

Visualizing the burden of disease and injury in Malaysia



LeeAnn Tan, Azahadi Omar, Shubash Shander Ganapathy, Fazila Haryati Ahmad, Chandrika Jeevananthan, Mohamad Fuad Mohamad Anuar, Nazirah Alias, Tahir Aris
 Institute for Public Health, Kuala Lumpur, Malaysia



Background

Burden of disease measures are helpful in determining resource allocation within health systems. The Malaysian Burden of Disease (MBOD) estimates were first produced in 2000, followed by 2008, and was most recently compiled for the years 2009-2014.¹

Objective

This poster presents a graphical overview of how different disease groups contributed towards the total burden of disease in Malaysia for the year 2014.

Methods

Burden of disease is expressed in DALYs, or **Disability-Adjusted Life Years**,² which were calculated for each of the 112 disease and injury categories in the MBOD study. DALY is the sum of Years of Life Lost (YLL) and Years Lost due to Disability (YLD).



Using data visualization software, total DALYs for each disease and injury category are individually represented in the adjacent bubble chart where the size of each bubble is relative to its burden.

Results

The total burden of disease in Malaysia in 2014 equalled 4,992,646 DALYs, with the top 5 contributors being:-

- cardiovascular and circulatory diseases (20.8%)
- unintentional injuries (11.9%)
- malignant neoplasms (9.4%)
- diabetes mellitus (7.8%), and
- mental and behavioural disorders (7.2%)

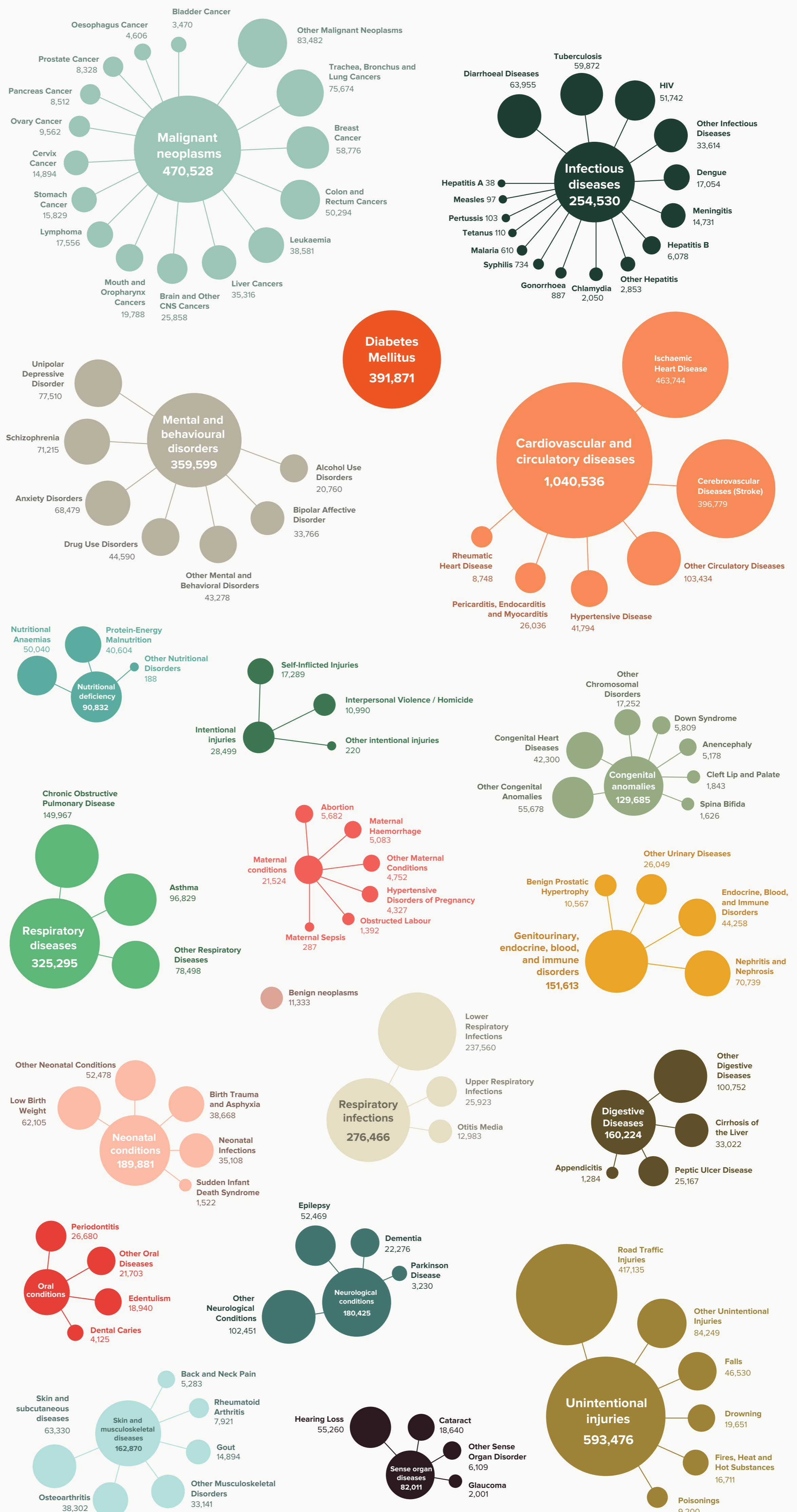
Conclusion

Visualizing burden of disease data puts into perspective what ails Malaysians most, and encourages transparent, informed, and well-supported decisions about where prevention and service activity should best be focused.

References

- Institute for Public Health (IPH) 2017. Malaysian Burden of Disease and Injury Study 2009-2014
- Vos, T., Allen, C., Arora, M., Barber, R. M., Bhutta, Z. A., Brown, A., ... & Coggeshall, M. (2016). Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*, 388(10053), 1545-1602. (Supplementary Appendix)

TOTAL DISABILITY-ADJUSTED LIFE YEARS (DALYs) LOST IN 2014: 4,992,646 YEARS



Scan this QR code to download a PDF copy of the Malaysian Burden of Disease and Injury Study 2009-2014

Corresponding author: Dr LeeAnn Tan
 Institute for Public Health
 leeann@moh.gov.my