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Inter-country comparison of non-communicable diseases

Eric Sarkodie
M.Sc Economics 2nd Year, Lovely Professional University, Phagwara, Punjab, India

Abstract
Purpose: The purpose of the study is to obtain data from World Health Organization (WHO) and make an inter-country comparison of non-communicable.
Methodology/Approach: An incorporated research that involve collecting and retrieving of data from secondary sources to make comparisons between countries in relation with NCDs and the responsiveness of countries to alleviating NCDs risk factors. WHO developed NCDs questionnaire which was translated into various languages and forwarded to the focal point and concern colleagues in health ministries, national institute or agencies in its member states for collection of data.
Findings: Non-communicable diseases (NCDs) are among the major health menace that has attracted global attention, NCDs such as cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are responsible for most deaths worldwide. This hampers the development of lower and middle income countries especially, though the developed economies have high tendency to record more NCDs but has proper logistics, control and preventive measures to curb the threat caused by NCDs.
Research Limitations: The details of this research and the result obtained as drawn from the figures provided by WHO Global Status Report on noncommunicable diseases, noncommunicable diseases, country profile and few other research papers. Economic growth and efficiency in production can be increased when various countries have appropriate health care systems and infrastructure to restrain NCDs.
Practical Application: The findings will aid policy makers and partners to identify the real challenges and the regions which are deeply affected by NCDs. The WHO is making all effort through surveillance, evaluation and monitoring to identify the countries capacity, gaps, preventive and control mechanisms to eradicate risk factors.
Originality\Value: The research is not unique or does not strictly deviate from the outcomes established in the various reports on NCDs published by WHO but it goes further to extrapolate analysis prevailing in those reports.

Keywords: noncommunicable diseases, evaluation, monitoring, prevention and control, WHO

Introduction

The fight against noncommunicable diseases by reducing its related risk factors is a global concern. Nations are more integrated now than before and that has necessitated joint action to alleviate or ensure maximum reduction in the risk factors such as tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. The purpose of the study is to obtain data from World Health Organization (WHO) and make an inter-country comparison of non-communicable diseases.

The objective of this research is to examine the priority areas which include prevention and control, strengthening and building of national capacities and leadership in member countries, which is extremely important. The reduction of modifiable factors, promotion of feasibility studies and research, monitoring and evaluation of trends of diseases have to be undertaken routinely in order to prevent further escalation. The four main NCDs which are cardiovascular diseases, cancer, chronic respiratory diseases and diabetes would be the focus of this study.

The global joint effort on noncommunicable diseases is not only attributed to the sufferings of the affected people but the lost of these important life's has an adverse effect on macroeconomic variables in the nation thereby retarding the economic growth. In respond to this menace the World Health organization (WHO) has adopted several mechanisms to identify and make policy suggestions to its' 193 member states. Global poverty can not entirely be associated with NCDs; however, the global interest is how much economic fortunes decelerate due to millions of deaths associated with NCDs.

The overwhelming impact of NCDs in 2011 prompted the United Nations General Assembly to adopt a political declaration, depicting their commitment to reduce the socioeconomic burdens emanated from NCDs. UN tasked WHO to support countries effort through research and partnership. Therefore, monitoring and evaluation framework are enshrined in the Global Action Plan 2013-2020 with nine voluntary targets which will assist NCDs prevention and control. The World health Organization (WHO) is focusing on a global unified approach to resolve issues attributable to NCDs through surveillance, policy development, monitoring and evaluation in its' 193 member states.

In order for the policy makers and partners to be well informed, WHO conducts a research by developing NCDs questionnaire which is translated into various languages and forwarded to the focal point and designated colleagues in health ministries, national institute or agencies in its member countries collect data.

The WHO surveillance assists decision and policy makers to

know the status and the needed action to take in order to achieve more progress in reducing NCDs risk factors. Governments have intensify their commitment to reduce the intake of harmful alcohol, tobacco use through high taxes, however, importers in their attempt to evade tax have resulted to smuggling of these products depriving government taxable revenue and also worsening the health of many others.

Development partners requires a credible report on the status of these pandemic diseases across all the sub-regions in order to provide the aid to the various economics in a more proportionate manner in relation with the NCDs the mortality, morbidity, risk factors and national capacity. Some countries health care systems lack health infrastructure. Modern technological equipments required to diagnose illness (i.e. respiratory and spinal scan machine) are very expensive to be adopted in the health facilities mostly in the developing countries. Partners who provide aid and technical assistance are not contributing their quota concerning NCDs prevention and control in most cases.

The cardiovascular diseases, cancer, chronic respiratory diseases and diabetes which are the four major NCDs, contributed 60% of global deaths in the year 2008 representing 38million people, and 42% of these deaths occurred before age 70. The developed countries are effective in curbing the NCDs but the developing countries are rather recording an increase in NCDs deaths due to inappropriate mitigation factors.

WHO provides member countries with sufficient policy advice and up to date technical knowhow intended for member's action. Member countries are assisted in formulating national targets and development of proper and well defined action plan to achieve the best result. The interactions that exist between development partners and governments are important to reducing the risk factors of noncommunicable diseases.

