Global Asthma Network

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NETWORK

NEWSLETTER – SEPTEMBER 2022

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Dear Global Asthma Network colleagues and friends,

Greetings to you all. This newsletter celebrates the 10 year anniversary of the Global Asthma Network, established in 2012. We are sending this out to coincide with World Lung Day on 25th September 2022 (see World Lung Day fact sheet on Page 12). Several contributions have been received from our collaborators.

We are also delighted that the Global Asthma Report (GAR) 2022 has been completed. The authorship list is even more global than our previous reports, with 97 people from 31 countries contributing. The State-of the Art report includes sections on the burden of asthma, asthma in the WHO regions, improving asthma management and climate change, as well as GAN Phase I reports.

GAR 2022 will be launched on 11 November 2022 (14:00-15:00 Central European Time) at The Union's World Conference on Lung Health. Those of you who have been involved with this publication and/or are part of the GAN Phase I study group will receive a printed copy of this document by post. The website for GAR 2022 is being created by Eamon Ellwood, and will be part of the launch.

This is my last Newsletter in my role as Chair of GAN. On 1 October Kevin Mortimer and Refiloe Masekela will become Co-Chairs of GAN going forward. It has been a privilege and a pleasure working with you all and the GAN Steering Group.

The GAN collaboration has 387 centres in 138 countries (from all regions of the world), the majority (67%) of centres being in low- and middle-income countries. As someone from a small high-income country, I feel humbled by the worldwide engagement in GAN, which reflects the global importance of asthma and the need to have accessible, affordable, effective detection and management everywhere. GAN Phase I has resulted in 27 publications to date, with more to follow.

The post-GAN Phase I online survey is about to close, and we look forward to replies from anyone who has not done so. GAN has had an amazing journey to date and I foresee that this extraordinary collaboration will continue.

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

Innes
Professor Emeritus Innes Asher ONZM,
Chair of GAN

Contributions from our GAN Collaborators for the GAN 10 year anniversary

GAN Uruguaiana, Brazil

Marilyn Urrutia-Pereira
Dirceu Solé
Herberto José Chong Neto

Collaborators: Pietro Nunes Rinelli
Laura Simon
Leticia Auth Rockenbach
Lucas Ferreira Scott
Victor Vargas Pacheco Raguzoni
Filipe Blum De Vasconcelos
Thiago Mitsuyoshi Fikuda
Tanise Fagundes Aurelio
Luisa Aquino Brum
Vinicius Jardim Oliano

GERAL

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17 DE OUTUBRO DE 2016 · 5

URUGUAIANA SERÁ CENÁRIO MUNDIAL PARA PESQUISA SOBRE ASMA

MÉDICA PEDIATRA DE URUGUAIANA MARILYN URRUTIA PEREIRA BANCA MAIS UMA VEZ UM PROJETO DE ABRANGÊNCIA MUNDIAL PROJETANDO URUGUAIANA EM PESQUISA GLOBAL

Depois de ser reconhecida ao ganhar prêmio mundial de pesquisa sobre asma, em Tóquio (Japão), em 2013, a médica uruguaiaense Marilyn Urrutia Pereira volta a projetar a cidade e o Brasil. Ela está à frente do Projeto Global Asthma Network (GAN) que levantará dados para Vigilância Global, Prevalência, Gestão de Gravidade e Fatores de Risco sobre a doença no município. A pesquisa é a maior realizada atualmente em todo o Planeta e conforme a doutora é muito difícil de uma localidade ser inserida no projeto. No Brasil, não 13 centros e Uruguaiana é um deles. "Nossa cidade está na condição de centro independente e consegui inserir a Uripampa nesse processo", observa a médica que é professora da Faculdade de Medicina de Uruguaiana. Passo Fundo, Maceió, Belo Horizonte, Rio de Janeiro, Brasília, São Paulo, Recife, Pôrto de Santana, Santo André e Pelotas são os demais centros.

DOUTORA MARILYN URRUTIA PEREIRA

DOUTORA MARILYN URRUTIA PEREIRA, TAMBÉM PROFESSORA DA FACULDADE DE MEDICINA DE URUGUAIANA E OS ACADÊMICOS VOLUNTÁRIOS NA PESQUISA FILIPE DE VAN CAVELOS, MARIANA DO AMARAL, TIZIANO FURTADO, EDUARDO DE MORAES, LAURA SIMON, MARINA NOBRIGA, PATRIC ROSELLI, RAFAEL BITTENCOURT, JÚLIA MOTA PEREIRA, CÁSSIA CORRENTINE, VINICIUS JARDIM OLIANO

TRABALHO DE VOLUNTÁRIOS

Em todo o Mundo, há centros em Albania, Angola, Argentina, San Francisco, Córdoba, Australia, Áustria, Bahamas, Bolívia, Carbalmatia, Santiago, Bogotá, Egito e em outros países e cidades. Em Uruguaiana, o projeto global é financiado pela própria médica que traduzia do inglês para o português e mandou imprimir 10.000 questionários, cada um com cinco páginas. Os questionários serão processados por 11 acadêmicos voluntários da Universidade Federal do Pampa (Uripampa), sito da Faculdade de Medicina e sito da Faculdade de Fisioterapia. "Esses universitários não irão ganhar nenhum tipo de bolsa, mas eram nossos estarão garantidos em todas as publicações futuras mundo afora", afirma Marilyn.

A PARTICIPAÇÃO DA COMUNIDADE ESCOLAR

A pesquisa será realizada entre crianças e adolescentes das escolas públicas municipais e estaduais. Ao final de 2015, a médica já havia obtido as assinaturas dos direções e o aval da 10ª Coordenadoria Regional de Educação. Os pais e mães das crianças e adolescentes também preencherão os questionários. "Dessa forma também conheceremos o histórico progresso de doenças da família e, por isso, é muito importante o comprometimento dos professores e da comunidade escolar", observa a médica que será a coordenadora do projeto em Uruguaiana. A coordenadora mundial do GAN é a médica inglesa Philippa Kilwood e o coordenador para os países de língua portuguesa e espanhola é o médico Luis Garcia Marques. Em Uruguaiana, o coletor de dados oficial que supervisionará o processo nas escolas é o professor de Educação Física e acadêmico de Fisioterapia Vinicius Jardim Oliano. A análise final dos resultados será feita na Inglaterra e somente depois da publicação dos dados em nível mundial é que será autorizada a divulgação dos resultados em nível local.

