



SICOM & AOCO 2024

SOMS International Conference on Obesity & Metabolism
in conjunction with **Asia-Oceania Conference on Obesity**

Hosted by

SOMS Society for Korean
Obesity and Metabolism Studies

Co-Hosted by



Empowering Health, Inspiring Change: Practical Solutions for Obesity

Date October 24 (Thu)~26 (Sat), 2024

Venue aT Center, Seoul, Republic of Korea (3F Segyero Room & 4F Changjo Room)

Obesity & the challenge of Vietnam in managing obesity from the clinic to the broader community & beyond

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Vietnam Nutrition Association (VINUTAS)

Content

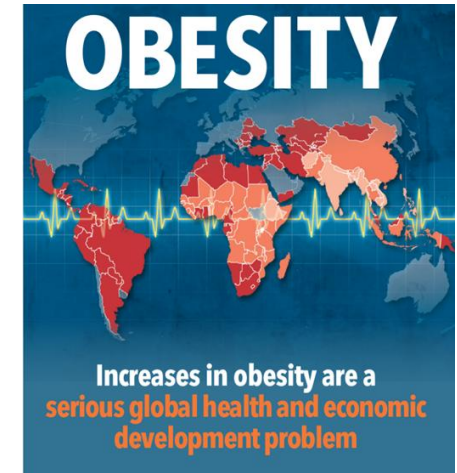
- Obesity & non-communicable diseases in Vietnam
- Complex contributing factors to obesity
- The challenge & solutions to tackle obesity in Vietnam

OBESITY & NON- COMMUNICABLE DISEASES IN VIETNAM

Obesity has become the most outstanding issue around the world

WHO target: **Zero increase in adult & childhood obesity prevalence by 2025!**

We miss the target!



- Worldwide adult obesity has more than doubled since 1990, and adolescent obesity has quadrupled. **1 in 8 people in the world were living with obesity**
- **Lower income countries are facing rapid increases in obesity prevalence**
- World Obesity Federation predicts that **51%** of the global population will be living with overweight or obesity by 2035- contribute to a total economic impact of **US\$4.32 trillion** by 2035 – nearly 3% of global GDP

Vietnam: Obesity increase rapidly



- **Adult obesity has doubled since 2010**
 - 14.35 millions adults were living with overweight & obesity
- **Obesity has more than doubled since 2010 in children**
 - 7,4 % children under the age of 5 were overweight & obesity
 - 19 % children and adolescents aged 5–19 years were overweight & obesity
- **Obesity has more than doubled in the cities**



Population: 100 millions

Vietnam in the top countries with the most rapid rise in obesity prevalence

Countries with the most rapid rise in obesity prevalence 1995-2016

Country		CAGR as % 	Country		CAGR as % 
1	Lao PDR	9.5	1	Vietnam	6.9
2	Vietnam	9.5	2	Lao PDR	6.6
3	Indonesia	8.8	3	Burkina Faso	6.1
4	Maldives	8.4	4	Rwanda	6.1
5	Timor-Leste	8.0	5	Nepal	6.0
6	China	7.9	6	Timor-Leste	6.0
7	Thailand	7.9	7	Bangladesh	5.9
8	Bhutan	7.7	8	Bhutan	5.9
9	Myanmar	7.7	9	Cambodia	5.9
10	Rwanda	7.6	10	Indonesia	5.9

'CAGR as %' = Compound annualised percentage change over the period

Source: NCD Risk Collaboration, 2017²

Vietnam in the top countries with the most rapid rise in obesity prevalence

Vietnam is 1 of 42 countries predicted to have > 1 million school-age children living with obesity in 2030

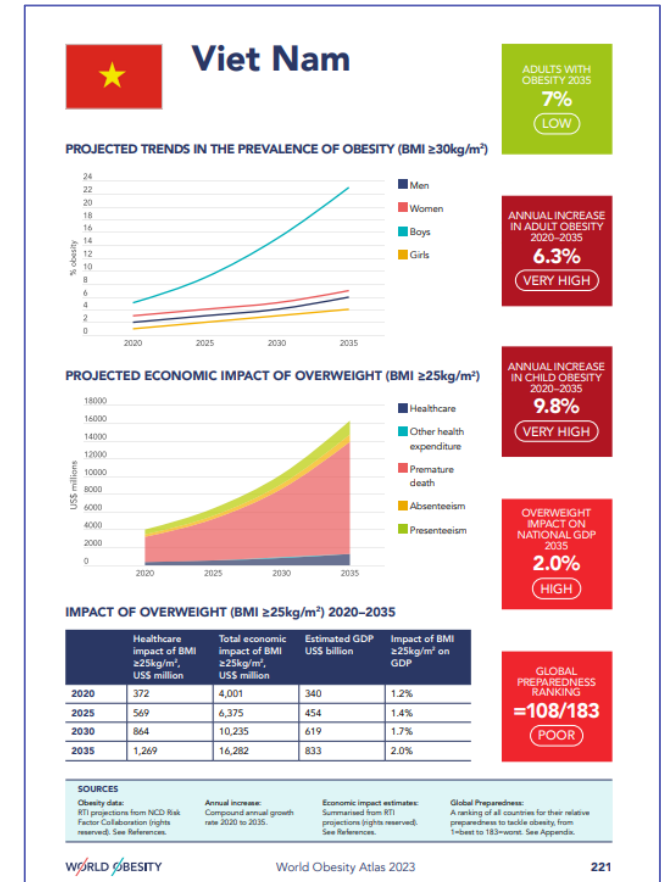
- 35 in 42 of these top countries are low or middle income
- 3 of the top 4 are in Asia

Country	Number of persons with obesity, aged 5-19, 2030	Country	Number of persons with obesity, aged 5-19, 2030
China	61,987,920	Vietnam	1,939,173
India	27,481,141	Ethiopia	1,926,697
United States of America	16,986,603	Saudi Arabia	1,864,250
Indonesia	9,076,416	Malaysia	1,770,631
Brazil	7,664,422	Sudan	1,757,471
Egypt	6,818,532	Morocco	1,757,152
Mexico	6,550,276	Yemen	1,646,485
Nigeria	6,020,182	Venezuela	1,611,444
Pakistan	5,412,457	Colombia	1,583,123
South Africa	4,146,329	Syrian Arab Republic	1,552,255
Bangladesh	3,555,050	Kenya	1,463,954
Iraq	3,477,305	France	1,368,893
Turkey	3,389,941	Uganda	1,345,197
Philippines	3,376,420	Germany	1,318,415
Iran	3,023,603	United Kingdom	1,309,702
Algeria	2,703,722	Italy	1,307,765
Russian Federation	2,550,607	Myanmar	1,288,929
DR Congo	2,421,404	Afghanistan	1,286,177
Argentina	2,248,509	Guatemala	1,262,281
Tanzania	2,185,879	Canada	1,109,002
Thailand	2,152,598	Peru	1,079,543