Literature Review

Smith-Spangler *et al.* (2010) examined strategies to decrease sodium consumption, the burden of cardiovascular disease and analyzed its associated cost. The study examined the strategies employed to reduce sodium intake. Government teamed up with food processing companies to reduce sodium in processed food. The voluntary effort between government and food processors yielded a good result thereby reducing sodium intake approximately from 9.5g to 8.6g over a five year span. The second solution was excise tax measure similar to that of cigarette was imposed at the industrial level. It was projected that having a joint effort with the industry would be expensive as compared to UK and the tax revenue generated would offset the cost of low-sodium foods for low income consumers. The study established that the Strategies adopted would minimize the level of sodium consumption in America significantly. Thus, a subsequent decline in stroke and MI incidence that in the end would save billions of dollars in medical expenditure that could have gone wasted.

Bovet *et al.* (2010) in their paper addressed the issue of non-communicable diseases in the Seychelles: towards a comprehensive plan of action. The paper revealed the various steps and procedures which followed in twenty years ago concerning how non-communicable diseases were curbed in Seychelles. Nationwide survey was conducted and was found that the cardiovascular risk factors were rising. The prompted the establishment of NCDs control unit in the Health Ministry in order to control non-communicable diseases (NCDs) in the Seychelles. National surveys revealed high level of several cardiovascular risk factors and resulted to an organized response which was initiated with the creation of NCDs unit in the Ministry of Health. The government introduced food nutrition policy and passed legislations which ban soft drinks in all schools. The political will was high in this case, thus more nurses were trained and posted to the various district health centers to assist Doctors in healthcare delivery. The laws on tobacco also served as check but in the same period cardiovascular diseases, cancer and diabetes records increased. The effect of the policy implemented took a considerable time before the full effects on NCDs were realized.

Deason *et al*. (2010) explained Ohio cross-cultural tobacco control alliance elaborated on tobacco-related disparities through the integration of science, practice and policy (CCTCA). They analyzed the policies formulated by decision makers to eradicate the disparities associated with tobacco in Ohio and how a cross cultural work group designed a good model to eliminate the disparities. The CCTCA was useful way to organize agencies that served underserved populations and established operational structure to end up disparities which are related to tobacco and the community-based programmes were designed to handle the disparities were successful. People from different geographic and cultural background formed groups and conducted interviews through telephone calls to assess the issues related to tobacco disparities.

Webster *et al*. (2009) pointed out the development of a national salt reduction strategy for Australia. The study depicted the salt strategies adopted by AWASH (Australian Division of World Action on Salt and Health) to control the level of salt consumption. The study indicated that a considerable reduction of salt intake could be achieved through public education on the complication of excessive salt consumption and the resulting blood pressure. The researches were of the view that the UK Food Standard Agency approach to reducing salt is long and comprehensive procedure. AWASH formulated comprehensive plan similar to UK Food's Agency. This was to ensure the reduction of population salt intake. The target set was to reduce salt consumption from 9g to 6g daily over a span of five consecutive years. Thus, success was achieved due to the involvement of all stakeholders such as government and media.

Tan, A.S.L. (2009) examined in their paper, a case study of the New York City trans-fat story for international application. They established that some heart diseases were as a result of artificial trans-fat added to processed food and despite the awareness and the legislations which banned the use of trans-fatty acid in food preservation; people intake of trans-fatty acid was quite significant. The consumers bought food from shops which used these harmful preservatives despite their side effect. Policy Makers were able to control the situation through formulation, and implementation of policy to guide the activities of food manufacturers and restaurants. The study

stated that restaurants can only commence business upon meeting all regulatory and compliance requirements.

Prabhakaran *et al*. (2009) explained the impact of a worksite intervention programme on cardiovascular risk factors. The study concentrated on Indian industrial population.

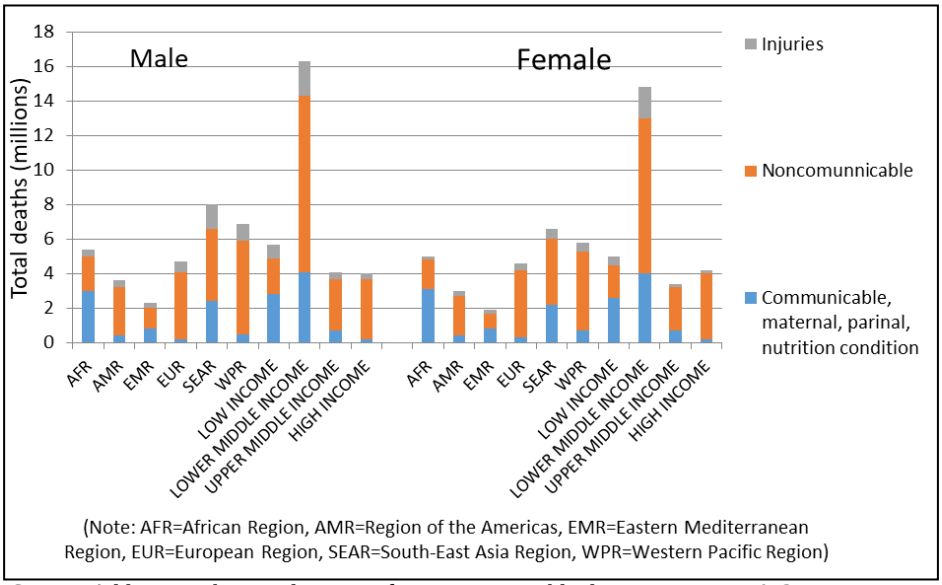
Due to the accelerated epidemiological transition in Indian, there was a rise in the burden of cardiovascular disease risk factors for the studies in community-based and population of the industry. The evidence was that health promotions, primary prevention and the use of infrastructure in the participating industries contributed to a significant reduction in the risk factors pertaining to cardiovascular diseases. It was established that a worksite approach undertaken through health promotion programs would foster the reduction of cardiovascular diseases. A comprehensive approach targeting multiple risk factors would detect the effect of the expected changes on hard cardiovascular end points.

