

Addressing the high burden of noncommunicable diseases in Nigeria: a commentary

Reducing
burden of
NCDs in
Nigeria

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Abstract

Purpose – The purpose of this study describes how individuals; healthcare providers and the government can reduce the burden of noncommunicable diseases (NCDs) in Nigeria.

Design/methodology/approach – This commentary paper combines extensive literature searches and experience from public health physicians.

Findings – Noncommunicable diseases are chronic diseases. They result from a combination of genetic, physiological, environmental and behavioral factors. NCDs are divided into four classes: cardiovascular diseases, cancers, chronic respiratory diseases and diabetes.

Practical implications – Noncommunicable diseases are responsible for about a quarter of total deaths in Nigeria. These deaths are unnecessary as most NCDs can be prevented if the risk factors are dealt with. Dealing

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with these risk factors involves everyone (Individuals, government, interdisciplinary and multidisciplinary researchers, policymakers, government, etc.).

Originality/value – Major risk factors for NCDs are tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity. The solution to NCDs, therefore, lies in dealing with these factors, which, fortunately, are modifiable since they have to do with lifestyle practices. There is evidence to support the claim that a reduction of the risks of NCDs can be achieved by engaging in healthy lifestyle practices.

Keywords Health education and promotion, Healthy lifestyle, Disease prevention, Noncommunicable diseases, Solutions, Nigeria

Paper type Commentary

Introduction

The World Health Organization (WHO) in 2011 stated obesity as a major risk factor for noncommunicable diseases (NCDs) [1]. Statistics from 2018 [2] showed that NCDs are responsible for the deaths of 41 million people annually, of which 15 million affected people are in the 30- and 69-year age group. It is reported that 50% of these premature deaths occurred in low- and middle-income countries [3]. Global Health Observatory data in 2018 predicted that deaths from NCDs would rise to about 52 million worldwide in the year 2030 [4] (Figure 1).

NCDs account for about 24% of total deaths in Nigeria [5]. Recent data [6] show an increase in statistics as represented in Figure 2.

The WHO reported that the probability of dying prematurely from NCDs in Nigeria is 20% [7]. The projected prevalence estimate of diabetes in Nigeria is 4.04% [8], it is also projected that in 2020, cancer incidence in Nigerian males will rise to 90.7/100,000 and 100.9/100,000 for females. According to the 2012 Globocan data, the top five cancers of the greatest burden in Nigeria are breast, cervix uteri, liver, prostate and colorectal cancers [9]. Workable and evidence-based solutions must be provided [10], to relieve the burden of NCDs in Nigeria which is the aim of this research article (Figure 3).

One of the primary aims of the 2011 UN high-level meeting of the General Assembly was to reduce the level of exposure of individuals to modifiable risk factors of NCDs and their determinants while strengthening the capacity to make healthier choices and follow lifestyle patterns that foster good health [11] (Figure 4).

Healthy lifestyle practices as a solution to NCD's in Nigeria

It was observed that small weight losses of 2–5% can decrease the risk of type 2 diabetes, and 15–30 min of brisk walking a day can reduce the risk of heart diseases by 10% [13].