GAN Mexico Collaborators and Centres

Dra. Blanca E. del Río Navarro
Ciudad de México, Norte

Dr. Roberto García-Almaraz
Ciudad Victoria, Tamaulipas

Dr. Juan Valente Mérida Palacio
Mexicali, Baja California

Dr. Francisco Javier Linares Z
Toluca, Estado de México (Rural)

Dr. Noel Rodríguez Pérez
Matamoros, Tamaulipas

Dra. Georgina Ochoa López
Ciudad Juárez, Chihuahua

Dra. Elsy Maureen Navarrete R
Toluca, Estado de México (Urbano)

Dra. Beatriz del Carmen Ramos
San Luis Potosí, San Luis Potosí

Dr. José Antonio Sacre Hazouri
Córdoba, Veracruz

Dra. Ángeles Juan Pineda
Puerto Vallarta, Jalisco

Dr. Hector Leonardo Moreno G
Chihuahua, Chihuahua

Dr. Luis Octavio Hernández M
Morelia, Michoacán

Dra. Ma.Guadalupe Sánchez C
Aguascalientes, Aguascalientes

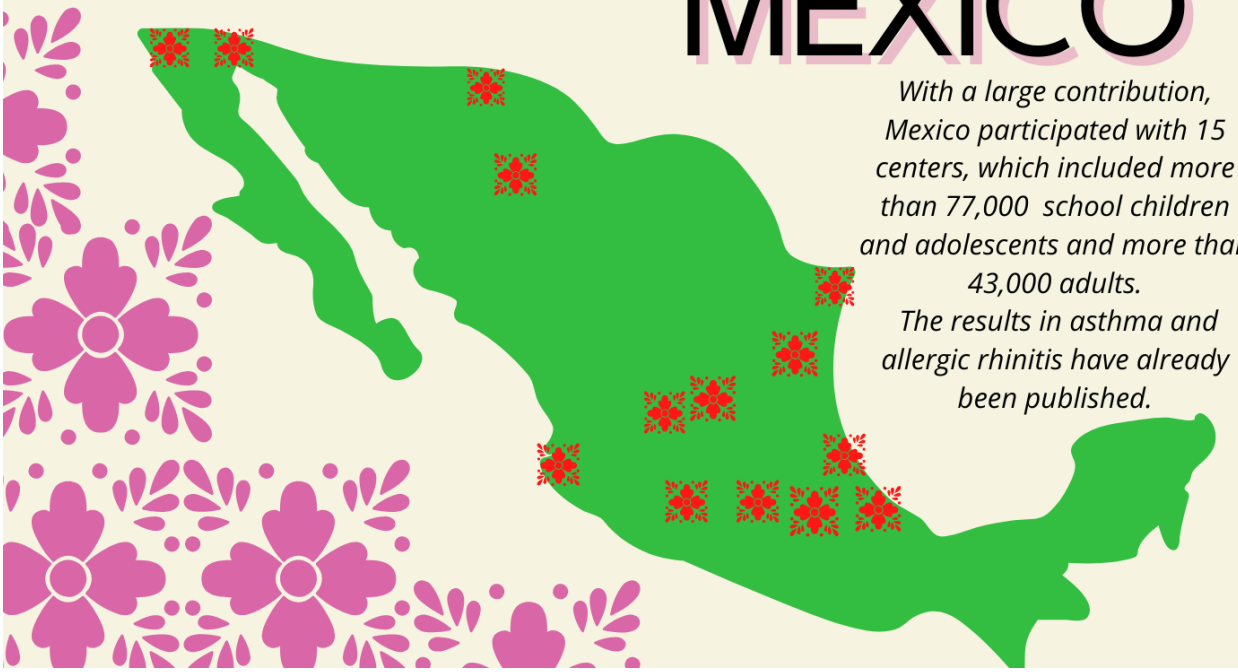
Dr. Alberto José Escalante D
Tijuana, Baja California Norte

Dr. José Santos Lozano Saenz
Xalapa, Veracruz

Dra. Nayely Reyes Noriega
Asesora Metodológica

Dr. Arturo Berber
Asesor Metodológico

MÉXICO



With a large contribution, Mexico participated with 15 centers, which included more than 77,000 school children and adolescents and more than 43,000 adults.
The results in asthma and allergic rhinitis have already been published.

GAN Bikaner, India

Global Asthma Network, Phase I, Bikaner (India) Group

An informal meeting of Bikaner group of GAN Phase I was held on 27th. of Aug. 2022 at advanced microbiology lab of S.P. Medical College, Bikaner to discuss strategy for propogating GAN theme in form of Asthma Education programs and guiding students, suspected to have asthma during survey.

Views expressed by team members are summarized below:

1. All were happy and felt proud to have association with such a successful project having Global impact on asthma research.
2. To increase Asthma awareness amongst students asthma education programs can be planned in schools covered in GAN Phase I, may be on World Asthma Day or World Lung Day.
3. Many parents of students covered in GAN Phase I study were anxious to know the result of the study; if their child is suspected to have asthma, then what is the program for future follow-up?
4. Asthma awareness program and evaluation of students suspected to have asthma can be done with the help of free **Joint Asthma - COPD Clinic (Airway clinic)** conducted by Department of Pulmonary medicine, KMRI, or at **Asthma Clinic** run by Respiratory Division of Department of Medicine, S.P. Medical College, Bikaner in collaboration with pharma companies. Possibility & feasibility is being worked out.

Left to right- Faizan, Nek Parveen, (both Field Workers) Gazala (Supervisor), Dr. M. Sabir (PI), Dr. Sanjay Kochar (PI), Dushyant (Supervisor), - Iliyas (Asthma Educator & PFT technician rendered free services to ISAAC-Phase III & GAN phase -I), Nahid (Field Workers).

Sitting(Left to right)- Gazala (Supervisor), Dr. M. Sabir (PI), Dr. Sanjay Kochar (PI), Dushyant (Supervisor).
Standing (Left to right) - Nek Parveen, Nahid, Faizan, (all Field Workers) Iliyas (Asthma Educator & PFT technician rendered free services to ISAAC-Phase III & GAN phase -I).

Journey in India of GAN Phase I Study – Professor Virendra Singh

Since the publication of ISAAC there were many reports suggesting an increase of asthma prevalence in India. With a variety of methodology, we could never make a true comparison but it remained a mind-boggling question. Therefore when GAN was announced we were quite excited. I along with my two pulmonologist daughters Dr Nishtha Singh and Dr Sheetu Singh had long deliberations. The biggest question was funding. Luckily with some efforts, Cipla foundation agreed to fund Asthma Bhawan to conduct a nationwide study.

GAN Phase I study was conducted across India in 9 centers from Aug 2017 to Feb 2018. Out of which 7 centers were the ones that had participated in the ISAAC phase 3 study also. The methodology and data questions were based on ISAAC. Additionally, data from parents were also collected to represent adults.

