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NEWSLETTER CONTENT:

- ♦ Editorial: Innes Asher
- ♦ GAN Phase I update
- ♦ Social Media and Wikipedia
- ♦ GAN Centres
- ♦ GAR 2018 Slide set

Sub editor - P Ellwood p.ellwood@auckland.ac.nz

NEWSLETTER — SEPTEMBER 2018

Dear Global Asthma Network colleagues and friends,

We are delighted to announce the Global Asthma Report 2018, produced by GAN. This Report was launched on August 31st in Helsinki Finland at the Annual Conference of GARD (Global Alliance Against Chronic Respiratory Disease). You can find the pdf on our websites http://www.globalasthmanetwork.org/ and http://www.globalasthmanetwork.org/.

The Global Asthma Report 2018 is an 88 page report which is a cutting edge State-of-the-Art document, with contributions from 53 experts around the globe. The Report is an update on the state of asthma globally, including research data on asthma hospital admissions, mortality, prevalence, severity, and burden, risk factors and management. GAN collaborators (EOI and Registered centres) are being sent a printed copy. I have prepared a slide set for the Report, illustrated on the following pages. If you would like the actual slides, please contact me directly i.asher@auckland.ac.nz. We hope you find the Global Asthma Report 2018 informative and useful to share with others.

I will be presenting the Global Asthma Report 2018 in New York in the week of the third United Nations High-Level Meeting on NCDs, at the NCD Alliance Civil Society Advocacy Briefing, Monday 24 September.

GAN Phase I is going well. Data Sets and Centre Reports continue to arrive to the GAN Global Centre in Auckland and following initial data checks the data is sent on to the respective data centres in London and Spain as soon as possible. On the next page, Philippa has written a short update on the progress of GAN Phase I.

As mentioned in a previous Newsletter, a requirement of the GAN Global Centre is that the Centre Report must be completed on line. This process captures the Centre Report information in a database that enables us to report on methodology in the worldwide papers. The link to the Centre Report on the website is http://www.globalasthmanetwork.org/surveillance/centre.php. We appreciate your assistance with this. We hope that you are well underway with your data collection and look forward to receiving this in Auckland.

The GAN annual Steering Group meeting will be held in London on the 2nd and 3rd of October and we will advise you of any significant outcomes following this meeting.

With all best wishes from the GAN Global Centre, Auckland.

Innes
Professor Innes Asher ONZM,
Chair of GAN





GAN Phase I update - Philippa

We have received 354 expressions of interest from Centres in 135 Countries. Of these, 128 centres from 53 Countries have registered to undertake GAN Phase I.

Data checks and Centre Report checks have been completed for 26 centres and 6 centres are still in the checking process.

We are pleased with the quality of data and Centre Reports. Thank you for those of you who have completed these checks with us.

For those of you who have not yet submitted your data, we urge you to get this into the GAN Global Centre in Auckland, as soon as possible.

Best wishes

Philippa

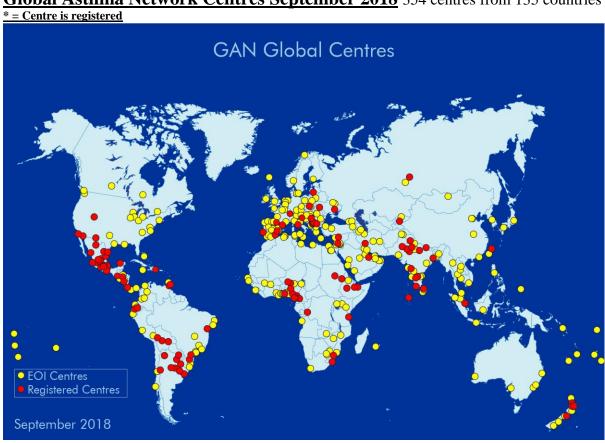
Social Media

The Global Asthma Network is on <u>Twitter</u> and is gaining more followers regularly. We now have 265 followers. Follow us at @GlobalAsthmaNet. All Global Asthma Network tweets are included as an extension of the <u>news section</u>. News items are tweeted, as well as pertinent asthma related information.