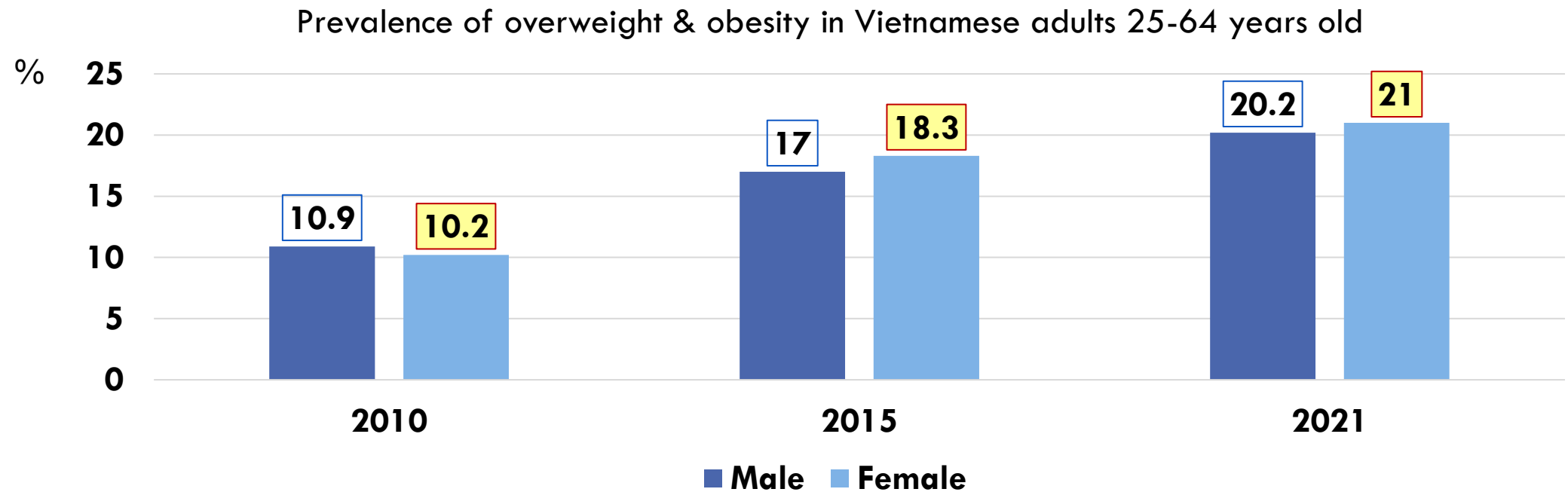
Obesity & the impact in Vietnam by 2020-2035

- There is a dramatic increase in the prevalence of obesity during the period 2020 to 2035:
 - 9.8% in children – VERY HIGH
 - 6.3% in adults – VERY HIGH
- The economic impact of overweight on national **GDP** is **2% - HIGH**
- The medical burden of overweight and obesity in Vietnam will reach **469 million USD**
- Global preparedness ranking **108/183 - POOR**

