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**INTRODUCTION**

The Clinical Practice Guidelines (CPG) on Management of Asthma in adults (Second Edition) was published in 2024. A Quick Reference (QR) and a Training Module (TM) are developed to increase the utilisation of the CPG. This TM has been developed by the members of Development Group (DG) of the CPG. The contents of the TM are extracted from the main CPG. It may be reproduced and used for educational purposes but must not be used for commercial purposes or product marketing.

**OBJECTIVES**

* To actively disseminate contents of the CPG and train healthcare providers on it; it may also be used for other educational purposes in the management of asthma in adults in any healthcare settings in Malaysia
* To assist the ‘trainers’ in delivering all components related to the implementation of the CPG systematically and effectively

**TARGET USERS**

All healthcare providers involved in the management of asthma in adults in primary, secondary and tertiary health care settings

| This document contains a Training Module booklet on:   * Introduction, objectives, target users, authors and instructions for use * Proposed training programme/schedule * Test questionnaire * 6 lectures (in **PPT**) * 3 case discussions (in **PPT**) |
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**AUTHORS**

| Profesor Madya Dr. Andrea Ban Yu-Lin  Pakar Perunding Respiratori  Fakulti Perubatan  Hospital Canselor Tuanku Muhriz  Universiti Kebangsaan Malaysia | Dr. Leong Swee Wei  Pakar Perubatan Respiratori  Hospital Serdang |
| --- | --- |
| Dr. Aisya Natasya Musa  Pakar Perunding Respiratori  Hospital Al Sultan Abdullah, UiTM | Dr. Mazapuspavina Md. Yasin  Pakar Perubatan Keluarga  Universiti Teknologi MARA |
| Dr. Nor Azila Mohd Isa  Pakar Perubatan Keluarga  Klinik Kesihatan Nilai | Dr. Nida’ Ul-Huda Adznan  Pakar Perubatan Dalaman  Hospital Selayang |
| Dr. Azza Omar  Pakar Perubatan Respiratori  Hospital Raja Perempuan Zainab II | Dr. Noor Ayuni Bazura Muhamad  Senior Principal Assisstant Director  CPG Unit, MaHTAS |
| Pn. Chong Li Yin  Pegawai Farmasi  Hospital Serdang | Cik Pang Siow Fen  Pegawai Farmasi  Hospital Tampin |
| Dr. Hema Yamini Devi Ramarmuty  Pakar Perubatan Respiratori  Hospital Queen Elizabeth | Profesor Madya Dr. Shamsuriani Md Jamal  Pakar Perubatan Kecemasan  Hospital Canselor Tuanku Muhriz, Pusat Perubatan Universiti Kebangsaan Malaysia |
| Dr. Ida Zaliza Zainol Abidin  Pakar Perunding Perubatan Kecemasan  Hospital Tuanku Fauziah | Dr. Yoon Chee Kin  Pakar Perubatan Dalaman  Hospital Pulau Pinang |
| Dr. Karen Sharmini Sandanasamy  Public Health Physician  CPG Unit, MaHTAS | Dr. Zul Imran Malek Abdol Hamid  Pakar Perubatan Kecemasan  Hospital Pakar Sultanah Fatimah |

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CPG Secretariat, Health Technology Assessment Section

Medical Development Division, Ministry of Health, Malaysia

4th Floor, Block E1 Parcel E, 62590 Putrajaya

E-mail: **htamalaysia@moh.gov.my**

**INSTRUCTIONS FOR USE**

This Training Module consists of:

1. Lecture - six sections
2. Case discussion - three sections
3. Training programme/schedule
4. Test questionnaire

The training may be conducted in one day and consists of two parts. In part 1, didactic lectures are delivered to the whole group of training participants to inculcate the understanding on the management of asthma in adults. In Part 2, participants are grouped into smaller groups to deliberate on cases of asthma in adults with assigned facilitators. In both parts, there should be active participation from the training participants for effective learning.

The test questionnaire must be given to the training participants before the training session starts (pre-test) and after it ends (post-test). The pre-test is to assess the level of knowledge and understanding of training participants in the management of asthma in adults. The post-test is to ascertain the increase in the training participants’ knowledge after attending the training session.