Milat, A., O'Hara, B., *et al*. (2009) in their published article on the concepts and new frontiers for development, identified the role health promoters should play in preventing lifestyle diabetes. The study established that type-2 diabetes was rising in Australia, which led to the development of lifestyle-based diabetes prevention programmes. The paper analyzed the importance of health promotion in relation to diabetes prevention. The researchers asserted that the investment in health promotion could increase if the health promotion proved to be cost effective, in the sense that the promotion was able to cause a reduction in the type-2 diabetes. The Government resolved the issues that came with the health initiatives by ensuring early detection and management.

Mortality

In the year 2012, out of the 56million who died globally, NCDs constituted 38million. The NCDs which caused these deaths were mainly cardiovascular disease, cancer and chronic respiratory diseases. The low and middle-income countries recorded approximately three quarters of these deaths. Since the year 2000, NCDs deaths have hiked globally. According to WHO, South-East Asia Region recorded the highest NCDs deaths, from 6.7million in the year 2000 to 8.5million in the year 2012. The NCDs in Western Pacific also increased from 8.6million to 10.9million. The yearly NCDs deaths have been estimated to 52million by the year 2030.

Cardiovascular diseases, cancers, respiratory diseases and diabetes recorded 46.2%, 21.7%, 10.7%, and 4% of deaths caused by NCDs respectively. Hence, in 2012, these major NCDs represented 82% of NCDs deaths worldwide. The figure 1 below depicts that NCDs are the major cause of death globally. The figure1 below shows global distribution of deaths by cause.



Source: Addressing the social impact of noncommunicable diseases, UNDP 2013

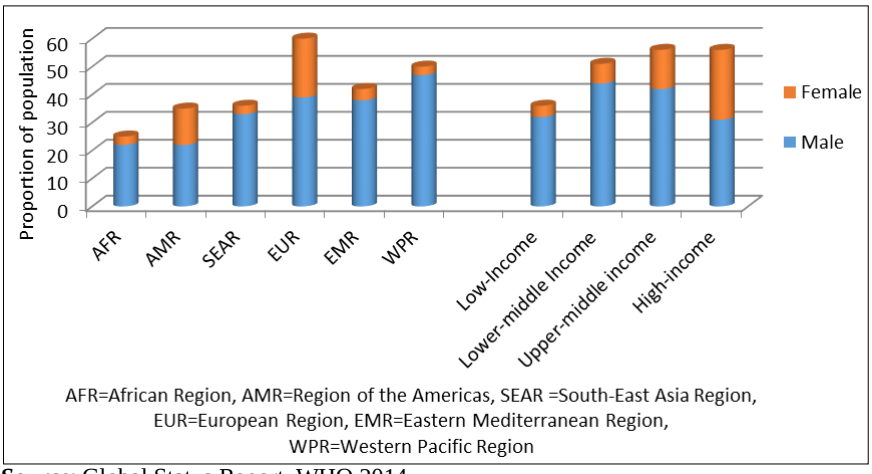
Fig 1: Global distribution of deaths by cause, by region and sex, 2010

Tobacco Usage

The diseases that emanate from the use of tobacco are much preventable; however it has led to many deaths globally. Most people are also exposed to smoke due to smoking behaviour of others. The users of tobacco are prone to cardiovascular diseases, cancer, chronic respiratory diseases and diabetes which cause premature deaths which are preventable.

The annual projection of deaths caused by tobacco is 6million and over six hundred thousand deaths are associated with second hand smoking. Therefore, governments have to employ policies and tax reforms to make the business of tobacco unattractive and also place a ban on smoking in public places. The tobacco use is not only in a smoke form but also includes smokeless consumption. The monitoring of smokeless tobacco is very difficult because it is not easy to identify a user as compared with the smoke use of tobacco.

There were 1.1billion smokers worldwide in the year 2012, 8 out of 10 tobacco smokers' smoke every day. Manufactured cigarettes are widely use throughout the world representing 90% of all types of smokes. World Bank income group, in 2012, indicated that the global prevalence of adult smoking was approximated to 22%. The figure 2 below depicts current tobacco smoking in persons aged 15 years and above.