<https://data.worldbank.org/indicator/SH.STA.OWGH.ZS?locations=VN>

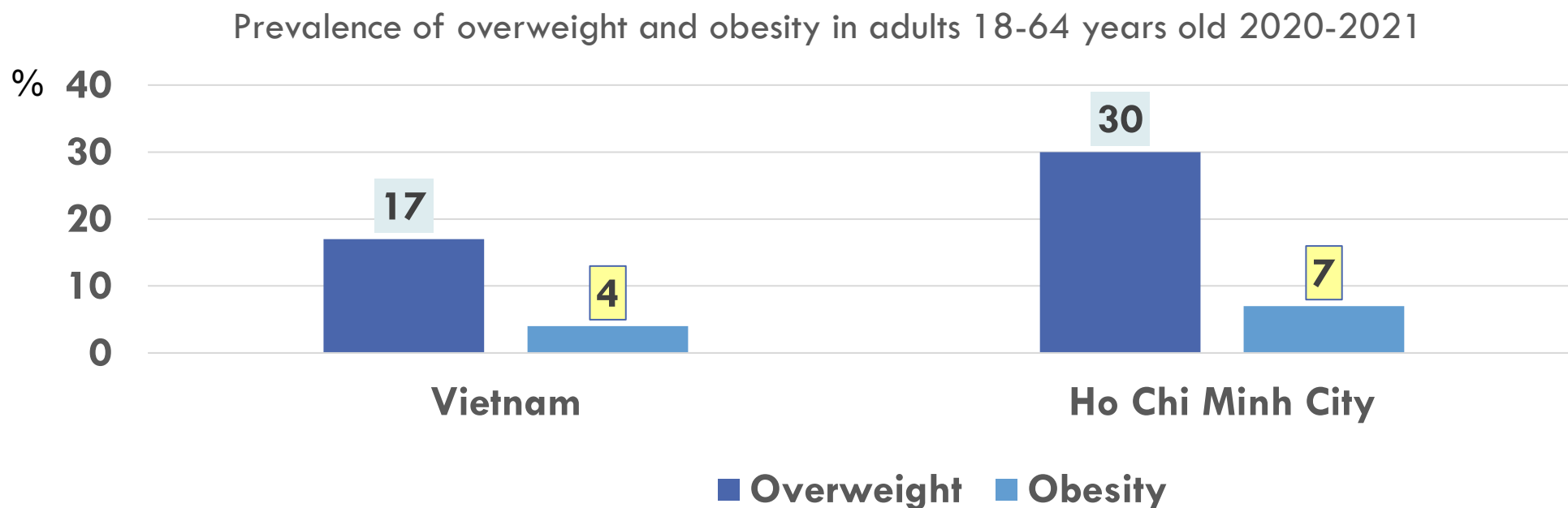


Overweight & obesity in adult has doubled since 2010



Source: National STEPs survey data

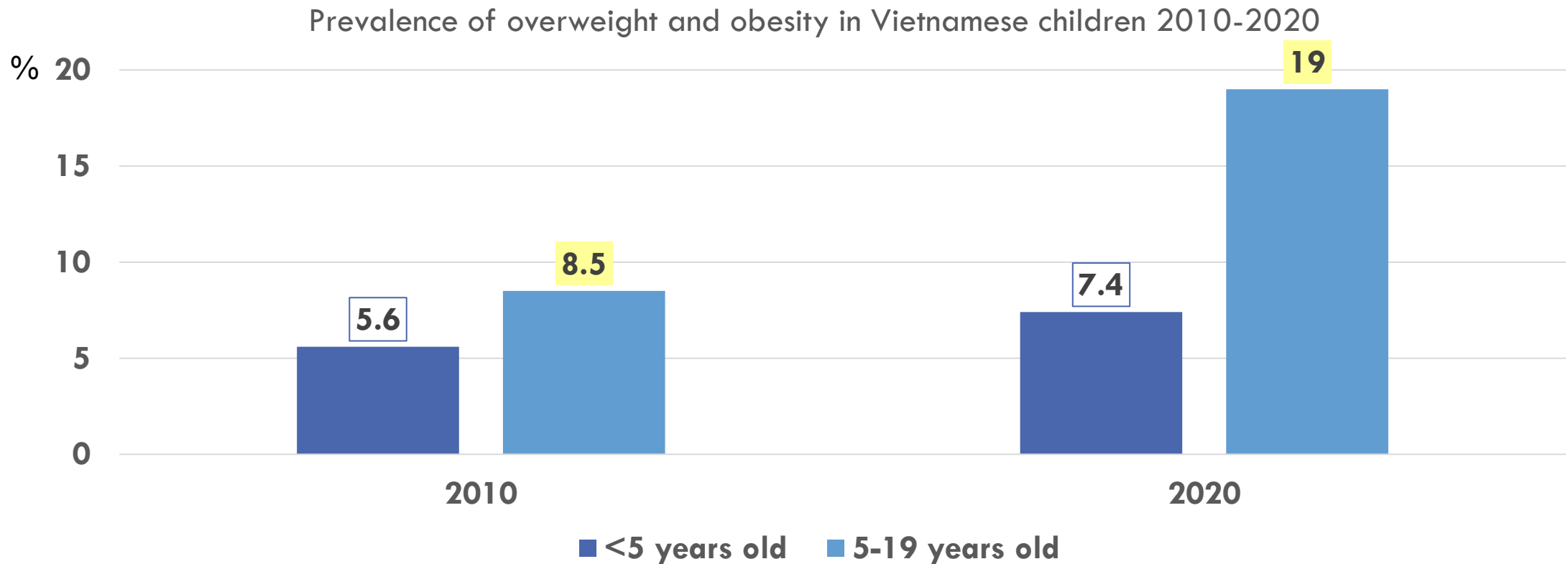
Prevalence of overweight & obesity in adult-year of 2020-2021



Prevalence of overweight & obesity in adult in HCMC nearly double of the country

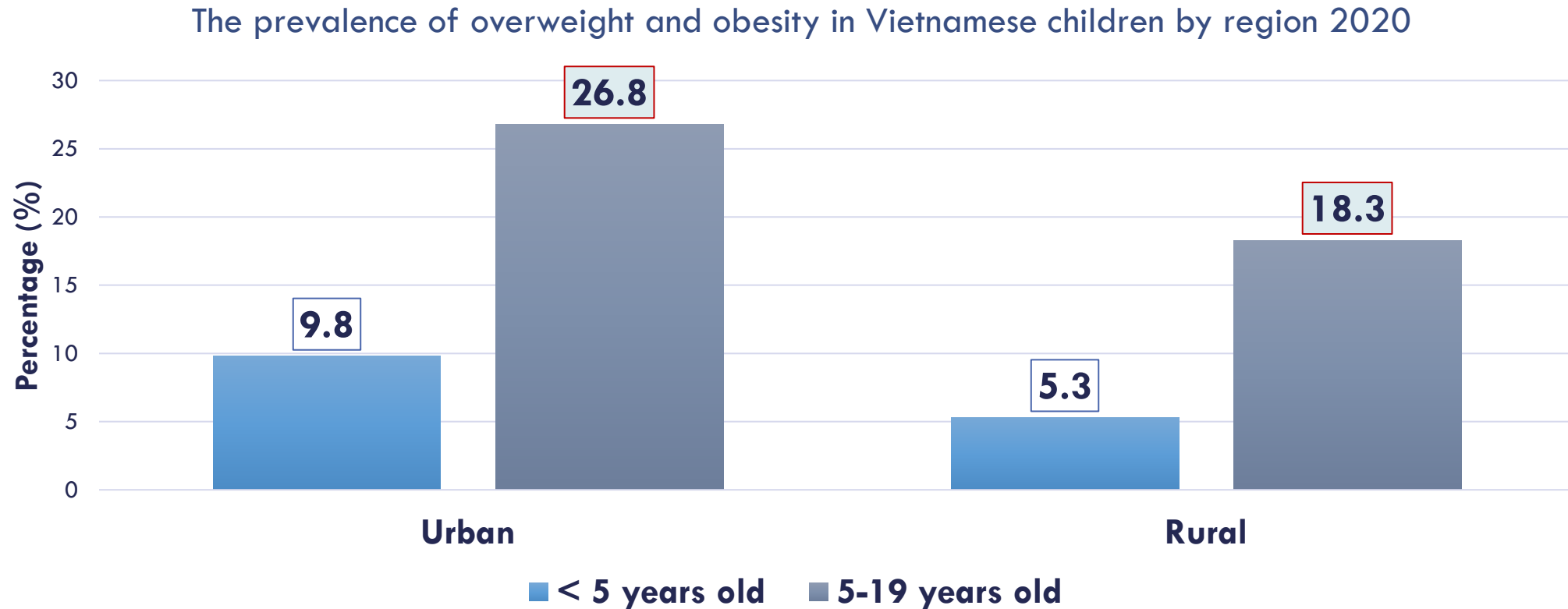
Source: National STEPs survey 2021 & HCMC Nutritional Survey 2020

