



The Obesity Policy Engagement Network Southeast Asia (OPEN SEA)

Inaugural meeting report and proposed 2022 action plan



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Executive summary

The Obesity Policy Engagement Network (OPEN) was globally established in November 2018, in conjunction with ObesityWeek[®] 2018. It brought together public health experts, policymakers, patient representatives and other leading experts across the globe. Participants discussed and identified solutions in driving action at a national level to reduce the rates of obesity, as well as its associated complications, and ultimately deliver meaningful change for people living with obesity.

In support of the global OPEN, a regional OPEN in Southeast Asia, OPEN SEA, was launched in November 2021 to advance regional and national policy advocacy in effective obesity care and management, as well as drive conversations and actions among multi-sectorial stakeholders to address the current obesity challenge in the region.

A virtual inaugural meeting, attended by 50 stakeholders from 11 countries across the region, was held on 24 November 2021^{*}.



Secretary, AOASO and President, Singapore Association for the Study of Obesity (SASO)

Speakers and Experts Dr Matthias Helble Scientist, Research for Health Department, World Health Organization

Ms Jacqueline Bowman-Busato Policy Lead, European Association for the Study of Obesity (EASO) and Chair, OPEN-EU (European Union)

The co-chairs and speakers opened with presentations on the current obesity landscape in Southeast Asia and best practice sharing from the European Union (EU) perspective, following the successful creation of OPEN-EU. The speakers also covered current ongoing regional initiatives in managing obesity, such as the South and Southeast Asian consensus on obesity. This was followed by interactive workshop sessions to collectively share experiences of obesity management and ideate solutions to improve the obesity landscape and drive meaningful action in the region.

Following the meeting, this report will serve as a springboard to drive action on the solutions discussed (Figure 1), as well as to initiate a local OPEN chapter in Singapore, before the next OPEN SEA meeting is convened.



Figure 1: OPEN SEA's 2022 action plan

* Refer to Appendix B for a full list of participants.



The obesity challenge in Southeast Asia Rates of obesity in Southeast Asia

Obesity and overweight are one of the greatest epidemics of the twenty-first century. In 2000, following consultation with the International Obesity TaskForce, the World Health Organization (WHO) published a ground-breaking report that classified obesity as a chronic disease and considered it as an epidemic, due to an alarming increase in its prevalence in both adults and children¹. At present, the rate of obesity is still increasing.

In 2020, it was estimated that 764 million adults globally or 15% of the world's population are living with obesity². By 2030, one in seven men and one in five women will be living with obesity, equating to more than 1.025 billion adults, or 18% of the global population.

Southeast Asia is also impacted by this global epidemic. At present, it is estimated that more than 30 million adults live with obesity in Southeast Asia^{3,†}. The prevalence of obesity in Southeast Asia is alarming, increasing by nearly 40% from 1990 to 2013^{4,5}. It is projected that this figure will increase to over 52.4 million adults in 2030². Several Southeast Asian countries, such as Indonesia, Lao People's Democratic

Republic, Thailand and Viet Nam, are amongst those with the most rapid rise in obesity rates from 1995 to 2016 globally and this increase is expected to continue^{$6.7, \pm$}.

While these figures are significant, it remains an underestimation, as it reflects the standard World Health Organization (WHO) cut-off point for obesity of body mass index (BMI) \geq 30kg/m². However, the specific cut-off point for Asian populations, as recommended by WHO, is much lower at BMI \geq 27.5 kg/m² ⁸. This means that the actual rates of adult obesity in the region are even higher.

The increase in prevalence is not limited to adults, as childhood and adolescent obesity is also becoming a serious health concern. There is an estimated 9.9% prevalence of overweight across member states of the Association of Southeast Asian Nations (ASEAN)^{9,5}. By 2030, more than 21 million children, aged five to 19 years old, will be living with obesity in Southeast Asia². Children living with obesity are at an increased likelihood of experiencing negative health, social and economic consequences¹⁰.



More than 30 million adults

Southeast Asia^{3,†}

40% increase

in the prevalence of obesity in Southeast Asia from 1990 to 2013^{4,5}.