1. Bikaner, S.P. Medical College.
2. Chandigarh, PGIMER.
3. Delhi, AIIMS.
4. Jaipur, Asthma Bhawan.
5. Kolkata, NAABI.
6. Kottayam, PIMS Thiruvalla.
7. Lucknow, K.G.M. University.
8. Pune, CRF.
9. Mysuru, JSS Medical College.

In order to understand and discuss various modalities and protocols, an investigators meeting was organized at Asthma Bhawan, Jaipur on 26th March 2017. It was attended by all 9 centers and after thorough discussions, everyone came to a consensus to move ahead. Couple of additional questions having relevance to India were also added. The GAN English Performa was translated into the regional languages by experts & back-translated to maintain validity.

The field teams were also trained at the Indian institute of health management and research (IIHMR) on 29th and 30th June 2017 for conducting the survey and data entry.

GAN India team of 9 centers worked rigorously to fetch robust data from across the country. At all centers, subjects were studied in 3 categories viz 6-7 yrs & 13-14 yrs children, and in a third group, their parents were assessed. However, due to methodological reasons 6-7 yrs aged group children were excluded from Kolkata center.

Results of the study

We called a meeting of all investigators from 9 Indian centers at Jaipur and had a marathon discussion. Results were presented and everyone in the hall was astonished to see that prevalence of current wheeze showed a sharp decline. All looked at each others faces in stunned silence. We replied with the unasked question "We have checked twice and are confident of our data." It was against expectations and the anxiety on our face was "how to defend these results at the national level?" We announced a tea break and slowly all recovered from the anxiety.

National Publications

The following publications used GAN data from India:

1. Prevalence, time trends and treatment practices of asthma in India: Global Asthma Network study In European Respiratory Journal.
2. Global Asthma Network Phase-I, India: Results for allergic rhinitis and eczema in 127,309 children and adults. In Journal of Allergy and Clinical Immunology.

Global Asthma Network in Taiwan

Jing-Long Huang, Kuo-Wei Yeh, Kuan-Wen Su

Global Asthma Network Phase One Survey

In 2016, the Taipei centre joined the Global Asthma Network (GAN) Phase 1 study after receiving an official invitation from Professor Philippa Ellwood. As a long-term participant in the International Study of Asthma and Allergies in Childhood (ISAAC), the Principal Investigator, Professor Jing-Long Huang, of the Taipei centre rapidly organized a new group for the GAN Phase 1 survey. We began with a forward-back translation of the questionnaires, received a waiver of informed consent from our Institutional Review Board, and establish the distribution plan for the questionnaires. With assistance from Taipei City Government, we received more than 17,000 questionnaires from students and their parents. In order to handle such a huge number of questionnaires, this time, the Taipei center utilized questionnaire scanning software to assist with data entry this time. Even though the COVID-19 pandemic postponed the data approval and analyses, the team members in Taiwan are all delighted about the achievement.

Asthma prevalence increases as the economy develops

Asthma prevalence in Taiwan is increasing over the past three decades along with rapid economic development. In the 1970s, only 1.3% of 7-15 year-old students in Taipei had asthma. The prevalence of current wheeze in Taipei increased to 5.2% in 1994 and 7.1% in 2002. The prevalence of current wheeze is up to 9.2% in 2017 according to the GAN Phase 1 survey (Figure 1).

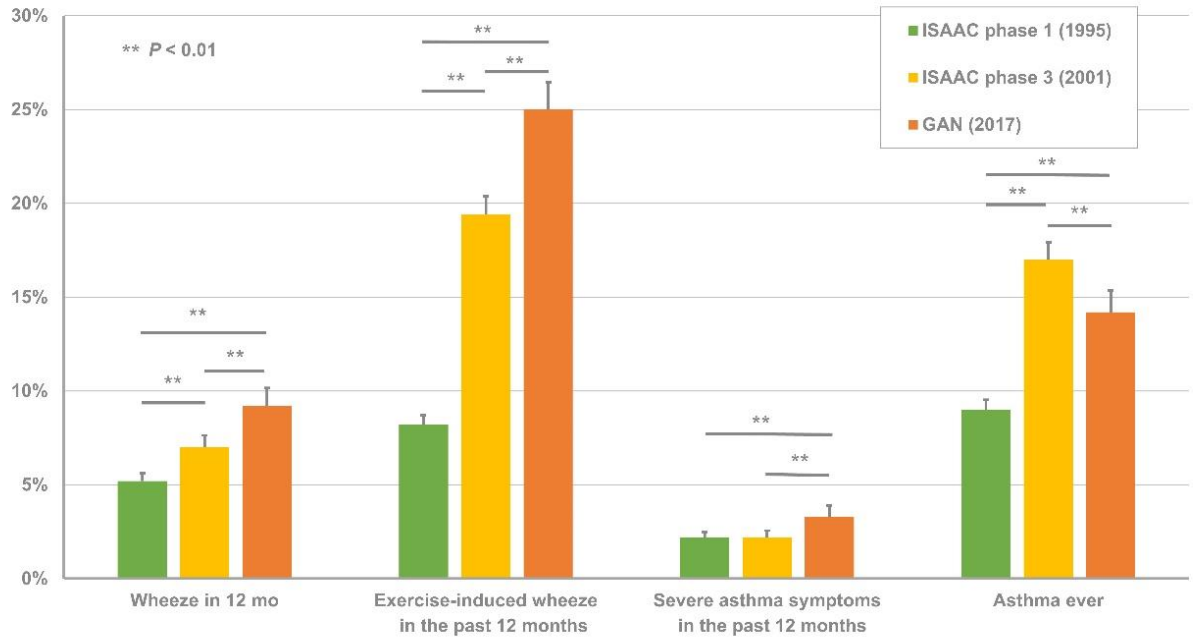


Figure 1. The percentages of asthma-associated symptoms are compared between surveys performed in 1995, 2001, and 2017.

Joint intervention to provide better asthma care

Professor Jing-Long Huang, the Principal Investigator of the GAN in Taipei, collaborated with medical societies, publishing local guidelines for asthma care in Taiwan (Figure 2). Prof. Huang and our team travelled around Taiwan, training physicians and nurses to provide better asthma care (Figure 3). The Asthma Quality Enhancement Project was initiated in 2001. General practitioners, asthma specialists, and certified asthma education nurses cooperate efficiently to provide holistic care for our asthmatic patients. Taiwan's National Health Insurance covers new biologics for severe asthmatic patients, providing better and affordable treatment options for them. The measurement of exhaled nitric oxide is also covered for 6-12 year-old children. The new generation of inhalation medications and devices is available in Taiwan as well. All of the measures are trying to alleviate the burden of asthma in Taiwan.

Figure 2. Guidelines of Asthma care in Taiwan (2011 and 2019 versions)

Figure 3. Asthma education around Taiwan.