Overweight & obesity in children has doubled since 2010



Source: National Nutritional Survey

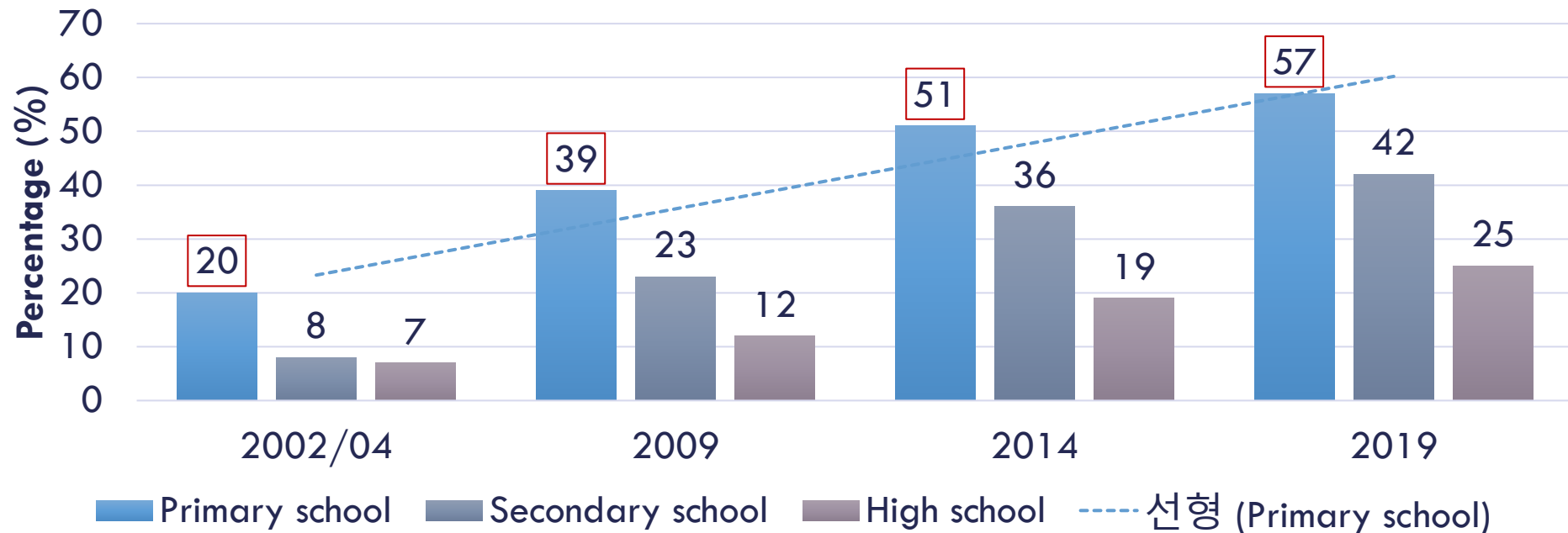
The prevalence of overweight and obesity in children by region



Source: National Nutritional Survey

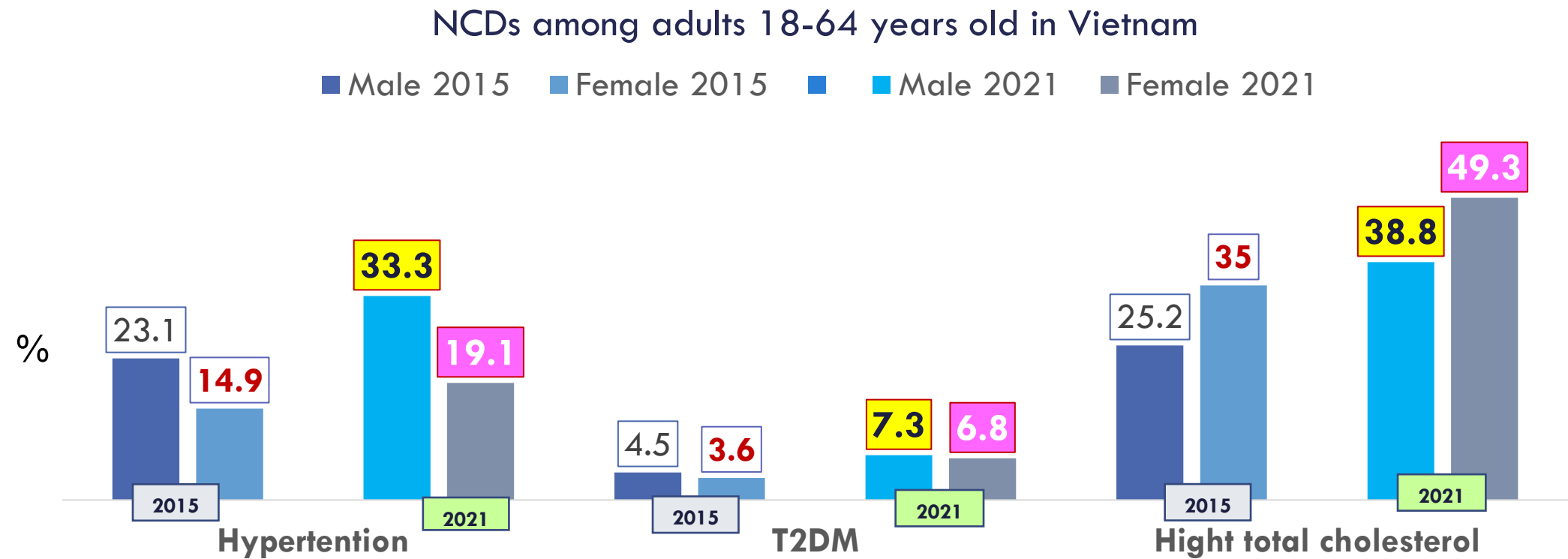
Trend of overweight & obesity in children 5-19 years old

The prevalence of overweight and obesity in school-aged children in Ho Chi Minh City, Viet Nam (2002-2019)