Wikipedia

The Global Asthma Network has a Wikipedia page. This can be found at https://en.wikipedia.org/wiki/Global_Asthma_Network

Global Asthma Network Centres September 2018 354 centres from 135 countries



<u>Africa</u>
Algeria
Bab El Oued
Blida
Wilaya of Algiers
Angola
Luanda
Benin
Cotonou
Sèmè Podji
Burkina Faso
Bobo-Dioulasso
Cameroon
*Bafoussam
*Buea
*Douala
*Yaounde
Congo, Dem. Rep.
*Kinshasa
Egypt
Alexandria
Cairo
Cairo-Castle
Ethiopia
*Addis Ababa

A f..:..

*Harar Mekelle Ghana Accra Kumasi Kenya *Eldoret *Nairobi Libya Benghazi Tripoli Malawi Blantyre Mali Bamako Mozambique Maputo Nigeria Benin City *Enugu *Gusau *Gwagwalada *Ibadan lfe Kano

*Lagos *Maiduguri Owo *Sokoto Reunion Island Reunion Island Senegal Dakar Sierra Leone *Freetown Somalia *Hargeisa South Africa *Cape Town *Durban Ekurhuleni Polokwane *Pretoria Sudan *Gadarif *Khartoum Swaziland *Manzini Tanzania

*Dar es Salaam

The Gambia
Fajara
Togo
Lome
Tunisia
Ariana
Tunis
Uganda
Kampala
Zambia
Lusaka
Zimbabwe
Zimbabwe

Asia-Pacific
China
Beijing
Hefei
Tayuan
Hong Kong
Hong Kong
Indonesia
Bandung
North Sumatera
Palangkaraya

Japan Fukuoka Tochigi Korea, South Seoul Lao PDR Lao PDR Malaysia Klang Valley Kota Bharu Mongolia Ulaanbaatar Philippines Metro Manila Singapore *Singapore Taiwan Tainan *Taipei Thailand *Bangkok Chantaburi *Chiang Mai *Khon Kaen Vietnam

Ho Chi Minh

Eastern Mediterranean

Iran *Ahvaz Birjand Bushehr Rasht Tehran Yazd Zanjan Israel Israel Jordan Amman Irbid Jerash Kuwait *Kuwait Malta Malta

Malta
Oman
Al-Khod
Muscat
Pakistan
Hyderabad
Islamabad
*Multan
Peshawar

North Gaza *Ramallah **Qatar** *Qatar **Saudi Arabia** Abha

Palestine

Abha Alkhobar Jeddah Madinah Riyadh

Syrian Arab Republic
*Damascus

*Damascus *Lattakia

United Arab Emirates

Al Ain Sharjah

Indian Subcontinent Bangladesh

Dhaka Sylhet India Aligarh *Bangalore Bijapur *Bikaner

*Chandigarh Chennai *Jaipur Kolkata (10) Kolkata (14) *Kolkata (19) *Kottayam *Lucknow Mangalore

Mumbai (11)

Mumbai (7)
*Mysore
*New Delhi
Orissa
*Pune
Rishikesh
Vellore
Maldives
*Malé

Nepal

*Kathmandu **Sri Lanka** *Anuradhapura Colombo *Peradeniya

Latin America & Caribbean Argentina
Buenos Aires
Buenos Aries (2)
*Buenos Aries (3)
*Córdoba Ciudad
*Corrientes
*Mendoza
*Salta
*San Francisco
Bahamas

Bahamas
Bahamas
Bolivia
*Cochabamba
*La Paz
*Santa Cruz
Brazil
Belo Horizonte

Brasília
*Curitiba
*Feira de Santana

*Maceió
*Passo Fundo
Pelotas
Porto Alegre
Recife
Rio de Janeiro

*Santo André São Paulo South *Uruguaiana *Chile* Santiago Valdivia *Colombia* Barranquilla Bogotá

Bucaramanga Cali **Costa Rica** *Costa Rica **Dominican Republic**

*Santo Domingo Ecuador *Cumbayá Esmeraldas Guayaquil Quito *Samborondón El Salvador

San Salvador Grenada Grenada Guatemala *Guatemala Honduras San Pedro Sula *Tegucigalpa Jamaica Kingston