Pollution control and cigarette prohibition to alleviate asthma in Taiwan

Air pollution and cigarette smoking are major risk factors for asthma around the world as well as in Taiwan. In 2009, the Taiwan government passed the Renewable Energy Development Act, aiming to reduce the utility of fossil fuels and increase the renewable share to 20% by 2025. Electric vehicles are promoted by tax exemption and subsidies in Taiwan. Cigarette smoking is prohibited in most public areas in Taiwan. High tobacco tax and education at schools and in the media intend to decrease the smoking population. All these measures hopefully decelerate pollution-associated asthma in Taiwan.

The prospect of asthma control in Taiwan

Through the joint effort to decelerate asthma prevalence and provide better asthma control, physicians, asthmatic patients, and their families look forward to a bright future in Taiwan. We hope "no one suffers from asthma" in Taiwan, the same as the vision of the Global Asthma Network.

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World Lung Day 2022: Lung Health for All

Lung Health Fact Sheet

The COVID-19 pandemic has shown the vital importance of lung health. However, with the pandemic dominating the headlines, it is easy to overlook the devastating impact of other common respiratory illnesses.

These facts from the Forum of International Respiratory Societies' Global Impact of Respiratory Disease report show that, despite existing cost-effective health interventions, respiratory disease remains a leading cause of death and disability globally.

There are strong links between lung disease, deprivation and health inequity. To address such inequity we must look beyond medical care to the social and environmental determinants of health such as tobacco use, air pollution, climate change and poverty. If we are to achieve lung health for all we need multisectoral collaboration to strengthen and expand global public health, research, and health-care systems.

The Big Five Respiratory Diseases

Respiratory diseases are an immense burden globally, with five of these - chronic obstructive pulmonary disease (COPD) asthma, acute respiratory tract infection, tuberculosis (TB) and lung cancer - being the most common causes of illness and death worldwide:

COPD

An estimated 200 million people have COPD, of which about 3.2 million die each year, making it the third-leading cause of death worldwide.[i,ii]

Underdiagnosis is common, especially in low-income and middle-income countries (LMICs) where access to basic diagnostics and effective care for COPD is limited[iii,iv].

The high prevalence and severity of illness make its economic cost high. For example, the direct cost of COPD is 6% of total health-care spending (€38.6 billion annually) in the European Union and accounts for 56% of the total cost of treating respiratory diseases.[v]

The most important risk factor for developing COPD is smoking. Tobacco smoke destroys lung tissue and obstructs airways due to inflammation and mucus, leading to disabling symptoms like cough and shortness of breath.

Household and outdoor air pollution, second-hand tobacco smoke, childhood pneumonia, TB occupational dust, genetic causes and other diseases that involve the airways, are also associated with an increased risk of COPD[vi,].

Asthma

Asthma is one of the commonest non-communicable diseases globally affecting 262 million people.[vii] The prevalence of asthma has been rising for the past three decades. [viii]

People with asthma may experience episodes of breathlessness, cough and wheezing, as well as chronic symptoms that interfere with sleep and limit exercise. Yet asthma can be well controlled using existing inhaled medicines. Inhaled corticosteroids are key to control of asthma in people with persistent symptoms.

In LMICs, underdiagnosis and undertreatment are common, and effective inhaled medicines may not be available or affordable. [ix]

Acute lower respiratory tract infection or pneumonia

Lower respiratory tract infection or pneumonia is a leading cause of mortality, accounting for more than 2.4 million deaths every year, particularly among those in LMICs.[x]

In children under 5 years of age, pneumonia is the leading single cause of death outside the neonatal period[xi]

Lower respiratory tract infection kills more people than HIV infection, TB, and malaria combined. It is the leading cause of death in children younger than five years, outside the neonatal period, and in the elderly[xii].

In 2019, pneumonia-related deaths occurred in approximately 650,000 children, making up almost 15% of the deaths in this age group. In addition, lower respiratory tract infections caused more than 1 million deaths in adults older than 70 years.[xiii] It is also the second-leading cause of years of life lost due to premature mortality and one of the most frequent reasons for hospitalization.[xiv] The COVID-19 pandemic has highlighted the importance of pneumonia, with 6.4 million[xv] deaths through the pandemic, most due to lung disease. The elderly or people with underlying illnesses are at highest risk for developing COVID-19.

Yet pneumonia is largely preventable with current immunisations and is treatable. Lack of access to available effective preventive and management options especially in LMICs is a major cause of pneumonia deaths.

Tuberculosis (TB)

On 14 October 2021, the World Health Organization (WHO) released its annual global report on TB, which shows that TB deaths have risen for the first time in more than a decade due to the COVID-19 pandemic.[xvi]

TB caused an estimated 1.4 million deaths in 2019, making it the greatest single infectious agent to cause death prior to the COVID pandemic and the 10th-leading cause of overall deaths in the world. Thirty countries accounted for 8% of the cases of TB.[xvii]

There are also poor health outcomes for those who survive TB ('post-TB'), with a high burden of morbidity and mortality. [xviii]

Yet new rapid diagnostics have improved the ability to rapidly diagnose TB, and most TB can be treated with available drugs, with new short course therapy effective. Underdiagnosis in LMICs and lack of completion of treatment remain important challenges.

Lung Cancer

Lung cancer kills 1.8 million people each year and is the deadliest of all cancers [xix]

The International Agency for Research on Cancer (GLOBOCAN) estimated a global lung cancer burden of 2.2 million new cases and 1.8 million deaths in 2020.

Despite many remarkable advances in evaluation and treatment, lung cancer remains a highly fatal disease, with a global mortality incidence ratio of 0.85 in 2016. [xx]

Five-year survival rates remain only 10% to 20% in most countries, with improvement observed predominantly in countries with higher health development index.[i]

Lung cancer is caused by modifiable risk factors, predominantly tobacco smoking. Multiple carcinogens in tobacco smoke cause mutations of both protective and tumor-promoting genes that accumulate over time. The risk of lung cancer correlates with intensity and duration of smoking.

The incidence and mortality rates of lung cancer are higher in high-income countries, reflecting a longer duration of the cultural tolerance of smoking. [xxi]

This distribution will change as the global tobacco epidemic evolves. More than 80% of smokers live in LMICs.[xxii]

Factors associated with poor lung health

Nutrition

Poor nutrition is a major factor that predisposes to severe pneumonia, TB and other respiratory diseases and mortality.

Lack of immunisation

Lack of immunisation to common childhood infections that cause pneumonia as well as to COVID-19 are important in LMICs. Strengthening of delivery of these interventions is urgently needed to reduce the burden of disease

Climate change

Global warming and related climate emissions can affect respiratory health directly (heat waves and extreme weather events such as hurricanes and cyclones) or indirectly (increasing air pollutants, wildfire activity, pollens, and moulds, as well as by promoting vectors for transmission of infectious diseases).