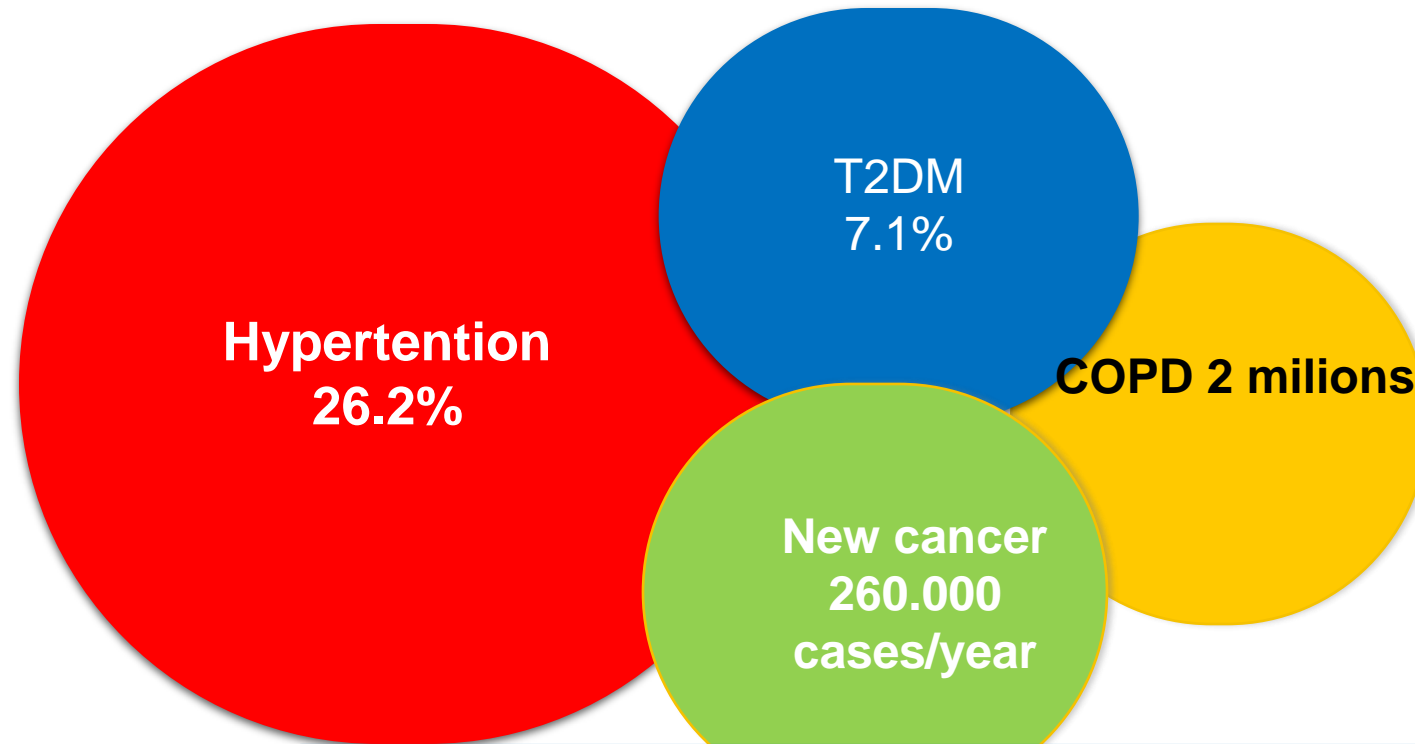
Source: HCMC Nutritional Survey

Some non-communicable diseases in Vietnam



Source: National STEP Survey 2015, 2021

Non-communicable diseases in Vietnam



DALYs # 77% total burden of diseases

CONTRIBUTING FACTORS TO OBESITY



The factors associated with obesity in Vietnam

Societal

- Socioeconomic status: income, education, employment
- *Lowest quintile (46.7%) > highest quintile (19.3%)*
- Living area: Urban > rural

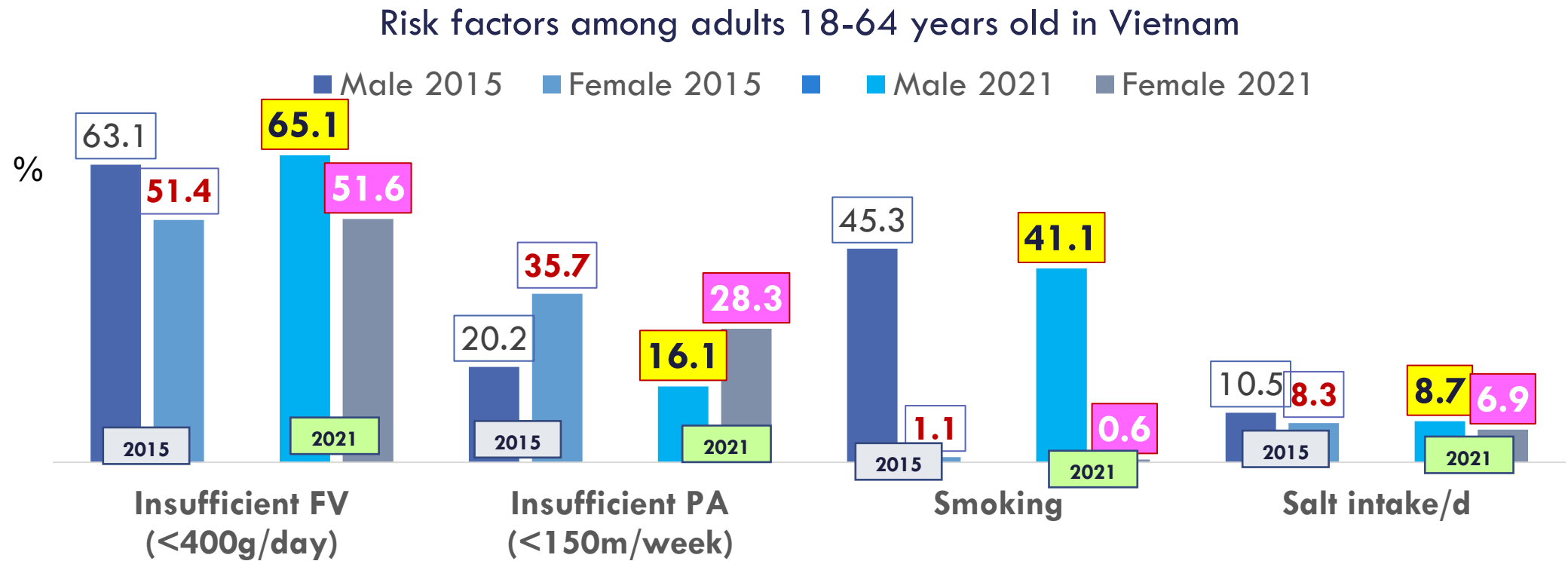
Familial

- Parent's BMI
- **Parental perception of a child's weight status:** underestimation of child weight status, the seriousness of childhood obesity, *and self-efficacy influence on child's diet and activities*
- The ratio of children per adults