Rapid rise in obesity rates in Southeast Asian countries

such as Indonesia, Lao People's Democratic Republic, Thailand and Viet Nam^{6,7,‡}.

⁺ Countries in Southeast Asia refer to Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.

- * Refer to Appendix A for obesity trends across Southeast Asia.
- [§] The Member States of ASEAN refer to Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam



The negative effects of childhood obesity



Health consequences

- Poorer health in childhood, including hypertension and metabolic disorders
- Poorer health in adulthood, including a higher risk of obesity and developing other chronic diseases, such as cardiovascular disease



Social consequences

- Lower self-esteem, which further diminishes aspirations
- Higher likelihood of being
 bullied
- Poorer school attendance levels
- Poorer school achievements



Economic consequences

- Poorer employment prospects as an adult
- Lower paid job

Obesity is influenced by a combination of physiological, psychological, genetic, environmental and socioeconomic factors and is linked to more than 200 other diseases^{11,12}. If no further action is taken, countries could find themselves fighting an increasing burden of related non-communicable diseases (NCDs), such as diabetes, cancers, cardiovascular diseases, stroke and musculoskeletal disorders. This is especially detrimental for the Southeast Asia region, as many countries are still developing their medical infrastructure. The rising rate of complications due to the obesity epidemic will impact state services and health resource consumption.

Obesity is also a significant cause of mortality. In 2017, it was estimated that there are more than 330,000 deaths annually from obesity-related complications in ASEAN countries¹³. The context of the COVID-19 pandemic has highlighted that people living with obesity are at an increased risk of developing acute complications and worse outcomes from infectious diseases¹⁴, such as a 240% increased risk of developing severe COVID-19 infections and with it, the risk of death¹⁵.

The obesity epidemic also puts an economic burden on health systems across the region. In 2018, the Asian Development Bank Institute estimated that the direct and indirect costs of overweight and obesity in Southeast Asia are \$7.5 billion (7.7% of total healthcare expenditure) and \$3.8 billion (5.1% of total healthcare expenditure), respectively⁵. The significance of this economic burden, especially as countries across Southeast Asia are working towards universal health coverage, urgently indicates that governments, communities and individuals must take collective action to stem the rising rates of obesity and associated costs.

The rising rates of obesity across the region, and globally, mean that the target set out by the WHO in 2013 to reduce the burden of NCDs and halt the rise in obesity at 2010 levels will not be met⁷. The obesity challenge is more urgent than ever and can no longer be ignored – the time to act is now.



The challenges of obesity prevention, management and care

The World Health Organization (WHO) has recognised obesity as a disease since 1948 and defines overweight and obesity as "abnormal or excessive fat accumulation that may impair health¹¹". Several codes in the international classification of diseases published by WHO are related to obesity and used by doctors in the region across their daily practices¹⁶.

In addition, obesity is today widely recognised by the scientific community, by medical societies and through clinical guidelines as a multifactorial chronic disease that requires long-term management.

Policy makers have also increasingly taken steps towards recognising obesity as a chronic disease. In 2021, the European Commission acknowledged obesity as a chronic disease through its definition, "Obesity is a chronic relapsing disease, which in turn acts as a gateway to a range of other non-communicable diseases, such as diabetes, cardiovascular diseases and cancer²²". At a global level, the obesity agenda is also progressing.

Obesity Associations



World Obesity Federation¹⁷

"Obesity is a chronic, relapsing, progressive disease process... need for immediate action for prevention and control of this global epidemic."



The European Association for the Study of Obesity¹⁸

"A progressive disease, impacting severely on individuals and society alike...obesity is the gateway to many other disease areas..."



Obesity Canada¹⁹ "Obesity is a progressive chronic disease, similar to diabetes or high blood pressure..."



American Medical Association (AMA)²⁰

"Obesity and overweight as a chronic medical condition (de facto disease state) and urgent public health problem..."



Asia-Oceania Association for the Study of Obesity (AOASO)²¹

"A pathological state (obesity disease) in which a person suffers health problems caused by or related to obesity thus making weight loss clinically desirable..."



