IFMSA Policy
Non-Communicable Diseases

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Policy Statement

Introduction

Non-communicable diseases (NCDs) represent a large and growing proportion of the global burden of disease. In addition to their mortality burden, NCDs commonly lead to significant morbidity, and have major economic consequences worldwide. Premature deaths from NCDs in particular are largely preventable, and many are mainly driven by four big risk factors: physical inactivity, unhealthy diets, tobacco use, and harmful use of alcohol. These risk factors are interrelated, and are in turn deeply rooted in social, political, economic, cultural, and commercial factors that often lie outside of individuals' control. NCDs, like many other conditions, follow a distinct social gradient both between and within countries. Many societies around the world - particularly in low- and middle-income countries (LMIC) - are faced with an obesogenic environment, predisposing children and adults alike to obesity and subsequent development of NCDs. Underfunding, lack of social mobilization, and conflicts of interest with the private sector together make this a challenging public health space, but also present an exciting opportunity for coordinated action.

IFMSA position

The International Federation of Medical Students' Associations (IFMSA) affirms that:

- NCDs are responsible for the majority of deaths worldwide, most of which occur in low- and middle-income countries;
- The four main NCDs - cardiovascular disease, cancers, diabetes and chronic respiratory diseases - share common risk factors, creating a potential for coordinated preventive action to tackle them as a group;
- In order to be effectively tackled, action must be multi-sectoral in nature, and must engage with stakeholders from both the public and private sphere;
- The WHO NCD Action Plan 2013-2020 (as well as its Appendices 3 and 9) set concrete steps to achieve meaningful progress in NCD prevention and control, including a set of cost-effective and evidence-based policies that can be adapted to meet the diverse needs of countries around the world;
- The global youth has a powerful role to play in NCD prevention, control and management, both as a vulnerable group and as a group with significant power to act.

Call to Action

The IFMSA calls upon:

National and state governments to:

1. Recognise NCDs as a major public health threat, particularly in LMIC;

2. Take affirmative steps to rectify social and economic disadvantages, with a view to reducing the burden of NCDs;
3. Shift towards a preventive health model that addresses upstream determinants of health – social, environmental, political, cultural, and commercial;
4. Invest more strongly in NCD prevention, control and management, to correspond more accurately with the disease burden these conditions convey;
5. Implement effective strategies to reduce tobacco use, such as increased taxation; advertising restrictions; plain packaging; and restriction of points of sale;
6. Implement a tax on sugar-sweetened beverages, that is based on sugar content, rather than volume; sufficient to modify purchasing behaviours; and effectively monitored and evaluated;
7. Consider other measures to improve nutrition and physical activity, such as subsidising fresh foods, where financially feasible; implementing an evidence-based front-of-package food labelling system; restricting advertising unhealthy foods to children; providing healthy food options in schools, hospitals and other public institutions; and providing appropriate physical education and time for exercise in schools;
8. Consider the above policy options in accordance with the WHO Action Plan 2013-2020 on prevention and control of NCDs.

Universities and other providers of medical education to:

1. Incorporate NCDs more comprehensively into the medical curriculum, encouraging a whole-of-society, holistic approach to their prevention and control;
2. Develop and implement training modules on how to take action on NCDs, involving different stakeholders including youth and medical students in designing these modules.

Healthcare professionals to:

1. Adequately inform patients about the influence of risk factors and upstream determinants on the development and outcome of NCDs;
2. Actively engage in evidence-based strategies to screen, treat and prevent NCDs;
3. Practise multidisciplinary care in the prevention and treatment of NCDs.

Private sector companies to:

1. Act in the interest of public health wherever possible, even if this may modestly reduce profits;
2. Ensure advertising of potentially unhealthy products conforms to government regulations and does not mislead consumers;
3. Incorporate health advice into alcohol and food advertisements;
4. Provide healthy food options at all workplace events;
5. Provide accessible and affordable workplace exercise facilities where possible.