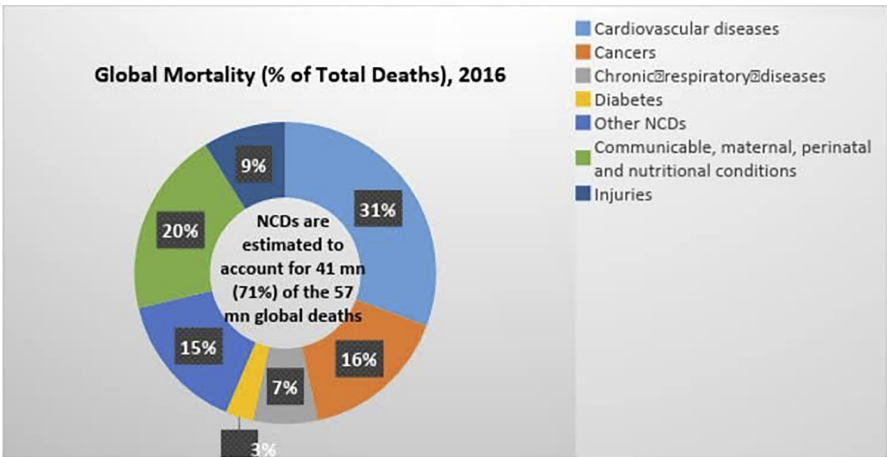


Figure 1.
Global mortality, % of deaths

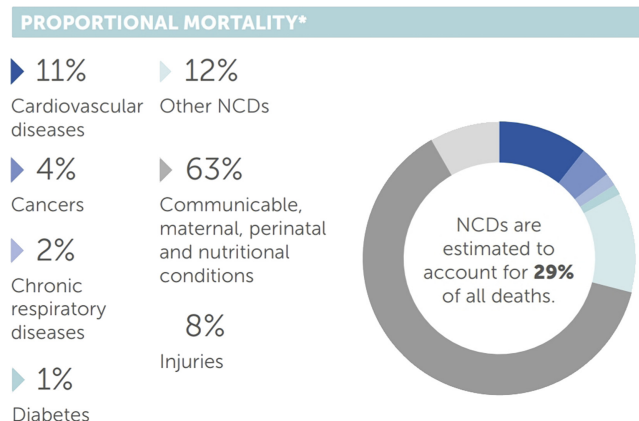


Figure 2.
Proportional mortality
due to NCDs in
Nigeria [6]

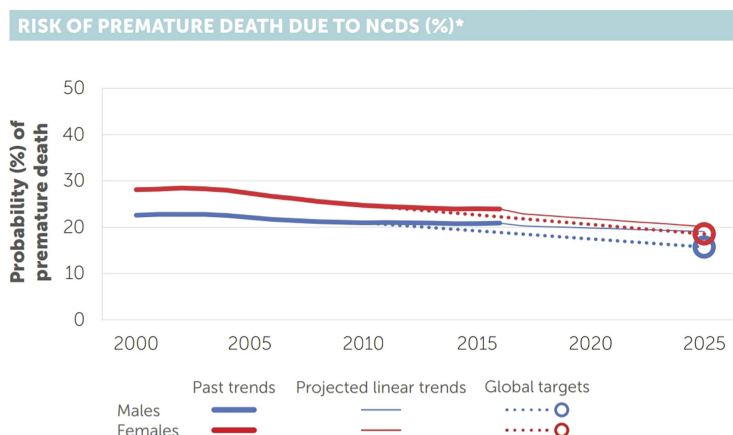


Figure 3.
Risk of premature
death in Nigeria due to
NCDs (%) [7]

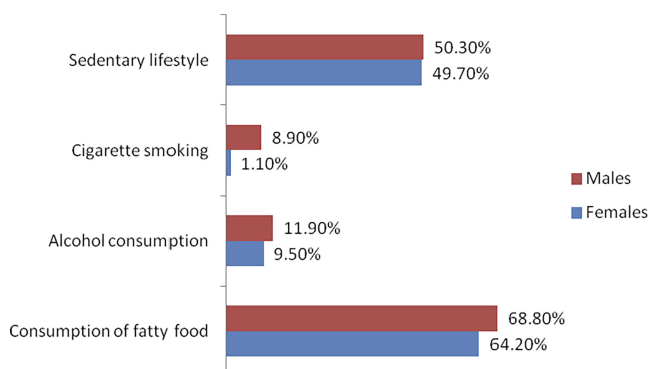


Figure 4.
Analysis of
participants' lifestyle in
a study conducted
among traders in
Sokoto, Nigeria [12]

Awareness of NCDs must be spread to imbibe healthy habits [14]. However, health literacy is not enough to make healthy lifestyle choices as illustrated in a study [15] where 54% of healthcare providers reported being obese.

The role of healthcare providers in ensuring ease of inculcating good health habits

The USA proposed to have a new set of practitioners, identified as healthy lifestyle practitioners (HLPs) to help combat the NCD crisis [16]. In Nigeria, healthcare providers can do their best to deliver healthy lifestyle medicine while we await the emergence and intervention of HLPs.