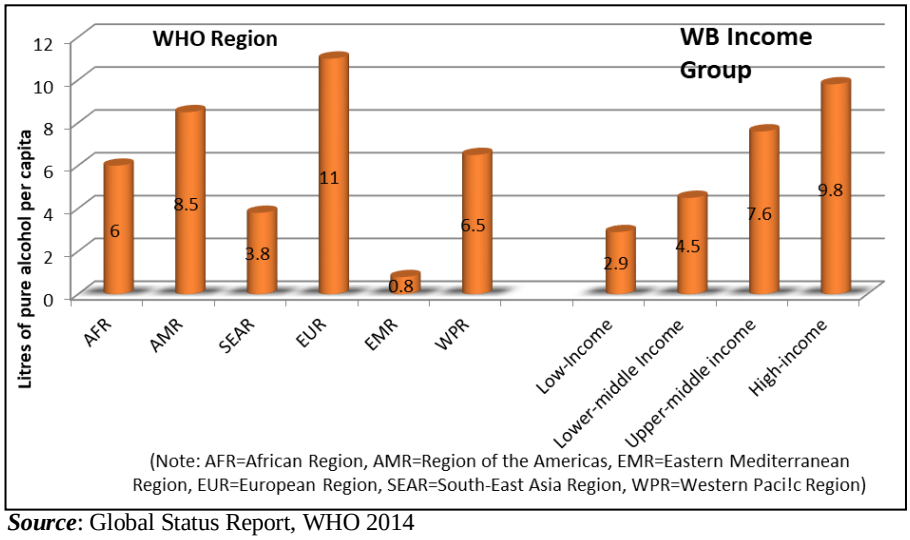
Source: Global Status Report, WHO 2014

Fig 2: Age-standardized prevalence of current tobacco smoking in persons aged 15 years and over, by WHO region and World Bank income group, comparable estimates, 2012

Harmful use of alcohol

Harmful and indiscriminate use of alcohol is one of the risk factors linked to the cause of NCDs. Mental disorders, excessive use of alcohol, injuries, road accidents and violent behaviors leading to many deaths. Infectious diseases such as tuberculosis through alcohol intake and some premature births were also due to alcohol intake by pregnant women.

Alcohol consumption led to approximately 5.9% of all deaths in the year 2012 globally. The NCDs which caused these deaths mainly included cardiovascular diseases, cancers and gastroinstestinal diseases and were responsible for an approximated 5.1% of global burden of diseases. The figure 3 below shows the litres of alcohol per capita in the WHO Region as well as the World Bank income group, also table 1 shows the total alcohol consumption per capita (in litres of pure alcohol) and prevalence of heavy episodic drinking (%) in the total population aged 15 years and over, and among drinkers aged 15 years and over, by WHO region and the world, 2010.



Source: Global Status Report, WHO 2014

Fig 3: Total alcohol consumption per capita, 2010 (in litres of pure alcohol) in the total population aged 15 years and over by WHO region and World Bank income groups

Table 1: Total alcohol consumption per capita (in litres of pure alcohol) and prevalence of heavy episodic drinking (%) in the total population aged 15 years and over, and among drinkers aged 15 years and over, by WHO region and the world, 2010

WHO Region	Among all (15+ years)		Among drinkers only (15+ years)	
	Per capita consumption	Prevalence of heavy episodic drinking (%)	Per capita consumption	Prevalence of heavy episodic drinking (%)
Africa Region	6	5.7	19.5	16.4
Region of Americas	8.4	13.7	13.6	22
South-East Asia Region	3.4	1.6	23.1	12.4
European Region	10.9	16.5	16.8	22.9

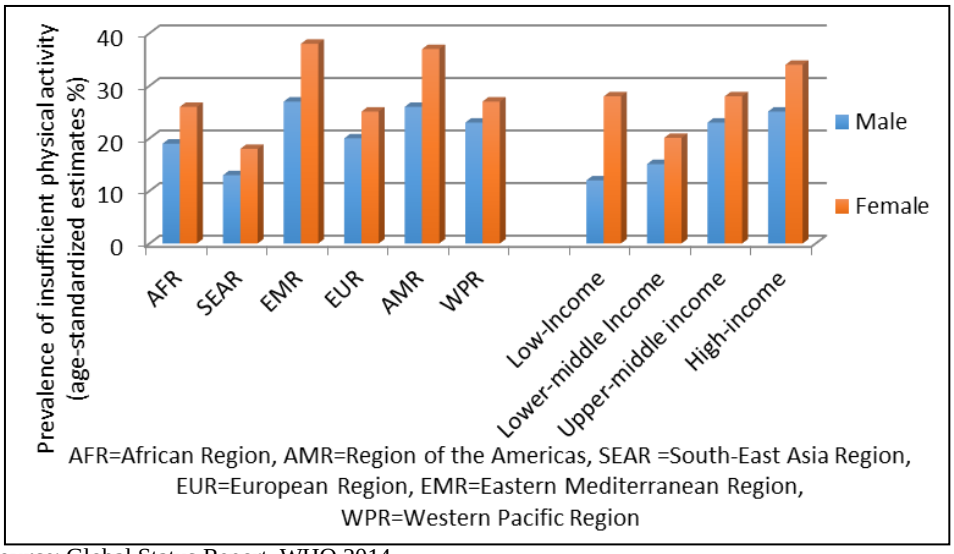
Eatern Mediterranean	0.7	0.1	11.3	1.6
Western Pacific	6.8	7.7	15	16.4
World	6.2	7.5	17.2	16

Source: Global Status Report, WHO 2014

Insufficient Physical Activity

The phrase insufficient physical activity refers to lack of training and exercise among age group and increases the tendency of stroke and respiratory disorders. Insufficient physical activity was responsible for 2.8% of all deaths.

The people who do 150 minutes physical activity weekly has less risk as compared with adults with less than 150 physical activity weekly. Frequent physical activity will lead to a fall in the risk of ischaemic heart diseases, diabetes, stroke, diabetes and breast cancer. It also ensures maximum energy balance, check body weight and prevent obesity. The figure 4 below indicates insufficient physical activity among female is higher than that of male.