Towards the recognition of obesity in the global agenda

At the 74th World Health Assembly (WHA) in 2021, a resolution was adopted and agreed to develop recommendations for the prevention and management of obesity over the life-course, including proposed targets on the development of obesity. These recommendations have been shared as a discussion paper, released by the WHO and submitted for a public consultation.

During the next WHA in May 2022, a draft resolution will be further discussed for its wide adoption²³.

According to the World Obesity Federation, the discussion paper highlights important considerations for the prevention, treatment and management of obesity throughout the life-course, as well as steps that are needed to support people living with obesity and countries to meet the existing targets. In particular, the current draft²⁴:

- Recognises obesity as a complex multifactorial disease
- Acknowledges the stigma and bias experienced by people living with obesity in different geographies and cultures
- Recognises the need to prevent and manage obesity throughout the life-course
- Makes recommendations for improving the training of healthcare providers (HCPs) in obesity management
- Makes recommendations for obesity to be included in universal health coverage (UHC) packages, and managed through multidisciplinary teams
- Highlights the importance of regulating food environments through taxation and incentive

Next steps

Presentation of draft recommendations during the 75th WHA in May 2022

The current version of the recommendations will be negotiated amongst the different countries. A new version of the document will be released following the next WHA. This document is significant, as it will form part of a global and unified road map on obesity. As countries implement the recommendations, it will lead to significant improvements on a national level to improve obesity care and management.

What are the expected outcomes?

- Greater emphasis on the whole-of-government and whole-of-society approach to halt the rise of obesity.
- A life-course approach to obesity, to tackle the rising rates of both childhood and adult obesity and highlight the importance of a preventative approach in early childhood.
- Integration of health services to provide a continuum of care for people living with obesity and ensure effective prevention and management of obesity.

What can you do?

The adoption of a global resolution on obesity is an important milestone towards greater recognition of obesity as a chronic disease, as well as better prevention and management of obesity. There is an opportunity to engage on this topic for Southeast Asia and your country, with the necessary stakeholders and policymakers, such as your Minister of Health, to encourage them to continue supporting the agenda and adopting these recommendations in your country.



Best practice sharing – success and learnings from the Obesity Policy Engagement Network (OPEN)

OPEN Italy

In collaboration with an obesity and diabetes parliamentary multi-party working group in Italy, OPEN Italy successfully advanced the recognition of obesity as a chronic disease in Parliament. The Chamber of Deputies of the Italian Parliament voted unanimously to approve the motion and within it, to improve obesity prevention and management in Italy. An outcome of this approval is a national plan to harmonise activities to prevent adulthood and childhood obesity, as well as to advocate for full access to various care pathways, including diagnostic procedures for comorbidities, dietary treatments and access to secondary care to evaluate psychological, pharmacological and surgical approaches.

In 2022, OPEN Italy aims to secure the inclusion of obesity in the Ministry of Health's list of chronic diseases for essential assistance. This will set a

However, many barriers still exist for the effective management of obesity across Southeast Asia. Obesity is still widely viewed as the responsibility of the individual by governments, healthcare systems and people living with obesity, which further reinforces negative weight stigma and discrimination^{25,26}.

Many healthcare professionals also lack the appropriate training in managing obesity, receiving none or less than 48 hours of training during their entire medical education²⁷. Moreover, obesity remains significantly underdiagnosed and undertreated – according to one study, only 55% of people living with obesity received a diagnosis and have access to evidence-based behavioural, pharmacological and surgical interventions²⁸.

precedence that allows the group to advocate for the implementation at the local health authority level.

OPEN Spain

A position paper was developed by OPEN Spain to reflect the obesity landscape in the country, as well as to recommend action plans to improve care and management for people living with obesity. OPEN Spain has engaged with the full spectrum of political parties in Spain, via the position paper, to encourage national action in the Spanish Congress, including the submission of a non-legislative proposal on the revision and updating of the Nutrition, Physical Activity and Prevention of Obesity Strategy. Additionally, another paper was launched to showcase the impact of the COVID-19 pandemic on people living with obesity.