Mexico

*Aguascalientes
*Chihuahua
*Ciudad Juárez
*Ciudad Victoria
*Córdoba
*Culiacan
*Guadalajara
*Guanajuato
*Matamoros
*Mérida

*Mexicali *Mexico City North *Michoacán

*Monterrey
*Oaxaca
*Puerto Vallarta
*San Luis Potosí
*Tijuana
*Toluca (1)

*Toluca (2)
*Xalapa
*Micaragua
*Managua
Matagalpa
Panama
David-Panamá
Panamá City
Paraguay

*San Lorenzo **Peru** Lima Puno Tumbes

Trinidad and Tobago
*St Augustine
*Tobago
Uruguay
*Montevideo

North America
Canada
Montréal
Ontario
Saskatoon
Vancouver
United States
Chicago
Dallas
Fort Wayne

Dallas
Fort Wayne
Hartford
Houston
Iowa City
Madison
Metropolitan Detroit
New Orleans

New Orleans
North Carolina
Seattle
*Utah
Virginia
Washington DC

Northern and Eastern Europe

Albania
Lezhë
Tiranë
Armenia
Yerevan
Belarus
Grodno
Bosnia and
Herzegovina
Prijedor
Bulgaria
*Sofia
Croatia

Croala
Krijeka
Czech Republic
Prague/Pilsen
Denmark
Copenhagen
Faroe Islands
Faroe Islands
Finland
Helsinki
Georgia

Kutaisi

Tbilisi Hungary
Szeged
Szigetvár
Kosovo
*Gjakova
*Gjilan
*Mitrovica
*Peja
*Prishtina
*Prizren

Kyrgyz Republic Bishkek *Jalalabat Latvia *Riga *Macedonia* Skopje Norway Oslo Tromsø Poland *Katowice Kraków Poznan Warsaw Romania **Bucharest** Cluj-Napoca

Cluj-Napoca
Russia
Novosibirsk
*Tomsk
Serbia
*Belgrade
Indjija
Novi Sad
Slovenia
Golnik
Sweden
Lund
Turkey
Ankara
Istanbul
Ukraine
Kharkiv

Rural Kharkiv
*Ternopil
*Zaporizhzha
Oceania
Australia
Adelaide
Brisbane
Newcastle
Perth
Sydney
Fiji

Fiji
Suva
French Polynesia
Polynésie française
New Caledonia
Nouvelle-Calédonie
New Zealand
*Auckland
Bay of Plenty
Christchurch
Hawke's Bay
Marlborough

Northland Otago *Waikato *Wellington *Whakatane **Niue** Niue Island **Palau**

Republic of Palau Samoa

Apia

Solomon Islands

Honiara
Tokelau
Tokelau
Tonga
Nuku'alofa
Tuvalu
Funafuti
Vanuatu
Port Vila

Western Europe Austria Salzburg Urfahr-umgebung Belgium

Antwerp
Channel Islands
Guernsey
Cyprus
Nicosia
France
Bordeaux
Créteil
Marseille
West Marne
Germany
Munich

Créteil
Marseille
West Marne
Germany
Munich
Greece
Athens
Crete
Thessaloniki
Ireland
Italy
Ascoli Piceno

Bari
Empoli
Firenze
Florence
Palermo
Roma
Trento
Netherlands
Leiden
Utrecht
Zwolle
Portugal
*Lisboa

Spain Asturias *Barcelona Bilbao Cádiz *Cartagena Castellón *Girona La Coruña Madrid Málaga Mar Menor *Pamplona Salamanca *San Sebastián Santander

*Bern
United Kingdom
Birmingham
Vatican City
*Vatican City

Sevilla

Toledo

*Valencia

Switzerland





Purpose of the Report



This Report by the Global Asthma Network (GAN) brings together in one document an up-to-date account on what is known about asthma, its management and where the major gaps lie.

It is intended to influence those in authority to act promptly and wisely to reduce the global burden of asthma



Contents of the Global Asthma Report



88 pages written by 53 authors from around the world

Foreword by Cherian Varghese, Coordinator, Management of Noncommunicable Diseases (NCDs), WHO

3 main parts:

- I. Burden of Asthma
- II. Management of asthma and capacity building
- III. Asthma a global priority



Asthma remains a worldwide health problem



Globally asthma is a common chronic disease.

