



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health

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Tuberculosis

Background

Chronic Obstructive Pulmonary Disease, or COPD, refers to a group of diseases that cause airflow blockage and breath-related problems. It includes emphysema, chronic bronchitis, and in some cases, asthma.

More than 3 million people died of COPD in 2012, which is equal to 6% of all deaths globally that year.

More than 90% of COPD deaths occur in low- and middle-income countries.

The primary cause of COPD is tobacco smoke (through tobacco active use or passive smoke).

The disease now affects men and women almost equally, due in part to increased tobacco use among women in high-income countries.

COPD is preventable but not curable. However treatment can slow the progress of the disease.

Who is at risk?

Earlier COPD was more common in men, but because of increased tobacco use among women in high-income countries, and the higher risk of exposure to indoor air pollution (such as solid fuel used for cooking and heating) in low-income countries, the disease now affects men and women almost equally.

Due to the fact that effective strategies for prevention and control are not always implemented or accessible in low- and middle-income countries, they are accountable for more than 90% of COPD deaths.

Risk factors

The primary cause of COPD is tobacco smoke which can be active or passive smoking. Other causes include:

- indoor air pollution (such as solid fuel used for cooking and heating)
- outdoor air pollution
- occupational dusts and chemicals (vapours, irritants and fumes)
- frequent lower respiratory infections during childhood

Symptoms

Patients typically present with a combination of signs and symptoms of chronic bronchitis, emphysema, and reactive airway disease. Symptoms include the following:

- Chronic cough, usually worse in the mornings and productive of a small amount of colorless sputum
- Acute chest illness
- Breathlessness: The most significant symptom, but usually does not occur until the sixth decade of life
- Wheezing: May occur in some patients, particularly during exertion and exacerbations

Daily activities, such as walking up a short flight of stairs or carrying a suitcase, can become very difficult as the condition gradually worsens.

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WEEKLY SRI LANKA - 2015

Diagnosis

COPD is confirmed by a diagnostic test called "spirometry" that measures the ratio of forced expiratory volume in 1 second over forced vital capacity (FEV1/FVC). FEV1/FVC less than 70% of that predicted for a matched control is diagnostic for a significant obstructive defect.

Criteria for assessing the severity of airflow obstruction (based on the percent predicted postbronchodilator FEV1) are as follows:

- Stage I (mild): FEV1 80% or greater of predicted
- Stage II (moderate): FEV1 50-79% of predicted
- Stage III (severe): FEV1 30-49% of predicted
- Stage IV (very severe): FEV1 less than 30% of predicted or FEV1 less than 50% and chronic respiratory failure

Because COPD develops slowly, it is frequently diagnosed in people aged 40 or older.

Treatment

COPD is not a curable disease. So it is essential to prevent the disease occurrence or its progression by cessation of smoking. Smoking cessation continues to be the most important therapeutic intervention for COPD.

Various forms of treatment can help control its symptoms and increase quality of life for people with the illness. Bronchodilators that help dilate major air passages of the lungs can improve shortness of breath. With the increase in the severity of the disease several other treatment options such as inhaled glucocorticoids, cardiopulmonary rehabilitation, long-term oxygen therapy, surgical options such as lung volume reduction surgery (LVRS) and lung transplantation are used for the management of the patients.

Pulmonary rehabilitation program is a multidisciplinary approach which includes patient and family education, smoking cessation, medical management (including oxygen and immunization), respiratory and chest physiotherapy, physical therapy with broncho-pulmonary hygiene, exercise, vocational rehabilitation and psychosocial support.

WHO has released a guideline with specific recommendations for COPD management in primary health care in resource-constrained settings.

Global response adopted by WHO

WHO's work on COPD is part of the Organization's overall efforts to prevent and control non-communicable diseases.

WHO aims to:

- raise awareness about the global epidemic of non-communicable diseases
- create more healthy environments, especially for poor and disadvantaged populations
- decrease risk factors of non-communicable diseases, such as tobacco use, unhealthy diet and physical inactivity

The WHO Framework Convention on Tobacco Control (WHO FCTC) was developed in response to the globalization of the tobacco epidemic to protect billions of people from harmful exposure to tobacco. It is the first global health agreement negotiated by WHO, and has been approved by 180 countries.

The Global Alliance against Chronic Respiratory Diseases (GARD), a voluntary alliance of national and international organizations, institutions and agencies which is also led by WHO, is working towards the common goal of reducing the global burden of chronic respiratory diseases. Its vision is a world where all people breathe freely. GARD focuses specifically on the needs of low- and middle-income countries and vulnerable populations.

Sources

1. Chronic obstructive pulmonary disease (COPD), available at <http://www.who.int/mediacentre/factsheets/fs315/en/>
2. Chronic Obstructive Pulmonary Disease (COPD), available at <http://emedicine.medscape.com/article/297664>

Compiled by Dr. M R K Perera of the Epidemiology Unit.