The majority of current obesity strategies focus on pure lifestyle interventions with an emphasis on diet and exercise²⁹. While these strategies are absolutely fundamental in addressing the wider challenge of obesity prevention and management as standalone treatment modalities, they do not fully address the complex nature of obesity³⁰. A whole-of-systems approach that factors in the interconnected variables influencing obesity, such as socioeconomic backgrounds, genetic makeup and cultural norms, as well as tackling the barriers within clinical treatments, are needed for effective interventions and management.

MACRO

Available prevention resources, intervention programmes, prevention policies, legal and regulation systems, global trade, national and provincial food policies, healthcare policies, social culture and norms

MESO

Family, individual, school, communit health-care

MICRO

Dynamic energy balance, nutrient, microbiome, organ, tissue, cells, gene, etc

Figure 2: A whole-of-systems approach to obesity prevention and management³¹.



In addition, many countries in the region also lack up-to-date or practical clinical guidelines on obesity management or lack consensus on the definition of obesity, which would ensure that obesity is subsequently treated as a disease and that people living with obesity can receive the needed medical care³².

To address this missing gap, the Asia-Oceania Association for the Study of Obesity (AOASO) will publish a regional consensus on obesity management with 10 countries from South and Southeast Asia in 2022^{**}. The consensus provides guidance on primary care and different profiles of people living with obesity, such as age groups and special populations, including pregnant women or patients with Type-2 diabetes. This consensus can serve as a reference for countries in the region and support defining national guidelines.

The critical need and opportunity for Obesity Policy Engagement Network (OPEN)

Despite positive steps on a local level, there is an urgent need and opportunity for a platform for multi-stakeholder collaboration to identify ways to manage and prevent the rising prevalence of obesity, recognise obesity as a complex chronic disease and ensure regional support to improve obesity care for those living with obesity through multidisciplinary and holistic strategies.

OPEN was first established to achieve national support to improve the care of people living with obesity and manage the obesity epidemic. Following the successful establishment of other regional networks in the EU and Gulf regions (OPEN-EU and OPEN Gulf, respectively), OPEN Southeast Asia (OPEN SEA) was established, with the objectives to:

- Increase recognition of obesity as a major health condition equitable to a chronic disease
- Build an ecosystem conducive in reducing obesity by promoting shared responsibility in obesity prevention and management
- Support national and regional coalitions to ensure people living with obesity across the life-course are integrated into obesity care
- Provide a sustained platform to enable best practice sharing

OPEN SEA is a long-term initiative, so members can continuously identify new ways to deliver meaningful change for people with obesity, healthcare systems and society at large, as well as collectively drive the understanding for a whole-of-systems approach to obesity.

** Countries represented in the consensus: Bangladesh, Brunei Darussalam, India, Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Viet Nan



The OPEN SEA inaugural meeting

The Obesity Policy Engagement Network Southeast Asia (OPEN SEA) inaugural meeting was held virtually on 24 November 2021 and brought together **50 stakeholders** from **11 countries** across Southeast Asia – Bangladesh, Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Sri Lanka and Viet Nam.

Participants, comprising of policymakers, medical practitioners, public health representatives and academics, discussed the current obesity challenge in Southeast Asia, gained insights and collaborated to drive regional advocacy and action.

The inaugural meeting was organised in partnership between the Embassy of Denmark and Novo Nordisk and hosted by:



H.E. Jon Thorgaard

Ambassador of Denmark to Thailand and Cambodia and Chairman of the board, The Danish Trade Council in Southeast Asia

Co-chairs of the inaugural meeting include:



Prof. Brian Oldfield

President, Asia-Oceania Association for the Study of Obesity (AOASO) and Vice-President, World Obesity Federation (WOF)

Dr Kwang-Wei Tham Secretary, AOASO and President, Singapore Association for the Study of Obesity (SASO)

The inaugural meeting also featured two speakers and experts:



Dr Matthias Helble

Scientist, Research for Health Department, World Health Organization and Author of 'Wealthy but Unhealthy: Overweight and Obesity in Asia and the Pacific: Trends, Costs, and Policies for Better Health', published by the Asian Development Bank Institute



Ms Jacqueline Bowman-Busato Policy Lead, European Association for the Study of Obesity (EASO) and Chair, OPEN-EU (European Union) The co-chairs and speakers delivered presentations on the obesity landscape in Southeast Asia, from a medical and economic perspective, best practice in the EU and the path towards building a consensus for obesity by AOASO.