Should the trainers have any queries, kindly forward to htamalaysia@moh.gov.my

**Training of Core Trainers on**

**CPG Management of Asthma in Adults (Second Edition)**

**5 August 2025 at Hospital Al-Sultan Abdullah UiTM, Puncak Alam**

| **Time** | **Lecture/case discussion** | **Lecturer/facilitator** |
| --- | --- | --- |
| 0730 - 0800 | Registration  Pre-test | MaHTAS |
| 0800 - 0815 | Welcome and Introduction | PM Dr. Andrea Ban Yu-Lin/  Dr. Karen Sharmini Sandanasamy |
| 0815 - 0845 | Lecture 1: Risk Factors & Diagnosis | Dr. Mazapuspavina Md. Yasin |
| 0845 - 0915 | Lecture 2: Treatment Goals and Optimising Treatment | Dr. Leong Swee Wei |
| 0915 - 0945 | Lecture 3: Patient Education & Skills Training | Ms Chong Li Yin |
| 0945 - 1030 | Case Discussion 1 | Dr. Mazapuspavina Md. Yasin/ Dr. Nor Azila Mohd Isa/ Dr. Leong Swee Wei |
| 1030 - 1100 | **TEA BREAK** |  |
| 1100 - 1140 | Lecture 4: Stable Asthma – Assessment and Treatment | Dr. Aisya Natasya Musa |
| 1140 - 1215 | Lecture 5: Asthma Exacerbation – Assessment and Treatment | PM Dr. Shamsuriani Md Jamal |
| 1215 - 1300 | Case Discussion 2 | Dr. Yoon Chee Kin/ Dr. Zul Imran Malek Abdol Hamid/ Dr. Nida’ Ul-Huda Adznan |
| 1300 - 1400 | **LUNCH** |  |
| 1430 - 1515 | Lecture 6: Special Groups – Pregnancy, Severe Asthma, Occupational Asthma, Asthma with comorbidities. | Dr Azza Omar/ Dr. Hema Yamini Devi Ramarmuty |
| 1515 - 1600 | Case Discussion 3 | Dr. Hema Yamini Devi Ramarmuty |
| 1600 - 1700 | Post-test  Closing | PM Dr. Andrea Ban Yu-Lin/  Dr. Karen Sharmini Sandanasamy |

