

# National Action Plan for Primary Health Care for Asthma 2016-2020

## Introduction

Bronchial asthma is a significant public health problem which is found in all parts of the world. It most commonly begins in childhood, with an estimated worldwide prevalence of approximately 10% among children and youths less than 18 years of age. The current reported prevalence in the Middle East region is somewhat lower, varying between 5.6% in Saudi Arabia and 8.5% in Kuwait. In Iraq, approximately 200,000 patients per year with asthma are either hospitalized or treated in an Emergency Room.

Generally, between 50% and 80% of cases of asthma are evident by 5 years of age. Although it is most problematic during childhood, symptoms may disappear in up to 50% of those with relatively mild severity by late adolescence; while 80% of those with more severe conditions symptoms will persist with the disease into adulthood.

Prevention and control of asthma needs to be addressed through a public health approach, including the implementation of interventions at a primary health care level to ensure universal health coverage. Essential medicines and equipment in addition to well trained health workers need to be prioritized.

Primary health care for asthma was introduced into the national action plan for prevention and control of noncommunicable diseases( 2013-2017) as one of the components of essential interventions in objective 2. Accordingly, a national guideline for the management of asthma at primary health care level was developed.

## Definition

Asthma is a chronic inflammatory disorder of the airways resulting in, variable bronchial obstruction which is potentially reversible with appropriate therapy or spontaneously. It is typically characterized by episodic attacks of breathlessness, cough, and wheezing (“asthma triad”).

## Goal

Reduction of morbidity and premature mortality attributed to asthma.

**Objectives:**

- Strengthen primary health care capacity for asthma with adequate and efficient PHC health and essential medicines and diagnostic equipment.
- Improve patient's competencies in self-care and monitoring.

**Process indicators:**

- percentage of PHCs with essential intervention
- percentage of asthmatic cases who receive treatment
- percentage of controlled cases

**Setting:**

The project starts in one PHC/ sector as selected by the Directorates of Health. The selection is based on the population size in the catchment areas of these centers, the availability of human resources, and the security situation that permits implementation and supervision of the process.

**Target PHC attendees:**

- Children 5 - ≤ 18 years with recurrent lower respiratory symptoms.
- Adults >18 years with asthma

**Expected outcome:**

- Improved health of cases with asthma
- provision of cost effective interventions based on national guidelines as an integral part of primary health care services

## Primary Health Care for Asthma:

### Personnel:

**Medical consultants:** cardiovascular and Respiratory system specialist at the College of Medicine/ University of Baghdad and University of Al Mustansirya.

### Supervisors:

- Central supervision by the key senior staff members of the Department of Non-communicable diseases at the General Directorate of Public Health in addition to representatives from other concerned directorates at the MOH mainly the Directorate of Technical Affairs.
- Local supervision is carried out by the NCD section managers and the internal medicine specialists who trained the PHC staff

### PHC staff:

- PHC physicians are mainly responsible for the diagnosis of cases of asthma and provision of primary health services.
- The NCD focal point at the PHC; a well trained paramedical staff; is in charge of provision of advice to the patient and family, recording and follow-up schedule.
- Spirometer device operator, a well trained staff at the selected PHC center.

### Supplies and equipment at PHCc:

- Peak flow meters
- Spirometer (either at the same PHCc or a referral center)
- Existing recording and reporting system
- Essential list of drugs for asthma
- National guideline for primary health care for asthma
- Recording forms (utilization of existing Patient NCD record form, follow –up card, Referral form).
- Guidelines and instruction manuals.

### Diagnosis of cases with asthma:

A provisional diagnosis of asthma is based on intermittent symptoms of asthma triad especially at night, exacerbations by triggering factors, personal and family medical history, in addition to respiratory signs on physical examination.

In order to confirm the diagnosis, pulmonary function test should be applied at the PHC if available, or else should be referred to a reference center:

- **Spirometer:** Is used to confirm the diagnosis. It demonstrates specific airflow obstruction which is at least partially reversible with salbutamol.
- **Peak flow meter:** Measurement of peak expiratory flow rate as a baseline for future reference and for monitoring.