In addition, a workshop session was held, which split attendees into four groups, with the aim of sharing insights between speakers and attendees on national obesity landscapes. This inspired new perspectives to drive regional change and ultimately strengthen a collective voice to effectively deliver change for people living with obesity. During the workshop session, which was moderated by speakers and co-chairs, the stakeholders were asked to reflect and discuss:

- Key barriers and challenges to effective obesity management
- The need for communicating greater evidence on obesity as a chronic disease
- Potential action plans to enable greater prioritisation of obesity management across the life-course in Southeast Asia

Members of the inaugural OPEN SEA meeting in November 2021 were asked to share their thoughts on the importance of communicating the health economic impact of obesity, showcasing patients and healthcare providers' perspectives on obesity care, as well as the potential mobilisation of a network of patient advocates in Southeast Asia, and asked if they had other suggestions.

Following the workshop, each group was asked to present key discussion points and outcomes to the wider group to inspire further knowledge sharing. The results of these discussions and subsequent recommendations are detailed in the next section.



Key discussion themes and recommendations from workshop sessions

Challenges and barriers to effective obesity management

Lack of awareness and knowledge

There was a resounding consensus among participants that there is a lack of awareness that obesity is a chronic disease among those within the healthcare system, as well as the public at large. People with obesity are usually unaware of the need to seek medical help and appropriate disease management strategies until they develop serious health complications, while healthcare professionals lack the resources needed to support people with obesity. Many participants highlighted that primary care physicians (PCPs) lack adequate training and knowledge to initiate the conversations around overweight and obesity with patients.

Due to high rates of overweight and obesity in Southeast Asia, there is a danger of the normalisation of the health condition, which could inhibit help-seeking behaviour. Many individuals across the region still view obesity as a personal responsibility, rather than a serious health condition, and may not actively seek treatments. For example, it is noted that many people with obesity would seek consultations with fitness coaches before an appointment with their healthcare providers. The apathy in seeking interventions is further exacerbated by the feeling of shame due to the psychological stigma that obesity stems from irresponsibility and lack of will to change.

Lack of research, data and consensus

Southeast Asia also lacks a standardised definition of overweight and obesity, according to body mass index (BMI) values. The cut-off values to determine overweight and obesity, as well as the health risks of developing other chronic diseases such as cardiovascular diseases, varies between ethnicities and in different Asian populations – the values are much lower than the World Health Organization (WHO) standard cut-off point, which is based on European populations⁸. Therefore, the lack of accurate data could be challenging to objectively determine the rates of obesity in the region. Participants highlighted that there lacks supporting data and research on the health and economic burden of obesity, as well as policy analysis of existing interventions, to understand and analyse the scale and progression of the obesity landscape in Southeast Asia. This translates to a lack of resources and budgets to address obesity, as policymakers do not have concrete evidence-based recommendations to support policy actions.

Moreover, many countries across the region lack guidelines on effective obesity prevention and management³². Existing guidelines for some countries are outdated and do not reflect the present national obesity landscape. Therefore, participants agreed that updated and consistent guidelines across Southeast Asia would help to ensure appropriate disease management for all people with obesity.

Environmental factors

Participants voiced that environmental factors, such as local food culture, unhealthy eating habits, the ease and availability of ultra-processed foods and drinks and a sedentary lifestyle have all contributed to the high rates of obesity across Southeast Asia. The growing rates of urbanisation in the region, which leads to insufficient space for physical activity, further exacerbates the rates of obesity in the region.