It affects about 339 million people worldwide.

About 1000 people die from asthma each day.



16th among the leading causes of years lived with disability (YLD).

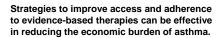
 $28^{\rm th}$ among the leading causes of burden of disease, as measured by disability adjusted life years (DALYs).



Asthma remains a worldwide health problem



Asthma continues to be a major source of global economic burden in terms of both direct and indirect costs.







Global trends in the burden of asthma are poorly documented



Establishing the proportion of the population who have asthma (that is, the prevalence of asthma), and comparing this prevalence between countries, requires the use of standardised measures implemented in large-scale, global surveys.

The last such surveys were about 15 years ago.

GAN is currently collecting new information on global asthma prevalence, severity, management and risk factors in children and adults.





Hospital admissions for asthma are poorly documented in LMICs



Hospital admissions for asthma are an indirect indicator of the burden of more severe asthma, and the efficacy of care.

Currently, routinely collected asthma admissions information is almost entirely restricted to high-income countries, limiting the value of admission rates for surveillance of the global burden of asthma.





Asthma deaths are are poorly documented and many are preventable



Deaths due to asthma are of serious concern because many of them are preventable.

Although asthma mortality rates have fallen in many countries over the last decade, avoidable asthma deaths are still occurring due to inappropriate management of asthma, including over-reliance on reliever medication, rather than preventer medication, and this needs to be rectified.





Inadequate access to effective treatments for asthma



Many governments have overlooked asthma in their plans to address NCDs and have made little progress in improving access to asthma management and medicines, especially the inhaled corticosteroids crucial for the long-term control of asthma.







Effective treatments for asthma are often unavailable or unaffordable



In many countries, essential asthma medicines are unavailable, unaffordable, or are of unreliable quality, resulting in unnecessary burden and mortality from asthma.

Patients are dying of asthma in low-income countries from lack of effective management.

Prompt action is needed from leaders (governments, development partners and technical organisations) to address this and achieve more success stories.



Asthma as a national policy issue: examples from Africa



Country profiles from Benin, Ghana, Kenya, Nigeria, South Africa and Sudan show that asthma is a large problem.

Unmet needs should be addressed by comprehensively applying asthma Standard Case Management and improving access to affordable quality-assured essential asthma medicines.





Asthma as a national policy issue: examples from Asia and India



Country profiles from China, India, Indonesia, Malaysia and Thailand indicate that the burden of asthma is substantial, but asthma remains underdiagnosed and undertreated.

Many asthma patients are not using inhaled corticosteroids, mainly because these medicines are either inaccessible or unaffordable.

To improve asthma care, implementation of asthma guidelines should be strengthened.





Asthma as a national policy issue: examples from Latin America



Country profiles from Argentina, Brazil, Chile, Colombia and Mexico demonstrate important advances in asthma care.

But to improve asthma care from infancy to late adulthood there are continuing needs for:

implementation of national asthma programmes with up-to-date public registries, universal access to essential asthma medicines, and education on asthma for parents, patients and health personnel.



The Global Authors Report

Asthma is a global NCD priority requiring global action



Asthma is one of the most significant NCDs. Two of the five interventions adopted by the World Health Organization (WHO) to tackle NCDs – tobacco control, and essential medicines and technologies – will directly reduce the worldwide burden of asthma.

A third priority aimed at reducing obesity – improved diets and physical activity – is likely to be beneficial for asthma.

But more research is needed to identify interventions specific for asthma.



Asthma is a global SDG priority requiring global action



The focus of the United Nations (UN) 2030 Strategic Development Goals on mortality alone does not capture morbidity and the imperative to reduce the worldwide burden of asthma.

Economic prosperity will be helped by correctly treating asthma, especially in LMICs.





Asthma is a global priority requiring global action for medicines



Policies are needed to enable access to affordable, good quality health care and quality-assured asthma medicines for all people with asthma worldwide.

Patient advocacy can ensure integration of patient viewpoints into planning and policy decisions.





Asthma is a global priority requiring up-to-date global data



Asthma monitoring needs to be ongoing and widespread. Nearly half of the world's countries have never studied the prevalence of asthma.