Assessment of the severity of the condition carried out depending on the symptoms and the results of pulmonary function tests (PEF or FEV1)

## **Management of Cases:**

### ***Goals of asthma control***

When the diagnosis has been confirmed, the goals of the management strategy need to be carefully defined and discussed with the patient. These goals should include the following:

- Prevent chronic asthma symptoms and exacerbations (no more than two occasions a week that requires bronchodilators, no more than two nights a month).
- Maintain normal or near-normal daily activities.
- no severe exacerbation (requiring visits to emergency department, admission to hospital, absenteeism from school or work) within a month;
- Achieve a normal or near-normal pulmonary function as measured by spirometer or peak flow meter.
- Tolerable or no side effects from medications used for control

### ***Introduction of treatment of asthma***

As part of the Ministry of Health approach towards strengthening PHC services, inhaled and oral bronchodilators and steroid drugs as well as other related drugs are added to the list of essential drugs of the PHC centers. PHCs have been recently supplied with these drugs to be prescribed under specific regulations by family physicians and by the other trained PHC physicians

### ***Treatment/ referral:***

Based on the guidelines.

## **Monitoring of cases:**

Follow-up of progress in staging based on:

- Severity and frequency of symptoms (Particularly nocturnal symptoms, the use of beta agonists)
- Morbidity (hospitalization, emergency department visits, unscheduled doctor visits, lost days from work and school)
- PEF monitoring

## Action Plan

Actions	Activities	Stakeholder	Sponsor	Time line				
				2016	2017	2018	2019	2020
<b>Strengthen primary health care capacity for asthma with adequate and efficient PHC health and essential medicines and diagnostic equipment.</b>	TOT of NCD focal point	MOH	MOH					
	Updating existing Asthma guideline	MOH	MOH					
	Training of staff at selected PHCs	DOH	DOH	5%	25%	50%	75%	100%
	Training of para-staff at selected PHCs	DOH	DOH	5%	25%	50%	75%	100%
	Updating essential drug list	MOH	MOH					
	Provision of drugs	DOH	DOH	5%	25%	50%	75%	100%
	Provision of Spirometer and peak flow meter	DOH	DOH	5%	25%	50%	75%	100%
	Monitoring and evaluation	MOH DOH	MOH DOH					
<b>Improve patient's competencies in self-care and monitoring.</b>	Translation of asthma guideline and protocols	MOH	MOH					
	IEC materials Develop	MOH	MOH					

	TOT of NCD focal point	MOH	MOH					
	Training of staff at selected PHCs	DOH	DOH			25%	50%	100%
	Training of para-staff at selected PHCs		DOH			25%	50%	100%
<b>Provide monitoring health indicators on asthma at PHC level</b>	Adaption of check list for controlled cases	MOH	DOH					
	TOT of NCD focal point	DOH	MOH					
	Training of staff at selected PHCs	DOH	DOH					

### Training:

- A central training of trainers workshop was held for NCD section managers and Internist specialist of the DoHs by the NCD department at MoH and Cardiology and Respiratory system Internal medicine specialist on the national guideline asthma management and instructions on primary health care.
- Local competency based training workshop for the selected PHC physicians and concerned PHC staff by the trainers to deliver primary health care services for asthma, data entry and reporting and for utilization and interpretation of equipment.

## **Monitoring and evaluation:**

### ***Supervisory visits:***

Direct supervision and coaching is carried out by central and local supervisors to the concerned staff at the selected PHC centers. Appraisal of the work is made according to a set of criteria.

A joint work has started in conjunction with the Quality Control section for evaluation of the DOHs performance.

### ***Follow up meetings:***

Several one day meetings are scheduled at central and local levels by the NCD department with the DoHs NCD Section managers for appraisal of the work team at the PHCs to discuss the results of implementation, the strength and weakness points and the recommended appropriate solutions.