Conflicting healthcare priorities

Many countries across Southeast Asia are faced with a double burden of malnutrition and obesity. Undernutrition in early development has been linked to a higher incidence of obesity and non-communicable diseases (NCDs), such as diabetes and heart disease in later life³³. UNICEF has estimated that in the member states of the Association of Southeast Asian Nations (ASEAN), the rates of childhood overweight and obesity are increasing, with 4.5 million children under five years old in 2016 living with overweight and

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obesity³⁴. As many countries in Southeast Asia are also challenged by under-nutrition, participants concluded that obesity is not prioritised as a public health issue and often not included in the national development agenda, posing further threats to the prioritisation of obesity as a serious public health concern.

Efforts beyond healthy diet and physical exercise

The majority of current obesity strategies across Southeast Asia focus predominantly on lifestyle interventions, with an emphasis on diet and exercise³⁵. Despite increased efforts in lifestyle interventions, policymakers in the region still face challenges in communicating the positive value of eating healthy and exercising to prevent obesity.

While these strategies are fundamental in addressing the wider challenge of obesity prevention and management, participants agreed that they often do not fully address the complex nature of obesity³⁰. A single intervention is likely to achieve little in delivering impactful changes. Therefore, a systemic, sustained approach, delivered at a large scale, is needed to address the complex burden of obesity.

Through addressing the complexity of obesity, other regional health goals can also be achieved due to the interconnectedness of obesity and other chronic diseases, such as healthy lifestyles throughout the life-course and minimising the impacts of obesity-related diseases.

The need to communicate more evidence on obesity as a chronic disease

The WHO recognises the global rapid rise of NCDs – such as cardiovascular diseases, cancers, chronic respiratory diseases and diabetes – and focuses on reducing its rates by reducing the risk factors, such as obesity and insufficient physical activity³⁶. However, participants all called for greater national and regional recognition of obesity as a chronic disease that requires medical care, rather than only as a risk factor of NCDs.

More research is also needed, especially on the economic cost of obesity, as well as the impact of comorbidities and obesity-related chronic conditions. Such data informs better design of obesity management and can provide a cost-benefit analysis for policymakers to understand the urgency of early obesity interventions. In addition, a patient network could be established to empower patients with a platform to voice their perspectives with other like-minded individuals on effective obesity prevention and management. Participants highlighted that such insights should be evidence-based to strengthen their credibility, while highlighting the important role of healthcare professionals in patient advocacy. However, participants discussed that there may be stigma associated with the term 'obesity', which may prevent patients from joining such networks. Attention should therefore be paid to the appropriate language in the establishment and communication of such initiatives.



Prioritisation of obesity management

Building awareness through prevention and education

Participants highlighted the importance of education across multiple settings – home, schools and in communities – in raising awareness of the importance of early intervention and effective obesity management, as well as to address the stigma surrounding obesity at a community-level. Such awareness is especially important during pregnancies and in schools, to encourage greater awareness and knowledge of obesity, its risk factors and associated complications, from the early stages of a child's development.

It was discussed that as well as different touchpoints, multiple channels of communication should be explored, such as leveraging social media to disseminate more information about obesity and generate greater engagement on the topic. Greater conversation around obesity could help to counter the stigma faced by people living with obesity and shift the narrative to convey that obesity is a shared community-level responsibility.

Participants recognised the need for a different strategy for lower-income communities in developing and high-income countries, given poverty is closely linked to worse health outcomes related to obesity, as well as greater exposure to unhealthy dietary products and limited access to quality health services³⁷. These factors further stifle the progress needed to curb rising

obesity rates in the region and should therefore be addressed in tandem.

Leveraging other health initiatives

As well as focusing on malnutrition and underweight, participants agreed that policymakers could balance messages of health initiatives to also focus on obesity for a more holistic view on weight management. This is because the region is faced with a double burden of malnutrition and obesity and undernourished children are at an increased risk of developing obesity in later life.

Additionally, participants emphasised the importance of addressing the life-course of weight management in Southeast Asia, through the integration of obesity prevention and management in maternal health, so women can adopt healthier options for their children from an early age.

Multi-sectorial action plans and cross-collaboration between different governmental departments and broader stakeholders, including policy makers, healthcare professionals and economists, are therefore urgently needed. Participants discussed the need for a clear champion to spearhead change on a national level and tackle the lack of political will in other ministries and local governments.