Healthcare providers can also take advanced courses and recommend technologies such as the Fitbit, [17] to the populace. The use of tailored and personalized messages via technology is shown to be effective in creating and sustaining healthy lifestyle practices [18].

Role of government and policymakers in ensuring that Nigerians imbibe healthy lifestyle practices

Creating a favorable environment

Policies that allow the establishment of community parks, sidewalks, bike lanes, playgrounds or village square areas with beautiful landscapes where people can gather, jog, meet and play during leisure encourages people to participate in physical activity. It was observed in a study [19] that the presence of available space for a stroll contributed to longevity. Another study [20] revealed that walking reduced the risk of coronary artery disease among women. Once these structures exist, participation in physical activity becomes much easier and habitual.

Enacting policies

Other government policies should include a price increase through a tax increase and nonprice measures. Currently, Nigeria takes nonprice measures such as smoking bans in public places, banning tobacco advertising and promotion, and restriction of alcohol access to people aged below 18 years, but there is little implementation of these policies. The WHO [21] calculated that if all countries increased their taxes on cigarette packs by 50%, there would be 49 million fewer smokers and this would prevent 11 million deaths caused by smoking [22] (based on unpublished WHO simulations using 2012 data).

Role of individuals in imbibing healthy lifestyle practices

Nigerians must understand that healthy lifestyle practices are evidence-based solutions to reducing the burden of NCDs. They must agree with their health providers, cooperate with the government to make use of provided structures, and consciously develop self-motivation and cues for imbibing healthy lifestyle practices. Generally, individuals should avoid sedentary lifestyles, get vaccinated, consciously make time for regular medical screening and avoid patronizing herbal remedies that have no scientific evidence of efficacy.

Conclusion

The development of healthy lifestyle practices against the risk of NCDs should not be left to individual willpower alone. Habits stick best when there are structures, motivational support systems and national policies.

Recommendations

- (1) Research in different fields should be conducted to unravel the cause of bad lifestyle practices and discover suitable cues for good lifestyle practices that the Nigerian population can engage in.
- (2) Healthcare professionals in Nigeria should be trained in delivering healthy lifestyle medicine.

References

1. World Health Organization [WHO]. Non-communicable diseases country profiles. [cited 2020 April 12]. Available from: http://apps.who.int/iris/bitstream/10665/128038/1/9789241507509_eng.pdf?ua=1.
2. World Health Organization [WHO]. Non-communicable diseases. [updated 2018 June 1; cited 2020 April 12]. Available from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.
3. World Health Organization [WHO]. Non-communicable diseases progress monitor 2018. [cited 2020 April 12]. Available from: <http://apps.who.int/iris/bitstream/10665/258940/1/9789241513029eng.pdf?ua=1>.
4. World Health Organization [WHO]. Non-communicable diseases. [cited 2020 April 12]. Available from: <http://www.who.int/mediacentrefactsheets/fs355/en/>.
5. World Health Organization [WHO]. Non-communicable diseases: Nigeria. [cited 2020 April 12]. Available from: http://www.who.int/nmh/countries/nga_en.pdf.
6. World Health Organization [WHO]. Noncommunicable diseases country profiles 2018. [cited 2020 April 12]. Available from: <https://www.who.int/nmh/countries/en/>.
7. World Health Organization [WHO]. Global health observatory data 2018: Premature NCD deaths. [cited 2020 April 12]. Available from: https://www.who.int/gho/ncd/mortality_morbidity/ncd_premature_text/en/.
8. IDF Diabetes Atlas. International Diabetes Federation [IDF]. 5th ed. Brussels: International Diabetes Federation; 2011.
9. Awodele O, Adeyomoye AA, Awodele DF, Fayankinnu VB, Dolapo DC. Cancer distribution pattern in south-western Nigeria. *Tanzan J Health Res*. 2011 Apr; 13(2): 125-31. doi: [10.4314/thrb.v13i2.55226](https://doi.org/10.4314/thrb.v13i2.55226).
10. Ezzati M, Riboli E. Can noncommunicable diseases be prevented? Lessons from studies of populations and individuals. *Science*. 2012 Sep; 337(6101): 1482-7. doi: [10.1126/science.1227001](https://doi.org/10.1126/science.1227001).
11. United Nations [UN]. High level meeting on prevention and control of noncommunicable diseases; 2011 September 19–20. New York: General Assembly, United Nations; 2011. [cited 2020 April 12]. Available from: <https://www.un.org/en/ga/ncdmeeting2011/>.
12. Awosan KJ, Ibrahim MTO, Essien E, Yusuf AA, Okolo AC. Dietary pattern, lifestyle, nutrition status and prevalence of hypertension among traders in Sokoto Central market, Sokoto, Nigeria. *Int J NutrMetab*. 2014; 6(1): 9-17. doi: [10.5897/ijnam2013.0158](https://doi.org/10.5897/ijnam2013.0158).
13. Golay A, Brock E, Gabriel R, Konrad T, Lalic N, Laville M, *et al*. Taking small steps towards targets - perspectives for clinical practice in diabetes, cardiometabolic disorders and beyond. *International Journal of Clinical Practice*. 2013 Apr; 67(4): 322-32. doi: [10.1111/ijcp.12114](https://doi.org/10.1111/ijcp.12114).
14. Teyhen DU, Robbins D, Ryan BU. Promoting and sustaining positive personal health behaviors - putting the person first. *Mil Med*. 2018 Nov; 183(suppl_3): 213-9. doi: [10.1093/milmed/usy212](https://doi.org/10.1093/milmed/usy212).
15. Miller SK, Alpert PT, Cross CL. Overweight and obesity in nurses, advanced practice nurses, and nurse educators. *J Am Acad Nurse Pract*. 2008 May; 20(5): 259-65. doi: [10.1111/j.1745-7599.2008.00319.x](https://doi.org/10.1111/j.1745-7599.2008.00319.x).