Individual

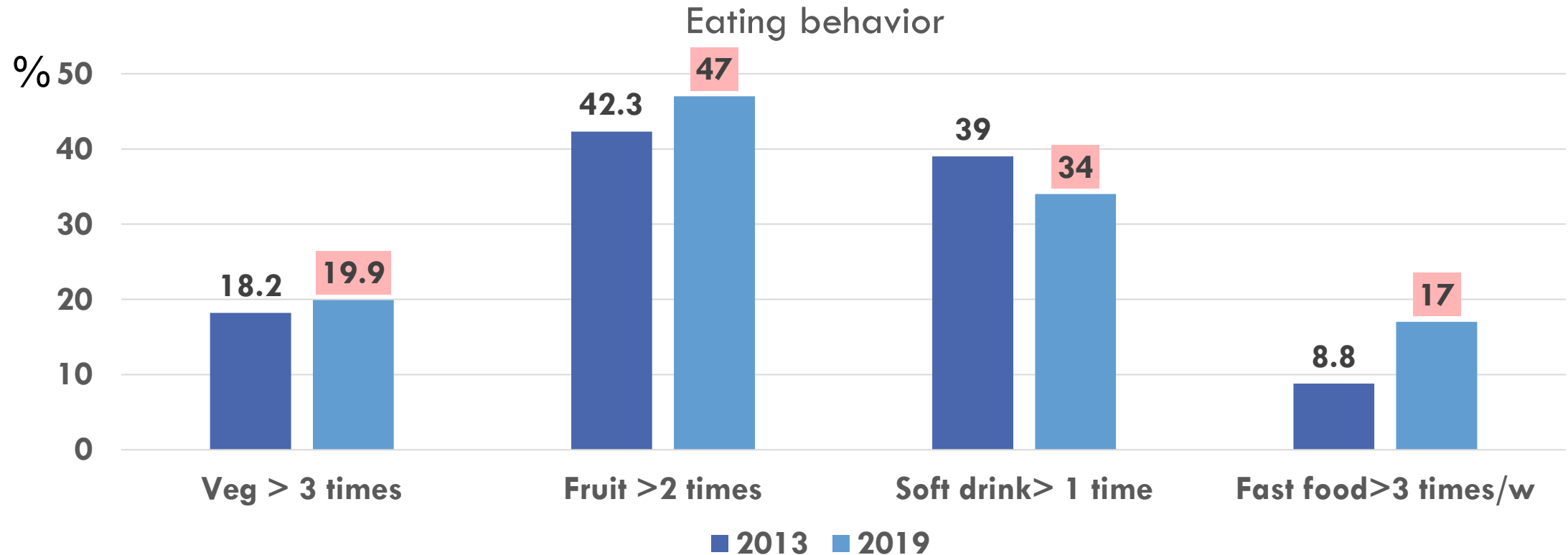
- Age, sex, ethnicity, birthweight, puberty
- Screen time
- Physical activity
- Dietary patterns

Contributing factors of OB & NCDs

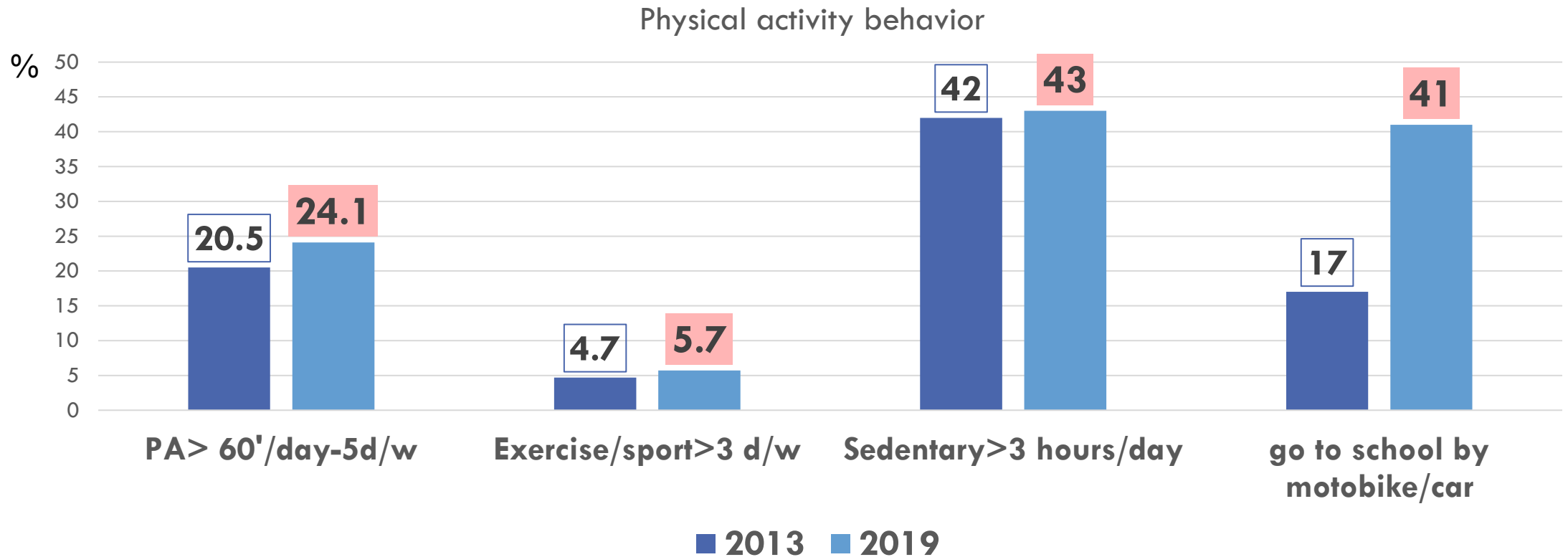


Source: National STEP Survey 2015, 2021

Eating behavior of adolescents in Vietnam



Physical activity behavior of adolescents in Vietnam



THE CHALLENGE & SOLUTIONS TO TACKLE OBESITY IN VIETNAM

The challenge of Vietnam in managing obesity

- **Large population size**, the number of obese people is increasing rapidly
- **Human resource**: Lack of training & trained HCPs
- Lack of financing investment into obesity, political interest, and action
- **Obesity not recognized as a disease**- Lack of evidence, monitoring and research
- **High cost of out of pocket payment**
- Poor health literacy & behaviour
- Mobilizing community participation and action
- **Cultural norm/traditional**: Social perception of chubby people as successful & wealthy
- *Policies and programs targeting healthy nutrition, increased physical activity, and healthy lifestyle ethos, addressing environmental determinants of obesity*

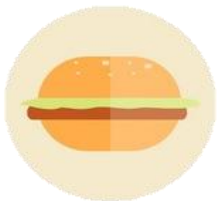
The solutions to tackle obesity

Two pronged approach:

- Prevention by creating the environment for healthy lifestyles
- Management from clinic to the broader community



National policy & action plan to control obesity-NCDs



Policies to reduce consumption of unhealthy food & beverages



School-based promotion of healthy food & physical activity



Food-based dietary guidelines



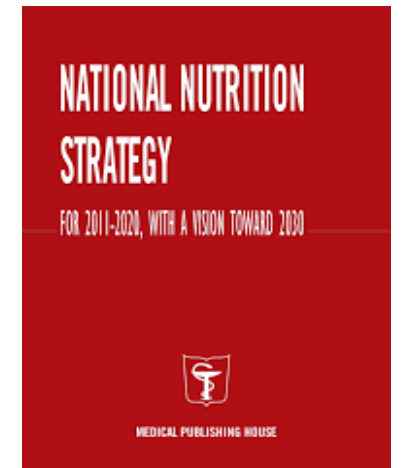
Clinical guidelines for managing obesity