Next steps

Building on the momentum generated at the inaugural meeting, OPEN SEA will focus on the following key areas to spearhead change for obesity on a regional and national level:





Strengthen OPEN SEA's network

Set up of regular touch base with stakeholders for **best practice sharing sessions and meetings** and to further progress on advocacy

- Organise best practice sharing sessions between stakeholders and organisations
- Convene second OPEN SEA meeting in 2022
- Launch local OPEN chapter in Singapore

Strengthen and formalise partnerships

Connect and formalise partnerships with other obesity-related organisations to expand OPEN SEA

 Outreach to other obesity-related organisations to discuss potential partnerships, shared goals and objectives of OPEN SEA

Develop the foundations of a patient network at a regional level

Setting up the foundations of a network by convening a patient working group to highlight their perspectives on managing obesity. A series of meetings and best practice sharing sessions will be held to empower people living with obesity to discuss topics, including stigma and what other patient groups have achieved through advocacy. This working group will serve as the foundation for a future advocacy network across Southeast Asia

- Partner with existing obesity-related organisations, such as Asia-Oceania Association for the Study of Obesity (AOASO), to source interested patients
- Connect with members of OPEN SEA to appoint as partners of the working group and/or share advocacy contacts
- Champion a patient leader as representative for any upcoming forums and meetings to advocate the SEA perspective
- Coordinate online training sessions on policy advocacy with Global Obesity Patient Alliance (GOPA) or other relevant organisations

If you would like to get in touch for more information on OPEN SEA or would like to participate in any of the workstreams, please contact opensea@gcihealth.com



Appendix A: Adult obesity trends across Southeast Asia⁺⁺

Prevalence of obesity



⁺⁺ Obesity is defined by the World Health Organization (WHO) as individuals with body mass index (BMI) ≥30kg/m²



Appendix B: Participant list of OPEN SEA

Name	Organisation
Bangladesh	
Prof. Md. Faruque Pathan	Professor of Endocrinology & Director, BIRDEM Academy & Former President, Bangladesh Endocrine Society, Dhaka Bangladesh
Prof. Muhammad Hafizur Rahman	Senior Consultant, Endocrinology and Metabolism, United Hospital
Prof. Indrajit Prasad	Professor (Diabetes and Endocrinology), Dhaka Medical College and Hospital
Dr Tanjina Hossain	Assistant Professor, Department of Endocrinology & Metabolism, Green Life Medical College & Hospital
Brunei Darussalam	
Dr Hjh Norhayati Hj Md Kassim	Head, Health Promotion Center, Brunei
Dr Alice Yong	Head of Endocrine Unit, JPMC Brunei
Cambodia	
Dr Kol Hero	Director, Department of Preventive Medicine, Ministry of Health
Dr Chhun Loun	Chief of Non Communicable Diseases Bureau, Department of Preventive Medicine, Ministry of Health
Indonesia	
Prof. Sidartawan Soegondo	Endocrinologist, Division of Endocrinology, Metabolism and Diabetes, University of Indonesia; Director of Diabetes Connection & Care Eka Hospital BSD, Indonesia
Dr Dicky L Tahapary, PhD	Endocrinologist, Division of Endocrinology, Metabolism and Diabetes, University of Indonesia; Indonesian Society for the Study of Obesity; Member of Diabetes Connection & Care Eka Hospital BSD, Indonesia
Lao People's Democratic Republic	
Dr Bouxou Keohavong	General Director, Food and Drug Department
Dr Savang Khunsavanh	Physician, 103 Military Hospital
Dr Chanthone Saysanavong	Physician, Setthathirath Hospital
Dr Viengxay Vansilalom	Deputy Director, Food and Drug Department
Dr Manithong Vonglokham	Deputy Director, Lao Tropical and Public Health Institute
Dr Vadsana Vongvanhdy	Chief Endocrinologist, Mahosod Hospital, Vientiane
Malaysia	
Prof. Dr Nur Azurah Abdul Ghani	Head of Obstetrics & Gynaecology Department, Consultant Obstetrician & Gynaecologist, Hospital Canselor Tuanku Muhriz UKM
Prof. Dr Rohana Abdul Ghani	Consultant Endocrinologist, Faculty of Medicine, Universiti Technology MARA
Mr Nazli Suhardi bin Ibrahim	Deputy Director, Nutrition Division, Ministry of Health Malaysia
Dr Mastura Ismail	Deputy Director, Primary Care, Family Health Development Division, Ministry of Health Malaysia
Mrs Khairul Zarina Mohd Yusop	Principal Assistant Director, Nutrition Division, Ministry of Health Malaysia
Dr Masni Mohamad	Consultant Endocrinologist, Hospital Putrajaya
Prof. Dr Norlaila Mustafa	Head of Medical Department, Senior Consultant Physician and Endocrinologist, Hospital Canselor Tuanku Muhriz UKM
Assoc. Prof. Dr Zubaidah Nor Hanipah	Clinical Consultant in General Surgery, Bariatric and Metabolic Surgery, Faculty of Medicine and Health Sciences, University Putra Malaysia