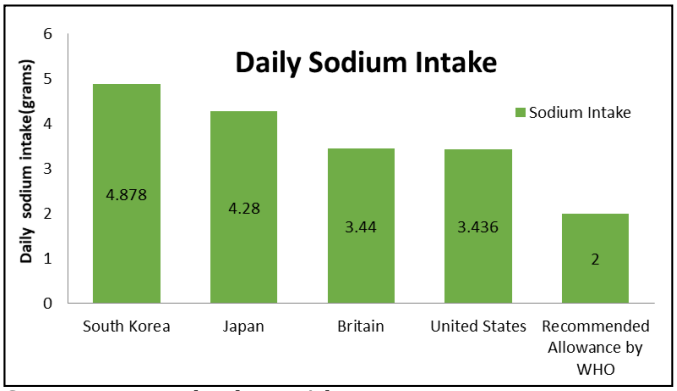
Source: Global Status Report, WHO 2014

Fig 4: Age-standardized prevalence of insufficient physical activity in adults aged 18 years and over, by WHO Region and World Bank income group, men and women, comparable estimates, 2010

Salt/Sodium Intake and Its Impact on Health

Over consumption of dietary sodium also leads to risk of hypertension and cardiovascular diseases. Excessive consumption of sodium led to approximately 1.7million deaths in the year 2010 across the globe. Although sodium is largely found in salt, the dietary consumption also depends on the culture of the people and their habit and most of this sodium intake is mainly from processed foods. Medical examination indicated that a low sodium intake will result to a reduction in blood pressure of that individual.

WHO propose that the sodium intake should not exceed 5g/day. According to WHO, the recent estimate indicates that global mean intake of salt is 10g of salt daily. South-east and central Asia and parts of Europe, the Americas, European and Western Pacific Regions show that the intake of salt is higher than WHO ideal situation. Intake of salt in Africa is low as compared to the above mentioned WHO Regions. In addition, The Korea Food and Drug Administration also noted that Korea would be in a position to decrease its medical expenditure by 3 trillion won ($2.7 billion) yearly, if citizens reduce their daily sodium consumption to 3 grams. The diagram below shows the daily sodium intake in South Korea, Japan, Britain, United States and the recommended allowance by World Health Organization.



Source: Korea Food and Drug Administration

Fig 5: Daily consumption of sodium

High Blood Pressure

High blood pressure risk factor has led to the lost of many lives in the world.

Over 9.4million deaths in 2010 were due to high blood pressure. This risk factor is also linked with cardiovascular, hypertension, myocardial and causes a severe financial burden to the immediate family and the nation at large. The decrease in systolic blood pressure of 10 mmHg is related with a 22%

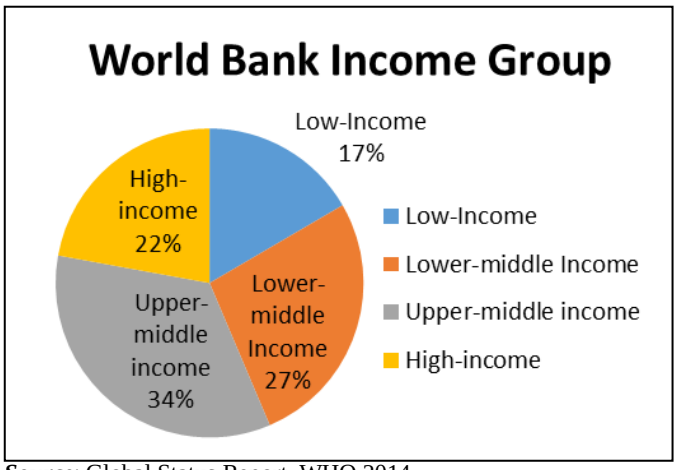
decrease in coronary heart disease and 41% decrease in stroke in randomized trials and a 41 to 46% decrease in cardio metabolic mortality in epidemiological studies.

The global prevalence of raised blood pressure refers to systolic and/or diastolic blood pressure which is greater than or equals to140/90 mmHg in adults aged 18 years and over was around 22% in 2014. The number of people with high blood pressure decreased between 1980 and 2010 but due to population growth and aging, high blood pressure increased thereafter.

Major Noncommunicable Diseases

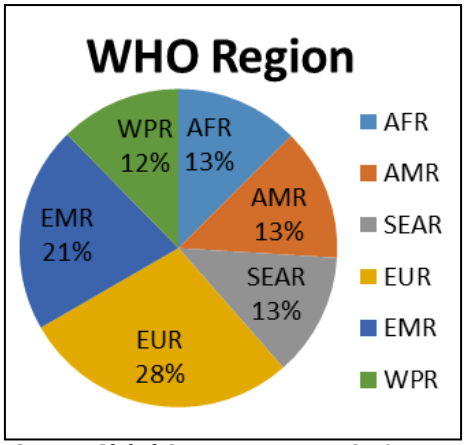
1. **Cardiovascular disease and stroke:** In 2012, out of 17.5million deaths recorded, 7.4million estimates stood for heart attacks and 6.7million emanated from stroke. There are many deaths of NCDs in the low and middle-income countries due to insufficient resource and mechanism to detect NCDs. Although the higher income earners or the developed countries have higher tendency to acquire NCDs, they have better management systems and has led to a reduction in cardiovascular diseases over the last four decades. In 2012, the low and middle income countries recorded 80% of all deaths caused by cardiovascular diseases. The number of stroke deaths increased as well which is not acceptable since there are several cost effective measures that can prevent heart diseases and stroke. The target to ensure a decline in heart attacks and stroke is to enhance drug treatment coverage, and councelling. This is less expensive through a primary healthcare system, even when resources are constrained.
2. **Diabetes**: Behavioural diabetes is a very easy to prevent, it stems from eating behavour which resulting to obesity and also diabetes subsequently. Type 2 Diabetes can be prevented or reduced with ease if individuals engage in adequate physical activity and manages lifestyle activities including diet. In this case, lifestyle interventions are required to deal with issues concerning type 2 diabetes. Vaccination is an import way of treating diabetes and for women in reproductive age; they require patient education and vigorous management of their glucose level. Dilated eye examination can diagnose diabetic retinopathy through suitable laser photocoagulation therapy which will prevent blindness. There should be effective angiotensin transforming enzyme inhibitor drug therapy to avert headway of renal disease.