Between 2030 and 2050, climate change is expected to cause nearly 250,000 additional deaths every year.[xxii]

Policies that reduce air pollution from fossil fuel combustion offer a “win–win” strategy for both climate and health, immediately lowering disease burden from air pollution while also mitigating climate change.

Air pollution and tobacco exposure

Globally, at least 2.4 billion people are exposed to the toxic smoke of biomass fuel, typically inefficiently burned in poorly ventilated indoor stoves or fireplaces. [xxiii]

Air pollution levels remain dangerously high in many parts of the world. Recent data from WHO show that nine of 10 people breathe air containing high levels of pollutants and that 7 million people die every year from exposure to polluted air. [xxiv]

More than 1.3 billion people worldwide use tobacco, exposing many others via second-hand exposure.[xxv]

Tobacco use causes 8 million avoidable deaths per year, mostly from cardiovascular or respiratory diseases.[xxvi] Although respiratory impairment causes disability and death in all regions of the world and among all social classes, poverty, overcrowding, environmental exposures, and generally poor living conditions increase vulnerability.

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GAN PUBLICATION UPDATE

GAN Phase I update – Philippa

It is pleasing to note that there are now 48 publications on the GAN website at http://globalasthmanetwork.org/publications/publications.php. Thank you to those of you who have sent these in and we look forward to more coming in over time.

With the publication of the Global Asthma Report (GAR) 2022, this is an exciting time for us. Eamon is busy preparing the online version and this will be available from the GAN website from November 2022 after the GAR is launched at The Union's virtual Annual General Meeting. We hope this provides you all with up-to-date information and that it is useful and informative.

GAN post-Phase I online survey

Thank you to those of you who have completed the GAN post-Phase I online survey. We have had 68 replies so far and we hope to get more very soon. We will analyse the answers and report back to you on our findings.

With all best wishes, Philippa

Recent Publications:

García-Marcos L, Asher MI, Pearce N, Ellwood E, Bissell K, Chiang C-Y, El Sony A, Ellwood P, Marks GB, Mortimer K, Martínez-Torres AE, Morales E, Perez-Fernandez V, Robertson S, Rutter CE, Silverwood RJ, Strachan DP, and The Global Asthma Network Phase I Study Group. The burden of asthma, hay fever and eczema in children in 25 countries: GAN Phase I study. Eur Resp J 2022 60: 2102866; DOI: 10.1183/13993003.02866-2021.

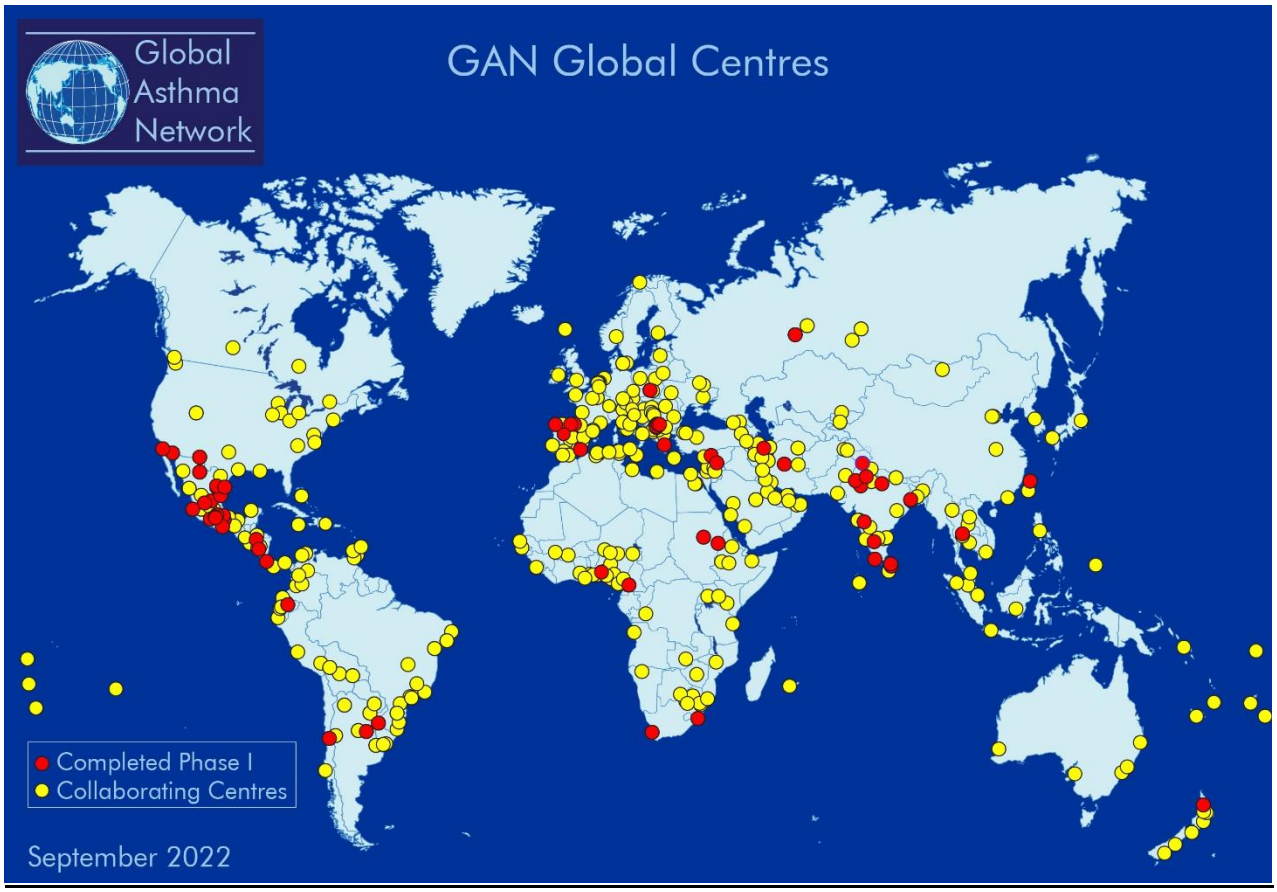
Mortimer K, Lesosky M, García-Marcos L, Asher MI, Pearce N, Ellwood E, Bissell K, El Sony A, Ellwood P, Marks GB, Martínez-Torres AE, Morales E, Perez-Fernandez V, Robertson S, Rutter CE, Silverwood RJ, Strachan DP, Chiang C-Y, and The Global Asthma Network Phase I Study Group. The burden of asthma, hay fever and eczema in adults in 17 countries: GAN Phase I study. Eur Resp J 2022 60: 2102865; DOI: 10.1183/13993003.02865-2021.