For many of the remainder, the latest available information on the prevalence and severity of asthma is about 15 years old.





22 key recommendations in the Global Asthma Report



- 5 to the World Health Organization (WHO)
- 9 to Governments
- 4 to Health authorities
- 4 to Health professionals, professional societies and patient organisations



Key recommendations to WHO



WHO should

ensure that asthma and other chronic respiratory diseases are included as a priority in the outcome document of the 2018 United Nations (UN) High Level Meeting on NCDs



Key recommendations to WHO



WHO should

develop and disseminate training manuals for asthma management for low-and middle-income countries (LMICs)

ensure essential asthma medicines are added to its Prequalification Programme



Key recommendations to WHO



WHO should

promote the harmonisation, across international reference pharmacopoeias, of quality requirements that govern the production and testing of asthma medicines



Key recommendations to WHO



WHO should

facilitate the development of independent laboratories for the testing of generic products that are not already approved by a stringent regulatory authority or relevant global mechanism



Key recommendations to Governments



Governments should

include asthma in all their actions resulting from the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020, and the WHO NCD Global Monitoring Framework



Key recommendations to Governments



Governments should

ensure their country has a coordinated national strategy towards better measurement of the true burden of asthma, improving access to care and improving adherence to asthma management strategies



Key recommendations to Governments



Governments should

aim to achieve the UN Strategic Development Goal 3: "ensure healthy lives and promote well-being for all at all ages" to lessen the burden of asthma





Key recommendations to Governments



Governments should

ensure that essential asthma medicines are on their country's Essential Medicines List and ensure that they are free, subsidised or reimbursed

develop and implement insurance schemes which will allow patients to access and buy asthma medicines



Key recommendations to Governments



Governments should

strengthen their national policies, such as those to reduce tobacco consumption, encourage healthy eating and reduce exposure to potentially harmful chemicals, smoke and dust

support further research into known asthma triggers and identifying the causes of asthma



Key recommendations to Governments



Governments should

commit to research that increases the understanding of asthma, its causes, its costs, and leads to improvements in management

support the acquisition of new standardised data to track the country and global burden of asthma



Key recommendations to Health Authorities



Health Authorities should

collect counts of hospital admissions for asthma among children and adults from defined catchment populations, to monitor trends in asthma over time

report national rates of asthma deaths in children and adults to monitor progress in asthma care, and as an early warning of epidemics of fatal asthma



Key recommendations to Health Authorities



Health Authorities should

develop new ways to target and deliver asthma care in diverse health systems and contexts, and assess their cost-effectiveness, affordability and feasibility

in LMICs recognise asthma as an important public health issue, include asthma in all their actions and set up a national programme to improve asthma care and limit costs



Key recommendations to Health Professionals, Professional Societies and Patient Organisations



They should

encourage patient advocacy to improve asthma outcomes

support the government in developing asthma guidelines which are adapted to the national situation

assist in improving correct inhaler technique and adherence to treatment

ensure that their country joins the Global Asthma Network

The Global Authora Report

Chapter 1 The Global Asthma Network



Global Asthma Network Phase I Surveillance data collected in 2017 to 2019 will provide new information on global asthma prevalence, severity, management and risk factors in children and adults





Chapter 2 What is asthma?



Although many causes and biological mechanisms may lead to asthma, the use of this term as a clinical diagnosis is useful in the majority of patients because it will open the door to appropriate management to reduce disease burden

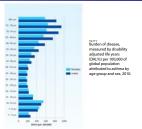




Chapter 3 Global burden of disease due to asthma



Globally, asthma is ranked 16th among the leading causes of years lived with disability and 28th among the leading causes of burden of disease

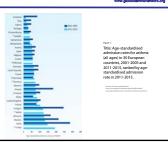


The Global Authoria Report 278

Chapter 4 Hospital admissions for asthma



There is potential for using asthma hospital admissions as an indirect indicator of the burden of more severe asthma, and the efficacy of care. However, more research is required to understand factors underlying the variations in hospital admission rates observed in different settings.