   The figure 5 and 6 below depicts overweight prevailing in the WHO Region and that of World Bank income group.
3. **Cancer**: There are many ways of preventing liver cancer; however the most suitable way is through hepatitis B immunization. Also another kind of cancer that needs to be given much attention is cervical cancer. Consistent screening and visual check up with acetic acid (VIA) or with cervical cytology which is cost-effective. In addition, the timely treatment of pre-cancerous lesions is paramount in the quest to prevent cancer from escalating. Vaccination against human papillomavirus is required in curtailing cancer from escalating, is also suitable when it is cost-effective and affordable, according to national programmes and policies. According to WHO Global Status report in 2014, timely cervical Cancer treatment is associated with Population-based cervical cancer screening. Population-based breast cancer and mammography screening 50 to 70 years is also associated with timely treatment. Population-based colorectal cancer screening, including a fecal occult blood test which is suitable at age more than 50, also leads to timely treatment. Finally, oral cancer screening in high-risk groups (e.g. tobacco users, betel-nut chewers) can be treated timely. This means that these cancers are highly preventable when they are detected early and are treated immediately. People can also undertake immunization and change their attitude.
4. **Chronic respiratory disease:** Some chronic respiratory diseases are attracted indoor and others are attracted outdoor. The fumes from vehicles, factories and dust carried by air or any human activity pave way for chronic respiratory disease. Indoor air pollution can be reduced when there is access to improved stoves and cleaner fuels. Cost-effective interventions are needed to avoid occupational lung diseases, e.g. from exposure to silica, asbestos. The treatment of respiratory diseases such as asthma has to follow WHO guidelines and there should be influenza vaccination for patients with chronic obstructive pulmonary disease.



Source: Global Status Report, WHO 2014

Fig 5: World Bank income group, comparable estimates, 2013



Source: Global Status Report, WHO 2014

Fig 6: Prevalence of overweight in children aged under 6 years, by WHO Region

Diet and NCDs

There is food insecurity in most part of the world especially East and the Sub-Saharan Africa increasing the mortality rate in Africa. Studies have showed that there is a steady relationship between unhealthy diet and the emergence of different forms of chronic non-infectious diseases such as coronary heart disease, cerebrovascular disease, various cancers, diabetes mellitus, dental caries, and various bone and joint diseases. Diet and nutrition have effect on health outcomes and productivity of a country.

Dietary transition has a lot of implication on the health of every individual. Most people consume processed food which has no or little dietary fibre. The dietary transition emerges from the developed world, method of food production storage and distribution has led to several deaths in the world. Excessive nutrient intake leads to a high sugar and fat level and contribute to obesity and chronic disease. Urbanization is also a factor that has led to an increased consumption of processed food unlike rural duelers whose dietary fibre intake is high. Notwithstanding, the rural population have a record of malnutrition in their food consumption and have led to several deaths especially in Somalia and South Sudan.

Meals away from home are becoming common to every society. Egyptians ate 46% of meals outside their various homes in 1998, which is greater than the 20% in 1981. The emerging issues are that taking meal is not only associated with development, but also to urbanization: the mobile carts of street vendors have become the fast-food restaurants of the urban centre.

Poverty and NCDs

With a higher incidence of risk factors, the poor are also most likely to develop noncommunicable diseases. This is because the developing economies have no or inadequate NCDs units to ensures better management of the diseases. Non-communicable diseases (NCDs) are among the major health menace that requires global attention, NCDs such as cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are responsible for most deaths worldwide. This hampers the development of lower and middle income countries especially, though the developed economies have high tendency to record more NCDs but has proper logistics, control and preventive measures to curb the threat caused by NCDs. The developing countries need support from donors in support of their respective country effort in order to fight NCDs among them.

The policy makers and partners have to identify the real challenges and the regions which are deeply affected by NCDs. The WHO is making all effort through surveillance to identify the countries capacity, gaps, preventive and control mechanisms to eradicate risk factors.

Reducing the impact of NCDs

In order to reduce the impact of NCDs on the society, a comprehensive plan is required; it should not only be a concern of the health ministry but should include finance, education, agriculture etc. There should be united effort since the health status of the citizens will lead to increase economic output. Promotion and control is needed to contain NCDs from escalating.

The root causes of these diseases are linked to their risk factors. WHO provides member countries with sufficient policy advice and up to date technical knowhow for member's to reduce those risk factors. Member countries are assisted in formulating national targets and development of proper and well defined action plan to achieve the best result. The interactions that exist between development partners and governments are important in order to curb NCDs. The table 2 below shows the financial commitment towards the NCDs action plan.