All major stakeholders of upcoming national and global processes and meetings relating to NCDs to:

1. Ensure comprehensive consultation and collaboration across sectors, including civil society organisations;
2. Recognise the importance of meaningful youth participation in processes related to the prevention and control of NCDs;
3. Ensure voices of young people are heard at all levels of society, recognising that young people will be living in a world informed by decisions made today.

Position Paper

Background

Of 56.4 million global deaths in 2015, 39.5 million, or 70%, were due to non-communicable diseases (NCDs). The four main NCDs are cardiovascular diseases, cancers, diabetes, and chronic lung diseases. The burden of these diseases is rising disproportionately among lower income countries and populations. In 2015, over three quarters of NCD deaths - 30.7 million - occurred in low- and middle-income countries (LMIC), with about 48% of deaths in these countries occurring before the age of 70. (1)

The leading causes of NCD deaths in 2015 were cardiovascular diseases (17.7 million deaths, or 45% of all NCD deaths), cancers (8.8 million, or 22% of all NCD deaths), and respiratory diseases, including asthma and chronic obstructive pulmonary disease (3.9 million). Diabetes caused another 1.6 million deaths. (1)

As for mental health, another notable and recognised area of non-communicable illness, the global burden of mental illness accounts for 32.4% of years lived with disability (YLDs) and 13.0% of disability-adjusted life-years (DALYs). (2) This group of illnesses also tends to target younger people, and remains an important cause of death in younger people in many countries.

The health, social, and economic burdens of NCDs are set to increase in the coming years and decades, and this group of largely preventable diseases threatens to undermine social and economic development in LMIC. (3)

The causes of NCDs

Direct causes and risk factors

The four major NCDs – cardiovascular disease, cancers, diabetes mellitus, and chronic respiratory diseases – share four main risk factors, namely tobacco use, harmful alcohol use, physical inactivity, and lack of exercise. These factors have been identified by WHO and numerous other health bodies and experts alongside factors such as high blood pressure and high cholesterol, which can be modified through these four factors (4).However, consideration of upstream factors is necessary if we are to effectively tackle NCDs – we must look at the causes of the causes. (5)

Adding to this, WHO estimates that air pollution is responsible for an enormous 7 million deaths annually. 4 million of these deaths are due to indoor air pollution, due primarily to open fires and biomass stoves being used to cook and heat homes without proper ventilation. (6) The other 3 million are caused by the more obvious form of air pollution – outdoor air pollution. Indeed, in 2014, 92% of the world's population was living in places that did not meet WHO air quality guidelines, suffering poor health accordingly. (6)

NCD processes:

In order to tackle NCDs at the international level, WHO has developed an action plan (the WHO NCD Action Plan 2013-2020) to address NCDs, starting with a 4X4 approach followed by 9 voluntary targets to achieve. Appendix 3 of the Plan sets out evidence-based and cost-effective policies that can be implemented at the national level. In order to increase the achievement of these processes, WHO member states have adopted in 2014 a Global Coordination Mechanism (WHO GCM on NCDs) to accelerate the implementation of the

WHO Action plan supporting multisectoral action involving WHO member states, UN organizations and non-state actors. (7)

Discussion

Socioeconomic determinants

Contrary to popular belief, the biggest toll from NCDs is in LMIC. More than three quarters of all deaths, and over 80% of premature deaths, occur in these countries. (8) This disproportionate disease burden is not just felt on a global scale, however. People of low socioeconomic status in all countries suffer more from NCDs, and are more likely to exhibit many of the causes of these diseases. Smoking rates, poor diets, and, increasingly, physical inactivity are more common in these populations, and the burden increases along the social gradient (9).

It is worth noting, however, that a large proportion of deaths in many low-income countries are still caused by communicable diseases – predominantly lower respiratory diseases and diarrhoeal diseases. Despite the larger absolute burden of NCDs in LMIC than in higher income countries, the proportion of deaths due to these conditions decreases steadily as income drops. (10) Nonetheless, many countries are now facing a double burden of communicable and non-communicable diseases, which may place already fragile healthcare systems under greater pressure. (11) Further, this trend is increasing rapidly – by 2020 it is predicted that 70% of deaths in these countries will be due to NCDs. (12) NCDs are becoming more common, while rates of communicable diseases are dropping. To prevent this from reaching a breaking point, investment in prevention is needed, and attention must be focused first and foremost on LMIC if we are to see the greatest benefits.