**TEST QUESTIONNAIRE**

**Answer all questions by circling the right answers.**

| **No.** | **Question** | **Answer** | |
| --- | --- | --- | --- |
| **True** | **False** |
| **1.** | **Which of the following statements regarding asthma are true?** | | |
| 1. Obesity is a known risk factor that predisposes individuals to the development of asthma. | T | F |
| 1. Maternal tobacco during pregnancy increases the risk of asthma in the child. | T | F |
| 1. A diagnosis of asthma can be reliably made based solely on history and physical examination. | T | F |
| 1. A Spirometry result with an FEV1/FVC greater than 0.7 is indicative of an obstructive pattern. | T | F |
| 1. A two-week record of twice-daily PEFR readings showing a variability greater than 10% supports the diagnosis of asthma. | T | F |
| **2.** | **Which of the following statements regarding the goals of asthma treatment are true?** | | |
| 1. Achieving optimal symptom control | T | F |
| 1. Minimising the risk of future exacerbations | T | F |
| 1. Achieving a normal blood eosinophil count | T | F |
| 1. Reducing the risk of treatment side effects | T | F |
| 1. ignoring patient’s individual goals and preferences | T | F |
| **3.** | **Which of the following statements regarding treatment optimisation in asthma are true?** | | |
| 1. Monotherapy with SABA is not recommended as its excessive use is associated with increased risk of exacerbations and asthma-related mortality | T | F |
| 1. The Asthma Control Test (ACT) is a tool to assess asthma control, not exacerbation severity | T | F |
| 1. Once treatment has been stepped up, it should not be stepped down even if good asthma control is achieved. | T | F |
| 1. Treatment should be stepped up primarily to improve adherence, even if symptoms are well-controlled. | T | F |
| 1. Patients with a history of severe exacerbations require caution before considering step-down in therapy. | T | F |
| **4.** | **Which of the following statements regarding effective inhaler technique education are true?** | | |
| 1. Healthcare professionals should be knowledgeable about inhaler techniques and be able to identify common patient errors when using inhaler. | T | F |
| 1. Selection of an inhaler device should take into account the patient’s individual needs and ability to use it correctly. | T | F |
| 1. Verbal explanation alone is suifficient to assess whether a patient can use an inhaler correctly. | T | F |
| 1. The Teach-to-Goal (TTG) approach involves repeated cycles of demonstration and assessment until the patient masters the correct inhaler techniques. | T | F |
| 1. Regular reinforcement of inhaler technique is important, as the benefits of one-time education tend to dimish over | T | F |
| **5.** | **Which of the following statements about pharmacological and non-pharmacological treatment in stable asthma?** | | |
| * 1. Inhaled short-acting β2-agonists (SABA) monotherapy is the preferred treatment option for asthma. | T | F |
| * 1. In moderate to severe asthma, maintenance and reliever therapy (MART) with low- to medium-dose ICS-formoterol may be used | T | F |
| * 1. Anti-inflammatory reliever (AIR) therapy using either ICS with formoterol or ICS with SABA, may be used as a reliever therapy. | T | F |
| * 1. Theophylline is not recommended for routine use in asthma management. | T | F |
| * 1. Asthma patients should avoid regular physical activity. | T | F |
| **6.** | **Which of the following statements regarding asthma assessment are true?** | | |
| 1. An Asthma Control Test (ACT) score of 23 indicates poorly controlled asthma. | T | F |
| 1. The ACT score is a physician-reported assessment tool | T | F |
| 1. Patients with well-controlled asthma for 3-6 months may be considered for de-escalation of treatment. | T | F |
| 1. Before stepping down treatment, the patient’s future risk of exacerbation should be assessed | T | F |
| 1. Frequent use of SABA without concomitant inhaled corticosteroid (ICS) therapy is a known risk factor for future asthma exacerbations | T | F |
| **7.** | **Which of the following are recognised risk factors for future asthma exacerbation?** | | |
| 1. A previous severe asthma exacerbation requiring systemic corticosteroids or hospitalisation within the past year | T | F |
| 1. Frequent use of SABA inhalers indicates good asthma control and reduces the risk of future exacerbations | T | F |
| 1. Presence of comorbidities such as obesity, gastroesophageal reflux disease (GERD) and chronic rhinosinusitis | T | F |
| 1. Pregnancy | T | F |
| 1. Current use of cigarettes, e-cigarette or vaping | T | F |
| **8.** | **Which of the following statements about asthma exacerbations are true?** | | |
| 1. In the Emergency Department, High Flow Nasal Cannula (HFNC) should be preferred over conventional oxygen therapy for asthma exacerbations. | T | F |
| 1. Pressurised Metered Dose Inhaler (pMDI) with spacer may be used in cases of life-threatening asthma. | T | F |
| 1. Monitoring of asthma exacerbation should include assessment of mental status, vital signs and respiratory effort. | T | F |
| 1. Upon discharge, patients with mild asthma symptoms do not need an asthma action plan. | T | F |
| 1. e. After a mild asthma exacerbation, patients may be discharged without a follow-up plan, and advised to return only if needed. | T | F |
| **9.** | **Which of the following statements about managing of asthma in special populations (eg pregnancy, comorbidities) are true?** | | |
| 1. Bronchoprovocation testing is safe and recommended for diagnosing asthma during pregnancy. | T | F |
| 1. Asthma in pregnancy should be reviewed and monitored at least every 2 weeks. | T | F |
| 1. Most asthma medications used prior to pregnancy can be continued during pregnancy. | T | F |
| 1. Active management of co-morbidities can help improve asthma control and reduce asthma-related complications. | T | F |
| 1. Proton-pump inhibitors (PPIs) have shown persistent benefit in all asthma patients who have GERD. | T | F |
| **10.** | **Which of the following statements regarding occupational asthma (OA) are true?** | | |
| 1. Asthma patients whose symptoms worsen due to non-specific irritants in the workplace are classified as having OA. | T | F |
| 1. Peak Expiratory Flow Rate (PEFR) monitoring is a useful tool in diagnosing and monitoring OA. | T | F |
| 1. A PEFR variability of ≥5% between workdays and offdays is suggective of work-related asthma. | T | F |
| 1. Confirmed cases of OA should be reported to the Department of Occupational Safety and Health. | T | F |
| 1. Once occupational asthma is diagnosed, early removal from exposure to the offending agent is recommended. | T | F |

**ANSWERS FOR TEST QUESTIONNAIRE**

| **Question** | | **Answers** | **Question** | | **Answers** | **Question** | | **Answers** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1.** | a. | **T** | **5.** | a. | **F** | **8.** | a. | **T** |
| b. | **T** | b. | **T** | b. | **F** |
| c. | **F** | c. | **T** | c. | **T** |
| d. | **F** | d. | **T** | d. | **F** |
| e. | **F** | e. | **F** | e. | **F** |
| **2.** | a. | **T** | **6.** | a. | **F** | **9.** | a. | **F** |
| b. | **T** | b. | **F** | b. | **F** |
| c. | **F** | c. | **T** | c. | **T** |
| d. | **T** | d. | **T** | d. | **T** |
| e. | **F** | e. | **T** | e. | **F** |
| **3.** | a. | **T** | **7.** | a. | **T** | **10.** | a. | **F** |
| b. | **F** | b. | **F** | b. | **T** |
| c. | **F** | c. | **T** | c. | **F** |
| d. | **F** | d. | **T** | d. | **T** |
| e. | **T** | e. | **T** | e. | **T** |
| **4.** | a. | **T** |  |  |  |  |  |  |
| b. | **T** |  |  |  |  |  |  |
| c. | **F** |  |  |  |  |  |  |
| d. | **T** |  |  |  |  |  |  |
| e. | **T** |  |  |  |  |  |  |