Table 2: Major funding sources for NCDs

FUNDING SOURCES FOR NCDS (Percentage of countries with funding source)					
	General Government revenues	**Health insurance**	**International donors**	**Earmarked taxes on alcohol, tobacco, etc.**	**Other**
AFR	86	31	86	20	17
AMR	97	85	76	50	32
EMR	90	60	55	15	15
EUR	98	75	35	33	21
SEAR	100	45	91	36	9
WPR	96	52	76	52	24
Low Income	77	15	77	8	15
Lower-Middle Income	93	53	87	33	20
Upper-Middle Income	100	82	78	50	16
High Income	98	71	29	34	30

Source: Assessing National Capacity for Prevention and Control, WHO 2015

This outline action plan for the prevention and control is intended to merge WHO's existing strategies and plans to reduce NCDs risk factors among WHO Regions across the globe.

Making these plans operational is very important to support regional and national action plans existing already. Coordination failure could lead to many deaths cause by NCDs.

Government commitment is required to support their respective action plans, all the WHO Regions aim to have a successful implementation of the following:

- Resolution AFR/RC50/R4 entitled "Noncommunicable diseases: strategy for the African Region" (Regional Committee for Africa, 2000).
- Resolution CD47.R9, entitled "Regional strategy and plan of action on an integrated approach to the prevention and control of chronic diseases, including diet, physical activity" (Regional Committee for the Americas, 2006).
- The Regional Framework for Prevention and Control of Noncommunicable Diseases (Eleventh meeting of Health

Secretaries of Member States of the South-East Asia Region, 2006).
- Resolution EUR/RC56/R2, entitled "Prevention and Control of Noncommunicable Diseases in the WHO European Region" (Regional Committee for Europe, 2006).
- Resolution EM/RC52/R7 entitled "Noncommunicable diseases: challenges and strategic directions" (Regional Committee for the Eastern Mediterranean, 2005).
- Resolution WPR/RC57.R4, entitled "Noncommunicable disease prevention and control" (Regional Committee for the Western Pacific, 2006).

NCDs in Poor Populations

Action in response to global NCDs

The objectives of global noncommunicable disease action plans are:

1. The priority set to prevent and control NCDs in the globe, requires internationally agreed development goals, including strengthened cooperation and advocacy among countries.
2. To strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of NCDs. More credible and accurate status report is necessary to eradicate all these pandemic diseases across all the sub-regions. The development partner's needs surveillance and progress report in relation with the NCDs mortality, morbidity, risk factors and national capacity.
3. Health promotion should be an important priority to reduce modifiable risk factors for NCDs and primary social determinants.
4. When there exist a good and oriented health systems, issues of NCDs would be minimized. The orientation should be people centred and have universal health appeal.
5. In order to promote and support national capacity to control and prevent NCDs, surveillance and evaluation is mostly needed for proper planning.
6. Monitoring the pattern and determinants of NCDs measure improvement in prevention and control.

Global status report on NCDs

- NCDs are barriers to poverty reduction and sustainable development.
- Some of WHO Regions are making improvement; they have to meet the global NCD targets in order to reduce the risk factors and their associated deaths.
- Nations should not just show political commitment but must also be action oriented and prioritize cost effective interventions.
- Countries focus should be on the national NCD targets and be responsible for achieving those targets. This global target aims at reducing the various risk factors.
- Proper structures, processes and procedures for multisectoral and intersectoral cooperation are required for attaining the set goal.
- The provision of modern health equipment is needed to diagnose or detect NCDs quickly.
- Investment is required to achieve good NCDs health results.
- Strong financial backbone is required to build institutional and human resource capacities towards fighting NCDs.

Who "best buys" – (very cost-effective interventions that are also high-impact and feasible for implementation even in resource-constrained settings)

Tobacco

- Increase tobacco taxes to make it expensive. This will reduce consumption.
- Legal framework to ban people from indoor places and the public places.
- Health promotion and campaign to create awareness of the dangers attributable to smoking.
- Place a ban on tobacco advertising, promotion and sponsorship.

Harmful use of alcohol

- Regulate and monitor commercial and public availability of alcohol.
- Restrict or ban excessive alcohol advertising and promotions in all forms.
- Place higher excise tax on alcoholic beverages.

Diet and physical activity

- Reduce excessive salt consumption.
- Replacing trans fats with unsaturated fats is paramount.
- Increase or Implement public awareness programmes on diet and physical activity.
- Promote, protect and encourage breastfeeding.

Smoking

- The people smoking are not the only persons affected but those unwillingly encounter second smoking.
- Charge higher taxes on cigarette and sanction those who smoke at public places.
- Promotion of the risk factors should be a priority.

Voluntary global targets for prevention and control of noncommunicable diseases to be attained by 2025

- Decrease in the overall mortality including cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases by 25%.
- Decrease in the harmful use of alcohol, as suitable, within the national context by 25%.
- Decrease in occurrence of insufficient physical activity by 10%.
- Decrease in mean population intake of salt/sodium by 30%.
- Decrease in occurrence of current tobacco use by 30%.
- Decrease in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances by 25%.
- Halt the rise in diabetes and obesity
- At least 50% of qualified people be given drug therapy and counselling (including glycaemic control) to stop heart attacks and strokes
- An 80% access of the inexpensive basic technologies and vital medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.