Table 1: Selected notifiable diseases reported by Medical Officers of Health 26th - 02nd Oct 2015 (40th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	100	6865	5	154	1	11	1	83	0	114	7	232	1	10	1	30	0	3	5	383	0	33	0	0	88	13
Gampaha	24	2986	0	70	0	7	0	28	0	27	6	305	0	10	0	116	0	0	8	220	0	23	0	2	87	13
Kalutara	13	1077	2	84	0	4	1	40	2	81	21	278	0	3	0	30	0	2	3	230	3	43	0	0	85	15
Kandy	27	907	5	105	0	6	0	27	1	41	1	95	3	59	6	120	0	0	4	182	1	20	1	13	91	9
Matale	0	348	0	35	0	1	0	8	0	5	0	52	0	8	0	27	0	0	0	24	2	25	0	16	69	31
Nuwareliya	2	126	3	274	0	4	1	25	0	7	0	32	3	63	3	48	0	0	1	110	1	46	0	1	85	15
Galle	21	636	0	63	0	3	0	7	0	21	4	186	5	78	0	7	0	0	1	221	1	43	0	2	70	30
Hambantota	4	240	1	31	0	1	0	8	1	26	4	81	0	46	2	34	0	0	5	100	0	11	4	226	83	17
Matara	10	312	2	56	0	6	0	4	0	44	18	168	1	34	3	34	0	0	1	197	0	17	5	110	100	0
Jaffna	9	1296	41	750	0	9	0	161	3	74	0	14	0	545	0	11	0	2	6	176	1	16	0	0	100	0
Kilinochchi	0	61	1	69	0	0	0	15	0	31	0	1	0	23	0	0	0	0	0	15	0	0	0	0	25	75
Mannar	1	80	0	13	0	1	0	5	0	3	0	8	0	21	0	0	0	0	0	7	0	0	0	1	80	20
Vavuniya	4	107	0	16	0	6	1	68	2	16	0	17	0	13	0	2	0	2	0	38	2	17	0	6	75	25
Mullaitivu	1	116	1	25	0	2	0	12	15	16	0	5	0	9	1	4	0	1	0	5	0	3	0	6	60	40
Batticaloa	4	1331	1	272	0	7	0	26	0	180	0	12	0	4	0	11	0	1	0	51	0	16	0	0	57	43
Ampara	0	46	0	39	0	1	0	1	0	15	0	13	0	2	0	7	0	0	0	172	0	5	0	3	14	86
Trincomalee	0	518	12	90	0	0	2	33	0	35	0	14	0	22	3	24	0	1	2	81	0	8	0	4	83	17
Kurunegala	9	998	7	148	3	5	0	7	0	17	5	209	0	28	0	37	0	6	10	342	0	30	5	113	89	11
Puttalam	1	560	6	52	0	4	1	8	0	9	3	33	0	18	0	2	0	0	1	49	2	26	0	3	69	31
Anuradhapura	2	319	7	96	0	3	0	3	3	62	2	187	0	20	0	14	0	1	6	152	0	29	2	285	89	11
Polonnaruwa	1	177	2	37	0	4	0	12	0	12	0	67	0	1	1	8	0	0	0	114	0	21	1	100	57	43
Badulla	4	433	3	177	0	7	0	9	0	16	1	61	3	119	10	177	0	3	0	175	1	75	1	7	71	29
Monaragala	1	155	3	99	0	4	0	15	0	5	1	138	4	74	15	330	0	1	1	84	0	26	0	35	91	9
Ratnapura	10	804	7	247	0	16	0	40	0	8	11	277	1	57	7	211	0	1	1	134	0	47	0	16	78	22
Kegalle	12	476	1	59	0	11	1	68	2	16	13	262	0	44	0	77	0	0	5	191	2	47	0	0	91	9
Kalmunei	0	455	0	99	0	1	0	1	0	51	0	7	0	0	0	3	0	0	1	98	0	9	0	0	31	69
SRI LANKA	260	21429	110	3160	4	124	8	714	29	932	97	2754	21	1311	52	1364	0	25	61	3551	16	636	19	949	78	22

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 02nd October, 2015 Total number of reporting units 337 Number of reporting units data provided for the current week: 266 C**=Completeness
A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

26th - 02nd Oct 2015 (40th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2015	Number of cases during same week in 2014	Total number of cases to date in 2015	Total number of cases to date in 2014	Difference between the number of cases to date in 2014 & 2015
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	00	00	00	00	00	02	56	63	-11.1%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	03	00	01	01	01	00	00	00	00	06	06	303	546	-44.5%
Measles	05	02	04	00	04	05	03	01	05	29	34	2278	2777	-18.1%
Rubella	00	00	00	00	00	00	00	00	00	00	01	08	17	-53.1%
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	04	-100%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	14	11	+27.2%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	07	22	-68.1%
Whooping Cough	00	00	00	00	00	00	00	00	00	00	03	77	53	+45.2%
Tuberculosis	149	21	09	13	07	64	01	05	05	274	151	7609	7593	+0.2%

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.
 RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS** =Congenital Rubella Syndrome

AFP and all clinically confirmed Vaccine Preventable Diseases except Tuberculosis and Mumps should be investigated by the MOH

Dengue Prevention and Control Health Messages

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

ON STATE SERVICE

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