Dato' Sri Dr Azhari Rosman	Senior Consultant Cardiologist, National Heart Institute
Prof. Dr Muhammad Yazid Jalaludin	Senior Consultant Paediatric Endocrinologist, University Malaya Medical Centre
Myanmar	
Prof. Than Than Aye	Emeritus Professor, Senior Consultant Physician, University of Medicine 2, Yangon
Prof. Tint Swe Latt	President, Myanmar Diabetes Association and Emeritus Professor, University of Medicine 2, Yangon
Philippines	
Dr Mia Fojas	Past President, Philippine Association for the Study of Overweight and Obesity and Philippine Society of Endocrinology, Diabetes and Metabolism
Dr Nemencio Nicodemus, Jr.	President, Philippine Association for the Study of Overweight & Obesity
Mr Jim Saret	Wellness Coach, FitFil Philippines
Prof. Ma. Esmeralda C. Silva	Assistant Professor, Department of Health Policy and Administration of the College of Public Health, University of the Philippines-Manila
Mr Alfred Vargas (Represented by his Chief Legislative Officer, Vince Liban)	Congressman, House of Representatives of the Philippines
Assoc. Prof. Zenaida Velasco	President, Nutritionist-Dietitians' Association of the Philippines
Singapore	
Ms Eer Ling Lee	Deputy Director, Physical Activity and Weight Management, Health Promotion Board
Dr June Lee	President, Obesity and Metabolic Surgery Society of Singapore
Mr Yinn Liang Ong	Manager, Physical Activity and Weight Management, Health Promotion Board
Mr Aaron Sim	Assistant Director, Physical Activity and Weight Management, Health Promotion Board
Ms Audrey Tong	Director, Physical Activity and Weight Management, Health Promotion Board
Ms Sunitha Vijiyasingam	Director, Strategic Planning and Collaborations, Health Promotion Board
Assistant Prof. Tee Joo Yeo	Consultant Cardiologist and Director, Cardiac Rehabilitation Unit, National University Heart Centre Singapore, Consultant Cardiologist and Singapore Heart Foundation
Sri-Lanka	
Prof. Prasad Katulanda	Consultant Endocrinologist, University of Colombo, National Hospital of Sri Lanka
Dr Noel Somasundaram	Endocrinologist, Diabetologist, National Hospital of Sri Lanka
Vietnam	
Dr Thi Kim Thanh Ho	Director of Family Medicine and Community Healthcare Center, Hanoi Medical University
Mrs Thị Tuyết Mai Kiều	Health Economist, Hanoi University of Pharmacy
Dr Huong Duong Phan	Vice Director, National Hospital of Endocrinology
Prof. Huu Dang Tran	President, Vietnam Association of Diabetes and Endocrinology
Dr Quang Nam Tran	Director of Endocrinology Department, HCM Medical University
Dr Le Van Ngoc Truong	Non-communicable diseases expert, Ministry of Health
Dr Quynh Trang Vu	Treatment expert, National Hospital of Endocrinology



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