16. Arena R, Lavie CJ, Hivert MF, Williams MA, Briggs PD, Guazzi M. Who will deliver comprehensive healthy lifestyle interventions to combat non-communicable disease? Introducing the healthy lifestyle practitioner discipline. *Expert Rev Cardiovasc Ther.* 2016; 14(1): 15-22. doi: [10.1586/14779072.2016.1107477](https://doi.org/10.1586/14779072.2016.1107477).
17. Jo A, Coronel BD, Coakes CE, Mainous AG. Is there a benefit to patients using wearable devices such as fitbit or health apps on mobiles? A systematic review. *Am J Med.* 2019 Dec; 132(12): 1394-400. doi: [10.1016/j.amjmed.2019.06.018](https://doi.org/10.1016/j.amjmed.2019.06.018).
18. Kreuter MW, Wray RJ. Tailored and targeted health communication: strategies for enhancing information relevance. *Am J Health Behav.* 2003 Nov-Dec; 27(Suppl 3): S227-32. doi: [10.5993/ajhb.27.1.s3.6](https://doi.org/10.5993/ajhb.27.1.s3.6).
19. Takano T, Nakamura K, Watanabe M. Urban residential environments and senior citizens' longevity in megacity areas: the importance of walkable green spaces. *J Epidemiol Community Health.* 2002 Dec; 56(12): 913-8. doi: [10.1136/jech.56.12.913](https://doi.org/10.1136/jech.56.12.913).
20. Lee IM, Rexrode KM, Cook NR, Manson JE, Buring JE. Physical activity and coronary heart disease in women: is 'no pain, no gain' passé? *Journal of the American Medical Association.* 2001 Mar; 285(11): 1447-54. doi: [10.1001/jama.285.11.1447](https://doi.org/10.1001/jama.285.11.1447).
21. World Health Organization [WHO]. WHO report on the global tobacco epidemic 2013. [cited 2020 April 12]. Available from: https://www.who.int/tobacco/global_report/2013/en/.
22. World Health Organization [WHO]. Raising tax on tobacco-what you need to know. [cited 2020 April 12]. Available from: https://apps.who.int/iris/bitstream/handle/10665/112841/WHO_NMH_PND_14.2_eng.pdf?sequence=1.

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