Antonogeorgos G, Panagiotakos DB, Priftis KN, Ellwood P, García-Marcos L, Liakou E, Koutsokera A, Drakontaeidis P, Moriki D, Thanasia M, Mandrapylia M, Douros K.
Parental education moderates the relation between physical activity, dietary patterns and atopic diseases, in adolescents: evidence from the Global Asthma Network (GAN) study. *Children* 2022, 9, 686. https://doi.org/10.3390/children9050686

Antonogeorgos G, Liakou E, Koutsokera A, Drakontaeidis P, Thanasia M, Mandrapylia M, Ellwood P, García-Marcos L, Panagiotakos DB, Priftis KN, Douros K. Parental education modifies the harmful effect of indoor moisture environment on childhood asthma. *BMC Public Health* (2022) 22:59

Jagath C Ranasinghe, Ruchira R Karunarathne, Thilini S Munasinghe, Gihani U Vidanapathirana and Sanath T Kudagammna. Childhood allergic diseases across geographical regions of Kandy and Anuradhapura districts of Sri Lanka; where do the rates stand among other regions: experience from Global asthma network Phase 1 study. *Allergy, Asthma & Clinical Immunology (2022) 18:79.* https://doi.org/10.1186/s13223-022-00720-z

Global Asthma Network Centres September 2022 387 centres in 138 countries



Africa

Angola
Luanda
Botswana
*Gabarone
Cameroon
*Douala
*Bafoussam
*Yaounde
*Buea
Ethiopia
*Addis Ababa
Mekelle
*Nekemte
The Gambia
Fajara
Ghana
Kumasi
*Accra
Kenya
Eldoret
*Nairobi
Malawi
Blantyre
Namibia
*Oshana
Nigeria
*Ibadan
Ife
*Maiduguri
*Lagos
Kano
*Gusau
*Enugu
Owo
Benin City
*Gwagwalada
Sokoto
*Okrika Rivers State
Senegal
Dakar
Sierra Leone
*Freetown
Somalia
*Hargeisa
South Africa
Polokwane
*Cape Town
Ekurhuleni
*Pretoria
*Durban
Sudan
*Khartoum
*Gadarif
Eswatini
*Manzini
*Mbabane
Tanzania
*Dar es Salaam
Uganda
Kampala
*Nansana
Zambia
Lusaka
*Lusaka (2)
Zimbabwe
*Zimbabwe
Egypt
Cairo
Alexandria
Cairo-Castle
Algeria
Wilaya of Algiers
Blida
Bab El Oued
*Annaba
Benin
Cotonou
Sèmè Podji
Burkina Faso
Bobo-Dioulasso
Congo, Dem. Rep.
*Kinshasa
Libya
Tripoli
Benghazi
Mali
Bamako
Mozambique
Maputo
*Maputo (2)
Reunion Island
Reunion Island
Togo
Lome
Tunisia
Ariana
Tunis

Asia-Pacific

Hong Kong
Hong Kong
China
Beijing
Hefei
Tayuan
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
*Taipei
Tainan
Thailand
*Bangkok
Chantaburi
*Chiang Mai
Khon Kaen
Vietnam
Ho Chi Minh

Eastern Mediterranean

Iran
*Ahvaz
*Yazd
Tehran
Rasht
Birjand
Bushehr
Zanjan
*Karaj
*Sari
*Hamadan
*Mashhad
*Kashan
*Sanandaj
*Tabriz
Israel
Israel
Jordan
Amman
Jerash
Irbid
Kuwait
*Kuwait
Malta
Malta
Pakistan
Islamabad
Peshawar
Hyderabad
*Multan
Palestine
Ramallah
North Gaza
Qatar
*Qatar
Kingdom of Saudi Arabia
Abha
Alkhobar
Madinah
*Kingdom of Saudi Arabia
Jeddah
Oman
Al-Khod
Muscat
Syrian Arab Republic
Aleppo
*Lattakia

*Damascus
United Arab Emirates
Sharjah
Al Ain

Indian Subcontinent
Bangladesh
Dhaka
Sylhet
India
*Kottayam
*New Delhi
*Chandigarh
*Bikaner
*Jaipur
Chennai
Mumbai (7)
*Lucknow
Orissa
Kolkata (10)
Mumbai (11)
Vellore
*Bangalore
Kolkata (14)
Aligarh
Bijapur
Mangalore
Jodhpur
*Kolkata (19)
*Pune
*Mysuru
Maldives
*Malé
Nepal
*Kathmandu
Sri Lanka
Colombo
*Peradeniya
*Anuradhapura

Latin America & Caribbean
Argentina
Buenos Aires
*Salta
*Mendoza
Buenos Aries (2)
*Corrientes
*San Francisco
*Córdoba Ciudad
*Buenos Aires (3)
Barbados
*Barbados
Bolivia
*Santa Cruz
*Cochabamba
*La Paz
Brazil
São Paulo South
Porto Alegre
Recife
Belo Horizonte
Rio de Janeiro
Brasília
*Passo Fundo
*Maceió
Curitiba
*Feira de Santana
*Santo André
Pelotas
*Uruguaiana
Chile
Valdivia
Santiago
Colombia
Cali
Bogotá
Barranquilla
Bucaramanga
*Santa Marta
*Medillin
Costa Rica
*Costa Rica
Ecuador
Quito
Guayaquil
Esmeraldas
*Samborondón
*Cumbayá
El Salvador
San Salvador
Guatemala
*Guatemala
Honduras
San Pedro Sula
*Tegucigalpa
Mexico
*Monterrey
*Mexico City North
*Guadalajara
*Mexicali
*Ciudad Victoria
Villahermosa
*San Luis Potosí
*Tijuana
*Toluca (1)
*Toluca (2)
Querétaro
Durango
*Chihuahua
Mexico City Central
Mexico City South East
*Oaxaca
San Cristabal de las Casas
*Ciudad Juárez
*Michoacán
*Xalapa
*Córdoba
*Puerto Vallarta
Nuevo Laredo
*Mérida
Hermosillo Sonora
Mexico City South West
*Aguascalientes
Mexico City East
*Guanajuato
*Culiacan
Puebla Pue
*Matamoros
Veracruz
Nicaragua
Matagalpa
*Managua
Panama
David-Panamá
Panamá City
Paraguay
*San Lorenzo
Peru
Lima
Tumbes
Puno
Uruguay
*Montevideo
Bahamas
Bahamas
Dominican Republic
*Santo Domingo
Grenada
Grenada
Jamaica
Kingston
Trinidad and Tobago
*St Augustine
*Tobago

