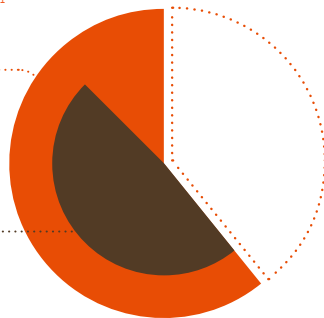


LET'S TALK ABOUT HYPERTENSION

HYPERTENSION IS A MAJOR RISK FACTOR FOR CARDIOVASCULAR DISEASE, THE MOST DEADLY NON-COMMUNICABLE DISEASE.

NON-COMMUNICABLE DISEASES (NCDs): A GROWING GLOBAL HEALTH CHALLENGE

More than **68%** of the world's 56 million deaths globally are associated with NCDs.¹



Almost **75%** of these deaths occur in low- and middle-income countries (LMICs).²



80% of cases of premature heart disease, stroke and diabetes can be prevented.³

Between 2011 and 2025 the lost economic output related to NCDs will be an estimated **USD 7 trillion** in LMICs.⁴



HYPERTENSION: A MAJOR RISK FACTOR



Treating hypertension

is relatively straightforward with both medicines and lifestyle changes, yet it is poorly controlled both in HICs and LMICs.

More than

9.4 million



people are estimated to die from hypertension and high blood pressure globally every year. This is equivalent to all infectious diseases combined.⁵

At **46%**

the African continent has the highest prevalence of raised blood pressure in the world.⁷



Most people with hypertension living in LMICs **don't know they have it.**⁶



THE NOVARTIS FOUNDATION'S APPROACH TO HYPERTENSION MANAGEMENT

The Novartis Foundation works hand-in-hand with local and global partners to catalyze scalable and sustainable healthcare models to improve access to quality healthcare and improve health outcomes for people living in low- and middle-income countries.

Two of our current programs in Ghana and Vietnam aim to improve the management and control of hypertension through innovative healthcare delivery models that:



Shift screening and treatment to the community



Integrate digital health technologies to empower healthcare workers and patients



Build transformational local partnerships

All with a vision for impact, scale and sustainability.



Ghana

Location: Lower Manya-Krobo District

36.7% of adults in Ghana have hypertension⁸, but only **4.1%** of these adults have their condition controlled.⁹

Community-based Hypertension Improvement Project (ComHIP)

The Novartis Foundation is working with the following partners to implement ComHIP:

FHI 360

University of Ghana
School of Public Health

Ghana Health Service

London School of
Hygiene & Tropical
Medicine (LSHTM)

VOTO



Vietnam

Location: Ho Chi Minh City

25% of the adult population in Vietnam has hypertension,¹⁰ but less than half have their condition controlled.¹¹

Additionally, hypertension in adults is higher in urban areas in Vietnam, at **33%**.¹²

Ho Chi Minh City Communities for Healthy Hearts

The Novartis Foundation is collaborating with the following partners to implement 'Communities for Healthy Hearts':

Hanoi School of
Public Health

Ho Chi Minh City Provincial
Health Department

PATH

Lotus Impact

References

- World Health Organization, Global status report on non-communicable diseases, 2014, [p.xi]
- World Health Organization, Global status report on non-communicable diseases, 2014 [p.xi]
- World Health Organization, Global Health Observatory (GHO) Data: Noncommunicable diseases (NCD). Available at: <http://www.who.int/gho/ncd/en/>. Last accessed April 2016.
- World Health Organization and WEF, From Burden to "Best Buys": Reducing the Economic Impact of Non-Communicable Disease in Low-and Middle-Income, 2011, [p.3]. Available at: http://www3.who.int/docs/default-source/WEF_WHO_HE_ReducingNonCommunicableDiseases_2011.pdf. Last Accessed May 2015.
- Angell, Sonia Y.; Decock, Kevin M.; Frieden, Thomas R. A public health approach to global management of hypertension. The Lancet, 2015, 385:9970: 825-827. Lim, Stephen S., et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. The lancet, 2013, 380:9859: 2224-2260
- Diel Lemogoum, Challenge for Hypertension Prevention and Control Worldwide: The Time for Action. The Journal of Clinical Hypertension August 2008. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/jch.12373/epdf>. Last accessed April 2016.
- World Health Organization, Global Health Observatory (GHO) Data: Raised Blood Pressure. Available at: http://www.who.int/gho/ncd/risk_factors/blood_pressure_prevalence_text/en/. Last accessed April 2016.
- World Health Organization. Report on the status of major health risk factors for noncommunicable diseases: WHO African Region, 2015. <http://www.afro.who.int/en/noncommunicable-diseases/npc-publications.html>. Last accessed January 2017.
- Lloyd-Sherlock P, Beard J, Minicuni N., Ebrahim S., Chatterji S. Hypertension among older adults in low- and middle-income countries: prevalence, awareness and control, International Journal of Epidemiology, 2013 [p.126]. Last accessed April 2016.
- Son, PT, Quang N., Viet NL., Khai PG, Wall S., Weinehall L., Bonita R., Byass P. Prevalence, awareness, treatment and control of hypertension in Vietnam – results from a national survey. J Hum Hypertension. 2012. 26(4): 268-80
- Pham, S. Hypertension in Vietnam: From community-based studies to a national targeted programme. Epidemiology and Global Health. Department of Public Health and Clinical Medicine. Umeå University, Sweden, and Vietnam National Heart Institute, Bach Mai Hospital & Hanoi Medical University. Umeå, Sweden: Umeå University; 2012 [p.30]. <https://www.diva-portal.org/smash/get/diva2:526145/FULLTEXT01.pdf>. Last accessed April 2016.
- Son et al, 2012. Prevalence, awareness, treatment and control of hypertension in Vietnam – results from a national survey. Journal of Human Hypertension. <http://www.ncbi.nlm.nih.gov/pubmed/21368775> Last accessed April 2016