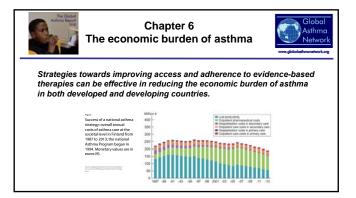
Chapter 5 Asthma mortality

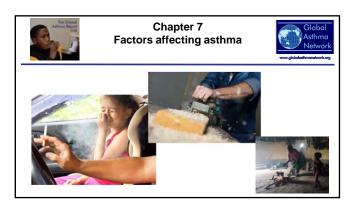


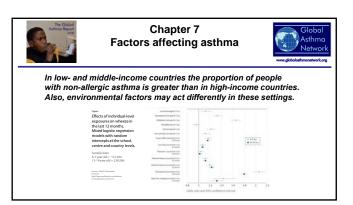
Avoidable asthma deaths are still occurring due to inappropriate management of asthma, including over-reliance on reliever medicines, rather than preventer medicines.

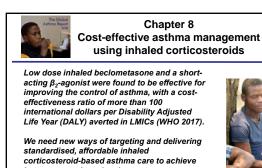


Age-standardised asthma mortality rates (ages 5-34) 2001-2005 and 2011-2015 by country, ranked by 2011country, ranked by 2011mortality rate within World Bank 2014-Sank 2014-Sanked Sanked Sanked Sanked Sank 2014-Sanked Sanked San









better economic and patient outcomes.





Chapter 9 Spacers for asthma and wheezing in children



Inhaled therapy is essential treatment of acute and chronic asthma, and the metered dose inhaler with a spacer is the optimal delivery system in children.

An alternative to a commercially produced valved spacer is a 500ml plastic bottle spacer, adapted from a drink bottle.







Chapter 10 Achieving access to affordable, qualityassured, essential asthma medicines



In many countries, essential asthma medicines are unavailable, unaffordable, or of unreliable quality, resulting in unnecessary burden and mortality from asthma.





Chapter 11 Asthma management in low-income countries



Patients are dying of asthma in low-income countries from lack of effective management. Prompt action is needed from leaders (governments, development partners and technical organisations) to

achieve more success stories.





Chapter 12 Asthma in regions: Country reports from Africa: Benin





Patient Story
24 year old Anita received preventer medicine for her asthma, but abandoned it when she lost her job and her income. When she was five months pregnant she had a severe exacerbation and

required urgent hospital admission.

Patient access to asthma preventer medicines remains a major issue in Benin.



Chapter 12 Asthma in regions: Country reports from Africa: Ghana



Patient Story

After hospitalisation for life-threatening asthma at 5 years of age and regular follow-up asthma clinic visits, 12 year old Sefa now enjoys a normal life.

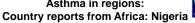
However, being in a family of 11, monthly treatment costs are difficult to sustain, being 15% of the annual family income of US\$4,000.

Moreover, asthma medicines are not always available.





Chapter 12 Asthma in regions:





<u>Doctor Story</u> "For children under 5 years old who need inhaled corticosteroid the family cannot buy it even when they could afford it.

Use of leukotriene modifiers in these children is frequently associated with side effects. This makes management of paediatric asthma difficult."





Chapter 12 Asthma in regions: Country reports from Africa: South Africa



<u>Patient Story</u>
A 5 year old child has attended clinic three times with recurrent wheezing and a troublesome cough which have not improved with inhaled asthma reliever. The father is being treated for tuberculosis (TB). There is a family history of asthma. The mother smokes.

Whether the child's symptoms are due to poorly controlled asthma or TB may be a diagnostic dilemma in areas of high TB prevalence.





Chapter 12 Asthma in regions: Country reports from Africa: Sudan



Patient Story

Ahmed, a 9 year old child from central Sudan, repeatedly admitted to hospital for asthma at least monthly for the past 2 years, is clearly in a need of an asthma preventer medicine. Unfortunately, physicians have never prescribed him an inhaled corticosteroid.





Chapter 12 Asthma in regions: Africa-tailored spirometry training course



There is no job more rewarding than seeing a child encumbered by debilitating asthma freed and living a healthy life, or a group of healthcare professionals inspired and using spirometry for the first time, making considerable change to the care they deliver.

It takes a network of teams to make it happen.