North America
Canada
Ontario
Vancouver
Saskatoon
Montréal
United States
North Carolina
Fort Wayne
Seattle
Madison
Chicago
Metropolitan
Detroit
Iowa City
Washington DC
Houston
New Orleans
Dallas
Virginia
*Utah
Hartford

Northern and Eastern Europe
Albania
Tiranë
Lezhë
Armenia
*Yerevan
Belarus
Grodno
Bosnia and Herzegovina
Prijedor
Bulgaria
*Sofia
Croatia
*Rijeka
Czech Republic
Prague/Pilsen
Denmark
*Copenhagen
Finland
Helsinki
Georgia
Tbilisi
Kutaisi
Hungary
Szeged
Szigetvár
Kosovo
*Prishtina
*Mitrovica
*Gjakova
*Peja
*Prizren
*Gjilan
*Ferizaj
Kyrgyz Republic
Bishkek
*Jalalabat
Latvia
Riga
Macedonia
Skopje
Norway
Oslo
Tromsø
Poland
Kraków
Poznan
*Katowice
Warsaw
Romania
Cluj-Napoca
Bucharest
Russia
Novosibirsk
*Tomsk
*Tyumen
*Tobolsk
Serbia
Belgrade
Novi Sad
Indjija
Slovenia
Golnik
Sweden
Lund
Ukraine
Kharkiv
Rural Kharkiv
*Ternopil
*Zaporizhzha
Turkey
Ankara
Istanbul
*Pendik
Faroe Islands
Faroe Islands

Oceania
Australia
Sydney
Newcastle
Adelaide
*Perth
Brisbane
Fiji
Suva
French Polynesia
Polynésie française
New Caledonia
Nouvelle-Calédonie
New Zealand
*Auckland
*Wellington
Bay of Plenty
Hawke's Bay
*Waikato
Christchurch
Otago
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
Marseille
Bordeaux
West Marne
Créteil
Germany
Munich
Greece
*Athens
Thessaloniki
Crete
Ireland
Ireland
Italy
Roma
Palermo
Firenze
Trento
Ascoli Piceno
Empoli
Florence
Bari
Netherlands
Utrecht
Zwolle
Leiden
Rotterdam
Portugal
*Lisboa
Spain
*Cartagena
*Barcelona
Castellón
*San Sebastián
Málaga
*Valencia
Sevilla
Cádiz
Asturias
Madrid
*Salamanca
*Cantabria
*La Coruña
*Bilbao
Mar Menor
Toledo
Girona
*Pamplona
Switzerland
*Bern
United Kingdom
Birmingham
Vatican City
*Vatican City