Methodology

The research was purely based on secondary data collected from World Health Organization (WHO). The tools used for data analysis included SPSS, pie chart and bar diagrams. This research incorporated most data published by WHO up to the year 2016. These secondary data collected were used for inter-country comparisons in relation to NCDs and the responsiveness of countries to alleviating NCDs risk factors. WHO also developed NCDs questionnaire which was translated into various languages and forwarded to the focal point and concern colleagues in health ministries, national institute or agencies in its member states for collection of data.

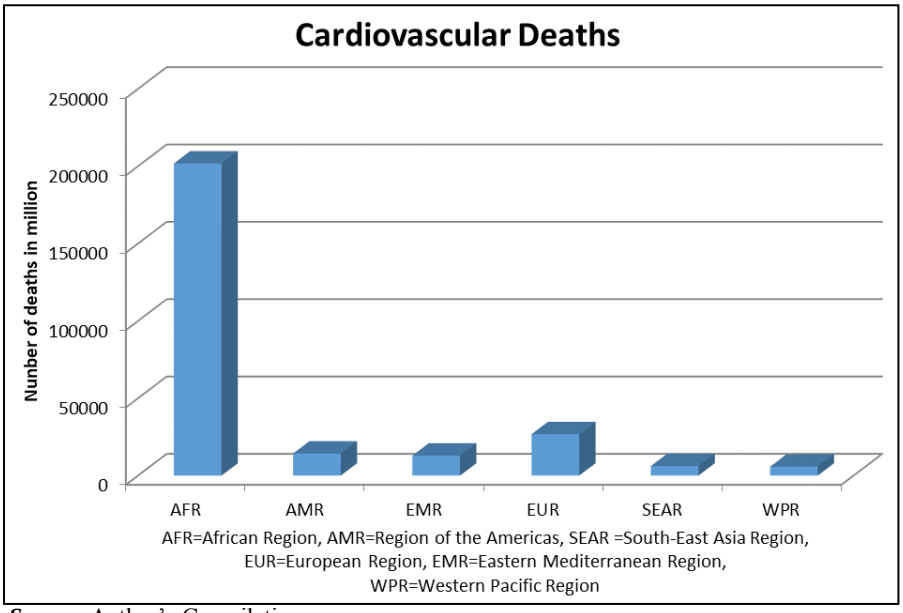
Target group

Inter-Country Comparison of noncommunicable

Area of study

Noncommunicable diseases

The figure.7 below also indicates how urgent the global attention should be drawn to Africa Region since the number of cardiovascular deaths is higher in comparison with the five other WHO Regions.



Source: Author's Compilation

Fig 7: Cardiovascular diseases among WHO Region in the year 2012

Limitations of research

The main challenge to the research was information gathering; retrieving of current and previous data and reports in relation with the topic under discussion from WHO website and other sources were much more difficult to obtain. Hence, old reports and data up until the year 2016 were used for analysis and expansion of knowledge in this research. The research did not throw more light on surveillance, monitoring and evaluation, national capacity, development partners, management and political will of various governments due to the limited nature of time allocated to this research. Sorting and filtering of data for regional comparisons were also affected by the time duration and insufficient data. Therefore, correlation and national comparisons were based on 172 countries related to the year 2012. Results for the test run for the year 2000 data was insignificant and hence eliminated from further discussion.

The major hindrance to developing countries is financing of healthcare. Developing countries should adopt preventive measures and health promotions to eradicate the menace associated with NCDs. Developing countries lack logistics and the financial resources required for general economic activities. Governments and developing partners should not be interest only in policy implementation but surveillance, monitoring and evaluation of NCDs.

Conclusion

In the years past, people hard the notion that noncommunicable diseases are attributed only to the aged and higher income earners. The tendency for higher income countries to record NCDs are higher than that of low and middle income countries. Most of these diseases are triggered by an increasing unplanned urbanization and unhealthy life style around the World. Conditions such as an increased blood pressure and blood glucose and obesity could be as a result of unhealthy diet and lifestyle. These issues can give rise to cardiovascular diseases; most of NCDs are due to modifiable risk factors. Tobacco usage accounts for an approximately 6million deaths globally which is estimated to growth higher in the near future. Cardiovascular diseases deaths were due to excessive intake of salt and sodium. Insufficient physical activity also stood at 3.2million deaths yearly throughout the world. The excessive intake of alcohol also kills 3.3million people globally. This situation would decrease the country's output and slow economic growth subsequently, mostly in the under-developed countries.

The studies on NCDs deaths revealed that higher income countries have adequate preventive measures that prevent NCDs from escalating. The research established that out of 16million of all NCDs deaths recorded, people die before age 70 and 82% of these deaths occurred in low and middle

income countries. WHO has line up global action plan to get rid of or reduce them to the bearers' minimum. In recent times, smoking and drinking are on the ascendancy among youth of today.

Non-communicable diseases (NCDs) are among the major health menace that has attracted global attention, NCDs such as cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are responsible for most deaths worldwide. This hampers the development of lower and middle income countries especially, the developed economies have sufficient logistics to curb the threat of NCDs.

Final, WHO must provide member countries with sufficient policy advice and up to date technical knowhow intended for member's action. Member countries are assisted in formulating national targets and development of proper and well defined action plan to achieve the best result. There should be good relationship between stakeholders in order to reduce the risk factors to noncommunicable diseases.

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