AOM availability and Accessibility

National policy supporting to control overweight/obesity

- The Vietnam health program update 2021
- **National Nutrition Strategy 2021-2030 view toward 2045**
- **National NCDs Management & Prevention Strategy**
 - **Approved the 1st National guidelines for the diagnosis & treatment of obesity**
- *Provide the framework aims to empower the population to make healthy choices, reduce the risk of overweight and obesity by creating an environment that supports and promotes healthy diet & physically active lifestyle*



National health policy: target of overweight and obesity rate by 2030

Overweight & obesity rate <20% for adult

Overweight & obesity rate <10% for children under 5

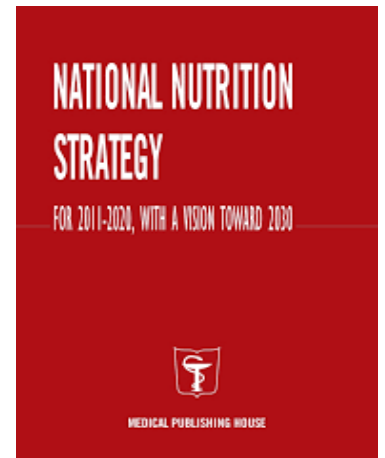
Overweight & obesity rate <19% for children 5-19



Communication on healthy diet & PA for:

> 85% of leader of school & teachers

> 50% of parents



Nutritional status monitoring for children every 1-3 months depend on their age

Policy to reduce consumption of unhealthy food & beverages

Lack of public policies need to be strengthened to address the social, commercial and environmental determinants of health:

- **Restrict** frequent exposure to marketing and promotion of unhealthy food products : NO
- **Mandatory regulations** to limit the availability of high-salt, high-sugar foods and soft drinks in schools: NO
- **Mandatory regulations on nutrition labelling** of processed foods: 5 criterias (without sugar, transfat)
- **Taxes on sugary drinks:** NO
- **WHY? The industry protests**



Restrict price promotions

- **Restricting price promotions:** the rationale and logic for the policy of restricting **price promotions** is clear
- **Price promotions** *increase purchasing of unhealthy food, induces a change in consumption habits.*
- **More impact:** The radical and structural policy initiatives that rely less on consumer agency
- **Low impact:** The usual playbook of individual-focused interventions and policies has not worked



Restrict advertising of junk food

- Exposing children to the adverts can increase the amount of food children eat and shape their preferences from a young age! “Food choices are shaped and influenced through advertising in its many forms”
- Restricting on junk food, less healthy food and drinks adverts: *Moving more care from hospitals to communities*, focus on sickness prevention to alleviate pressure health care system

UK: A ban on junk food adverts being shown on TV before 21:00 will come into force on 1 October 2025 + alongside a total ban on paid-for online adverts! **UK government wanted "to tackle the problem head on" and "without further delay"!**

Ban on junk food TV adverts before 9pm to come in next year

13 September 2024

Share  Save 

Alex Boyd & Zahra Fatima
BBC News

The four pillars of obesity treatment



All have been implemented in Vietnam!

Nutrition therapy

- **Guideline:** nutrition management for obesity; healthy diet; active life, school lunch...
- **Training, Education & Communication**
- **Experts:** lacking
- **Food:** diverse, complex, high energy, eating out...



Thực đơn 1800 Kcal



Sáng



Bữa trưa



Bữa chiều



Giữa sáng



Xế chiều



Tối

Thực đơn 1400 Kcal



Sáng



Bữa trưa



Bữa chiều



Giữa sáng



Xế chiều



Tối

Thực đơn 1200 Kcal



Sáng



Bữa trưa



Bữa chiều



Giữa sáng



Xế chiều



Tối

Case study



BMI= 34.9 – 23.4

Increasing physical activity in school



The school time: 7:00- 16:30; extra-learning; extracurricular
The school yard is so narrow
How do we do?