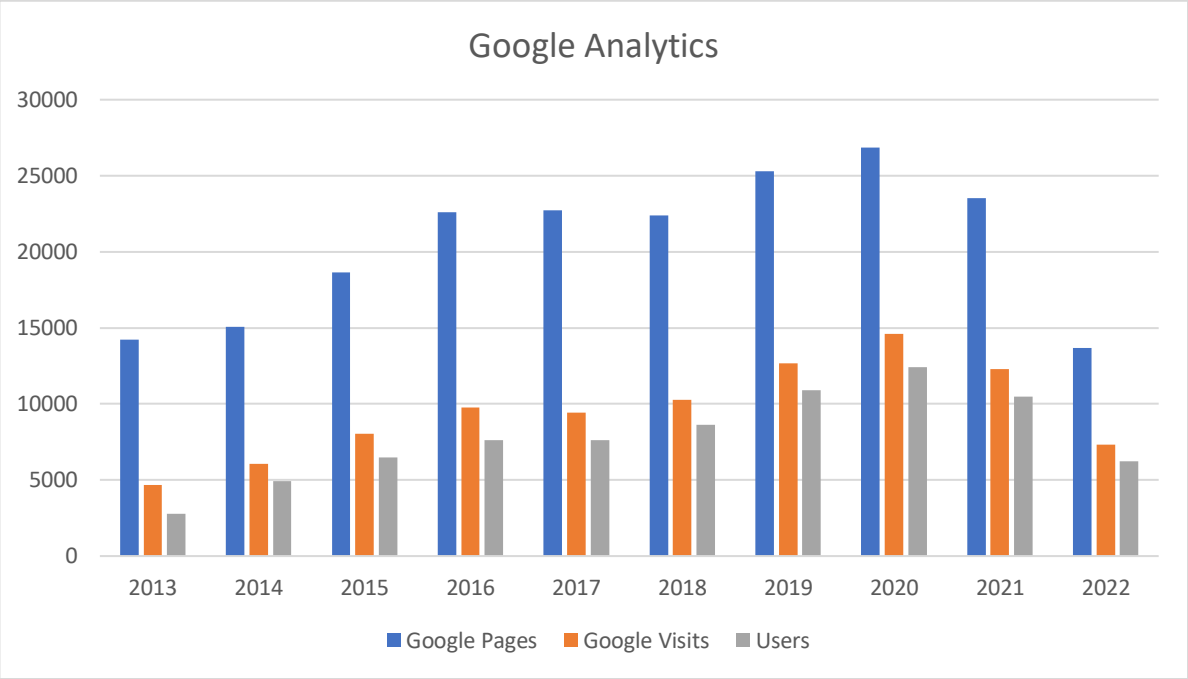
*** = Centre is registered**

Global Asthma Network Website Report – September 2022

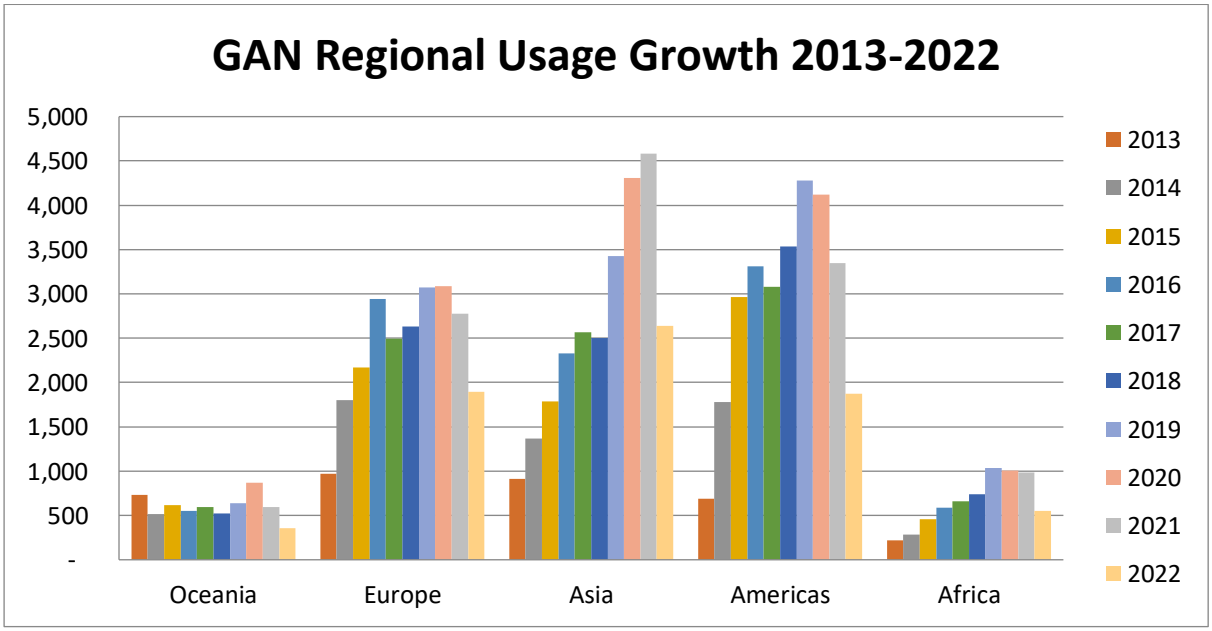
The Global Asthma Network website is intended to be the main channel for the dissemination of information. It includes information of use to collaborators in the Global Asthma Network, such as upcoming conferences and symposiums, asthma management guidelines and the latest asthma related news. The website also provides all the surveillance tools including the GAN Manual, Rationale and Methods and Registration and Centre Report forms, as well as all GAN publications. Please send us anything you recommend for the website.

GAN Website Statistics

Website usage has slowed since 2020. Disruption due to COVID may explain this trend.

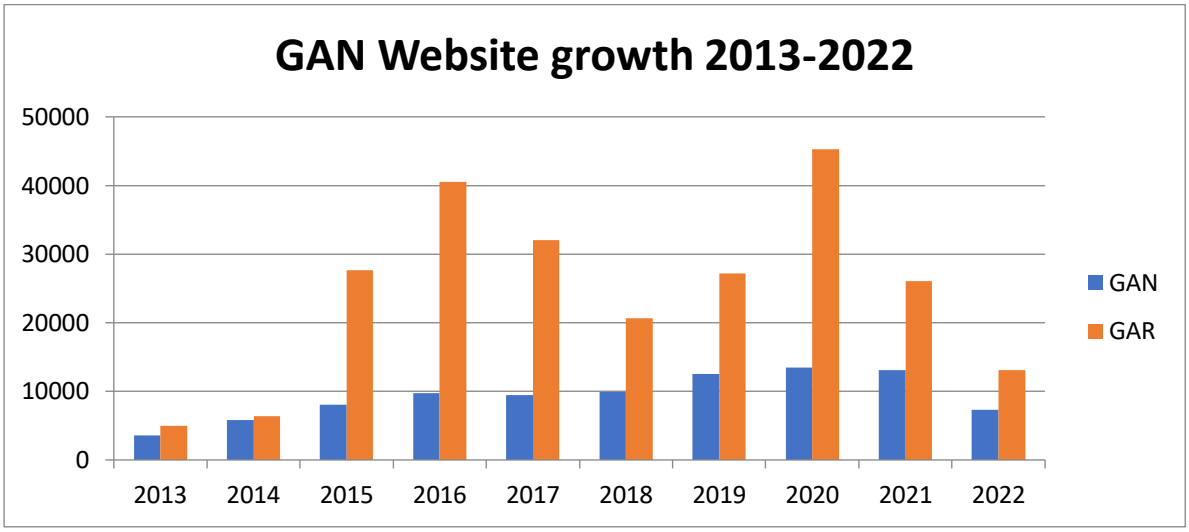


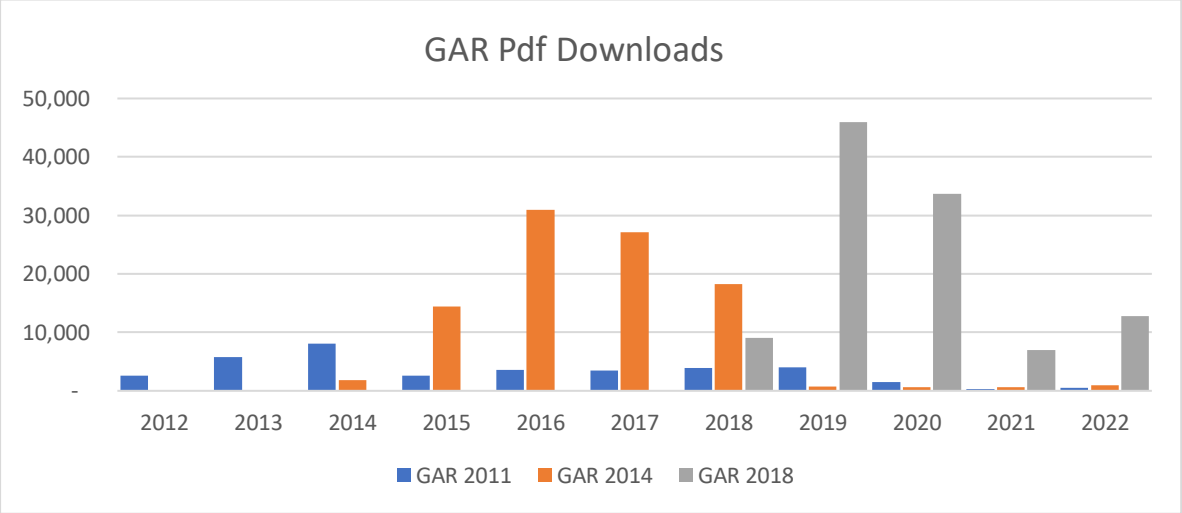
Website usage has slowed in all regions, however Asia continues to show the most usage.



Global Asthma Reports (GAR) 2011, 2014, 2018

We temporarily lost access to the statistics for the pdf downloads in 2021 so the numbers reported here are underestimates. The three GARs had been downloaded over 250,000 times and the GAR 2018 continues to be downloaded on average over 1500 times per month. The continued high demand and growing global recognition of the Global Asthma Reports is heartening. Usage of the website has dropped in 2021, and while this follows the pattern of previous GARs we also anticipate that COVID has had an effect as with the GAN website as seen below. We expect usage to increase again with the launch of the GAR 2022 November 2022.





Social Media

The Global Asthma Network is on Twitter and is gaining more followers regularly. We now have 360 followers. Follow us at @GlobalAsthmaNet. All Global Asthma Network tweets are included as an extension of the news section. News items are tweeted, as well as pertinent asthma related information. Please send us news items!

Support Our Work