Chapter 12 Asthma in regions: Country reports from Asia and India: China



<u>Patient Story</u> A 4 year old child with recurrent wheezing was referred to a Tier III hospital to consider asthma diagnosis and management. The specialist suggested an asthma preventive medicine; however, the parent asked "could you NOT prescribe corticosteroids for my child" as they did not want an asthma diagnosis. This can also lead to parents stopping prescribed asthma treatment once symptoms have improved.





Chapter 12 Asthma in regions: Country reports from Asia and India: India



In India, almost 80% of expenditure on a sick patient is on buying medicine, mostly from personal savings.

Since 2011. Raiasthan state has provided free inhaled asthma medicines at all points of care. Pooled procurement of medicines for 70 million people has reduced the costs to the state.





Chapter 12 Asthma in regions: Country reports from Asia and India: Indonesia



Patient Story

A 5 year old boy has persistent asthma that requires management with an inhaled corticosteroid. The drug is available and covered by health insurance. However, the family cannot afford a spacer. Hence, a homemade bottle spacer is used.





Patient Story

Chapter 12 Asthma in regions: Country reports



from Asia and India: Malaysia

A 5 year old girl had episodes of cough and breathlessness after colds and running. She responded well to nebulised bronchodilator. There was a strong family history of asthma and atopy. The parents (physicians) believed she had reactive airway disease but were wary of the diagnosis of asthma. Thus, the girl only took the prescribed inhaled corticosteroids or nontelukast during acute episodes. There was no asthma action plan or regular medical follow-up.





Chapter 12 Asthma in regions: Country reports from Asia and India: Thailand



Patient Story

A 50 year old woman dentist with latex allergy had breathlessness and nasal congestion for six months. She partly responded to antibiotics, asthma relievers and an inhaled preventer. Her investigations showed high blood and eosinophil counts, and sputum with numerous degranulated eosinophils. She responded well to a short course of prednisolone, resulting in reduction of eosinophil levels.





Chapter 12 Asthma in regions: Country reports from Latin America: Argentina



<u>Patient Story</u>
A 9 year old boy, on budesonide treatment,
was admitted to hospital for asthma. The physician recommended switching to inhaled corticosteroid with long-acting β_2 agonist treatment, but the public hospital pharmacy did not stock it. The mother could not afford to buy it at a private pharmacy, so he continued with only budesonide.



Chapter 12 Asthma in regions: Country reports from Latin America: Brazil



<u>Patient Story</u>
A 6 year old boy presented to the emergency department with his third severe asthma attack in one year. He improved with salbutamol by nebuliser, oxygen and intravenous hydrocortisone.

Upon discharge, 24h later, he was prescribed oral prednisolone for 5 days and inhaled salbutamol as needed, but no inhaled corticosteroid was recommended nor was he referred for follow-up.





Chapter 12 Asthma in regions: Country reports from Latin America: Chile





Patient Story

A 5 year old girl, whose mother has asthma, had recurrent wheeze from 12 months of age. Previously only assessed in primary care, she was hospitalised for an obstructive crisis and diagnosed with asthma. For the first time doctors prescribed inhaled corticosteroids to manage her symptoms.



Chapter 12 Asthma in regions: Country reports from Latin America: Colombia



<u>Patient Story</u> Marta, whose 6 year old son Santiago suffers from asthma, recently attended an asthma education programme where she learnt about the benefits of the regular use of an inhaler. She is very pleased, as since then Santiago has not been hospitalised for asthma.





Chapter 12 Asthma in regions: Country reports from Latin America: Mexico



Patient Story

Gabriel is 8 years old and he has suffered more than six asthma attacks during the last 12 months, resulting in several hospital admissions. His treating physician prescribed inhaled corticosteroids but the family cannot afford to buy the medicine regularly because of their low income.





Chapter 15 The role of patient advocacy



Patient advocacy can ensure integration of patient viewpoints into planning and policy decisions.





Chapter 16 Asthma as an NCD Priority



Asthma is an important NCD in all regions of the world, affecting people in low- and middle-income countries as well as high-income countries.





Chapter 17 Asthma and the UN's Sustainable Development Goals 2030



The Strategic
Development Goals'
focus on mortality
alone does not capture
morbidity and the
imperative to reduce
the burden of asthma.