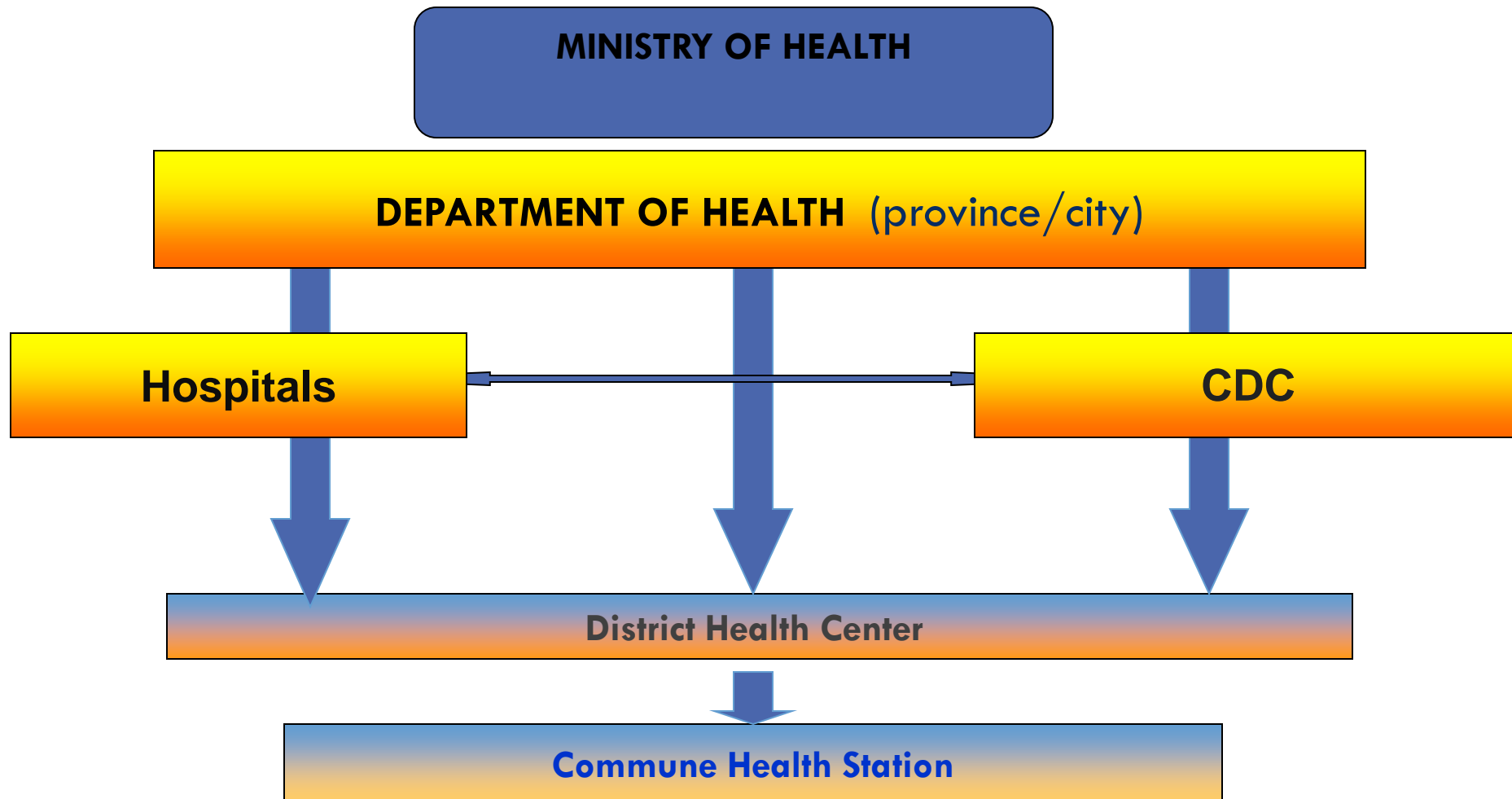


Anti-obesity medication: the cost & supply

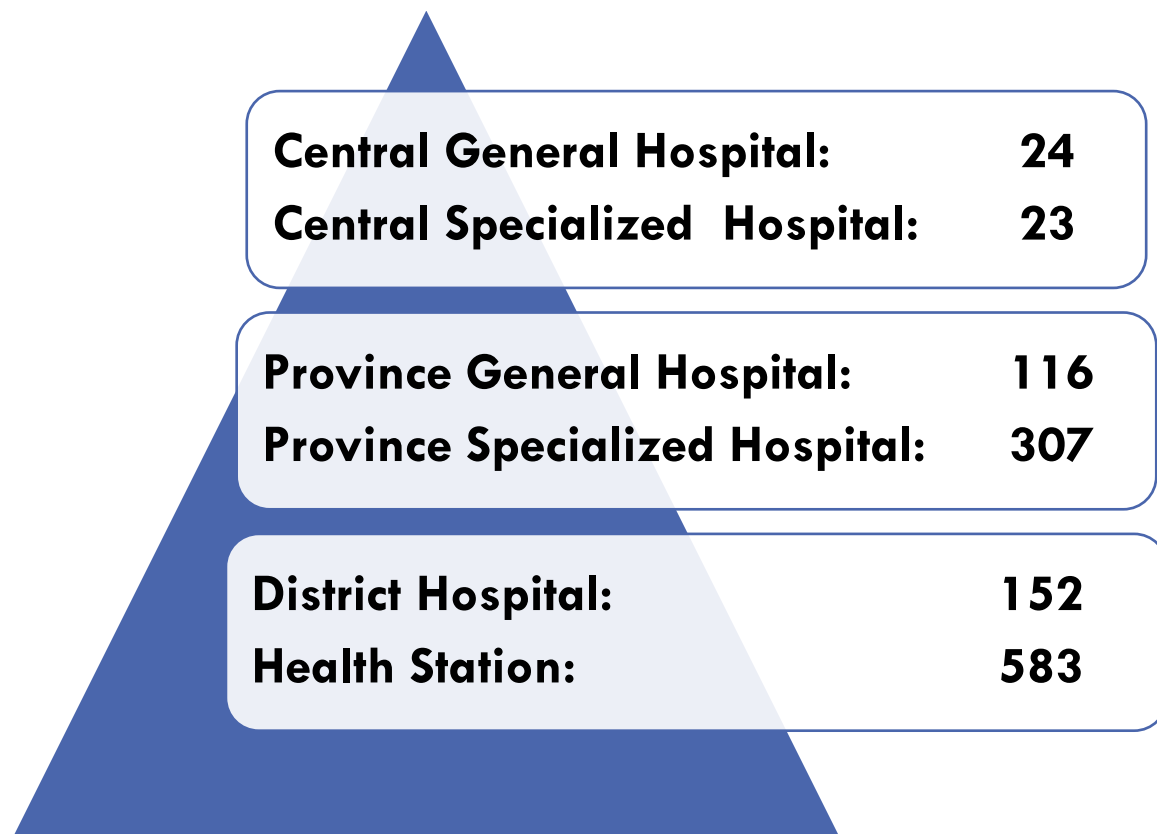


- Availability: *Orlistat; Liraglutide*
 - The cost of Liraglutide and other AOMs: High
 - Health insurance payment: NO
 - Information update: LESS
- many obese people are excluded from this crucial treatment option

Vietnam Healthcare system



Vietnam healthcare system



Public hospital:	1.700
Private hospital:	400
Private Clinic:	37.350

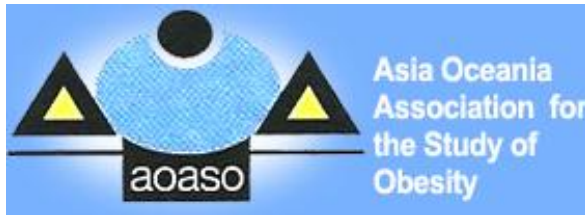
How to speed up the fight against obesity

- **Addressing obesity requires** political will, interest, and action; **organizations and people to work together** to create communities, environments, and systems that support healthy, active lifestyles for all
- **Responsibility must be shared** among individuals, communities, industries, healthcare system
- **Funding programs, providing training and resources for initiatives that promote healthy eating, physical activity, and medication.**
- **The solutions to control obesity particularly related to concrete recommendations for the health system,** including clear criteria for providing a continuum of care through health promotion, prevention, diagnosis, treatment and management of obesity which is equitably offered and **progressively implemented from the clinic to the broader community.**

Conclusion

- The prevalence of overweight, obesity, and NCDs is increasing rapidly in VN
- Vietnam still faces many difficulties in prevention, treatment and management of obesity
- Ambitious programs are needed at a national & regional level, **from the clinic to the broader community & beyond** to prevent obesity and consider obesity as a chronic disease

Acknowledgments



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Thank you for your attention!

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