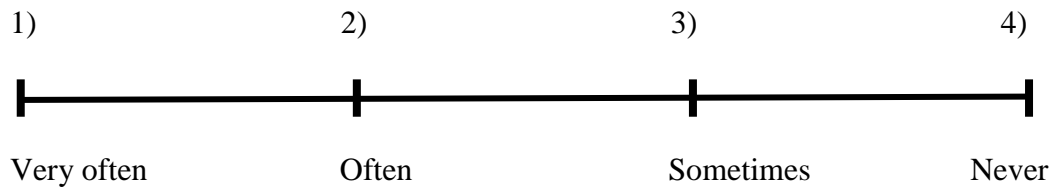


Strongly agree          Somewhat agree          Somewhat disagree          Strongly disagree

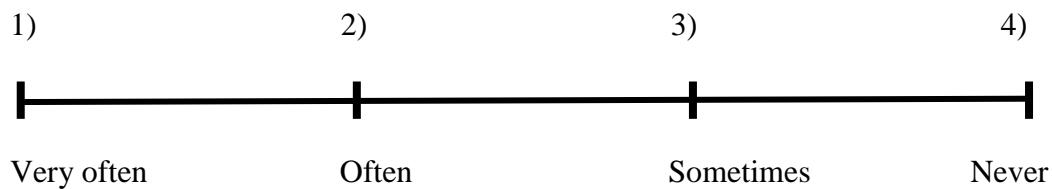
### **III. Questions on practice regarding asthma guideline**

Choose among the answer options for each of the following statements.

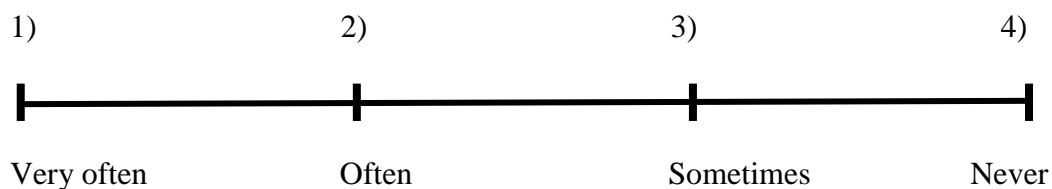
3-1. How often do you prescribe inhaled corticosteroids to control persistent asthmatic symptoms?



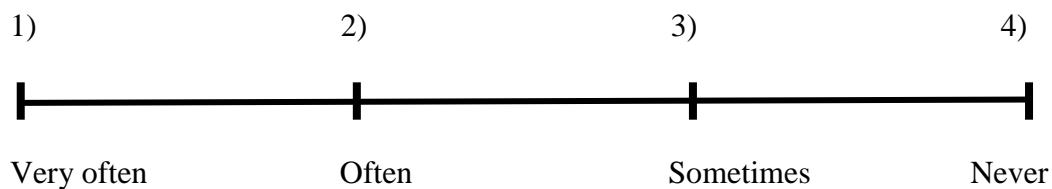
3-2. How often do you assess the degree of severity and treatment plan of your asthma patient based on their symptoms and lung functions?



3-3. How often do you evaluate and treat allergic rhinitis in patients with asthma?



3-4. How often do you prescribe both a controller and reliever medication, and explain to use the controller and reliever separately?



3-5. How often do you explain your patients how to use the inhaler when you prescribe inhalers?

1)

2)

3)

4)



Very often

Often

Sometimes

Never