The vast differences in prevalence of NCDs between and within communities and countries of differing socioeconomic status and income is striking. Rather than being ‘diseases of the rich and lazy’, NCDs cause and perpetuate inequality, and will continue to do so without coordinated action.

Commercial determinants

Beyond the social determinants, there has always been critical public health analysis of the power of the corporate sector—especially in the field of tobacco—and attention has turned to other areas in recent years, including work on unhealthy commodities, industrial epidemics; profit-driven diseases, and corporate practices harmful to health. The focus on lifestyle choices has also been extensively critiqued, especially in relation to marketing to children.

We define the commercial determinants of health as “strategies and approaches used by the private sector to promote products and choices that are detrimental to health”. This single concept unites a number of others: at the micro level, these include consumer and health behaviour, individualisation, and choice; at the macro level, the global risk society, the global consumer society, and the political economy of globalisation.

Corporate influence is exerted through four channels: marketing, which enhances the desirability and acceptability of unhealthy commodities; lobbying, which can impede policy barriers such as plain packaging and minimum drinking ages; corporate social responsibility strategies, which can deflect attention and whitewash tarnished reputations; and extensive supply chains, which amplify company influence around the globe. These channels boost corporate reach and magnify the health impact of commercial enterprise. The breadth and depth of corporate influence is expanded as more people are reached with ever more consumption choices.

Health outcomes are determined by the influence of corporate activities on the social environment in which people live and work: namely the availability, cultural desirability, and prices of unhealthy products. The environment shapes the so-called lifeworlds, lifestyles, and choices of individual consumers—ultimately determining health outcomes. (13)

Obesogenic environment

Many people today are faced with an environment that simultaneously promotes physical activity and unhealthy eating. This makes it difficult for people to make healthy choices, as it is often cheaper, easier, and more convenient to take an unhealthy option. This is particularly true for people of low socioeconomic status, and those who are otherwise disempowered. The impact of environment on the development of NCDs, as for other risk factors, follows the social gradient. Shaping our environment, then, must be key in any effort to combat obesity and NCDs. (14)

The nutrition transition and NCDs

The world is rapidly shifting from a dietary period in which the higher income countries were dominated by patterns of nutrition-related non-communicable diseases (NR-NCDs; while the lower and middle world were dominated by receding famine) to one in which the world is increasingly being dominated by NR-NCDs. Dietary changes appear to be shifting universally toward a diet dominated by higher intakes of caloric sweeteners, animal source foods, edible oils, high fat diet, and refined and processed foods. Activity patterns at work, in leisure time, during travel, and in the home are equally shifting rapidly towards reduced energy expenditure. Large-scale declines in food prices, increased access to supermarkets, and urbanization are key underlying factors. (15)

The essence of these changes is captured by the term ‘nutrition transition’ which accompanies the demographic and epidemiologic transition in these countries with economic development. Changes in habitual food consumption towards an increasingly energy dense diet that is high in saturated fats will further aggravate the burden of obesity and NCDs. (16)

The importance of sugar in the fight against NCDs

Sugar is widely known to be a contributing factor to obesity and NCDs, and the evidence for this fact is growing. As is the case for NCDs more broadly, sugar consumption is dependent on a wide range of social, political, economic, environmental, cultural, and commercial factors, and is not influenced by choice alone. (17) Consumption of free sugars also plays a role in childhood obesity, leading to increased rates of complications and NCDs in the future. One specific sugar-control policy that has gained significant support and evidence in recent years is a tax on sugar-sweetened beverages (SSBs). Recent evidence from Mexico, which has had such a tax since 2014, suggests that taxation has a strong influence on purchasing patterns, which has the potential to greatly reduce obesity. (18) This is backed up by modelling data from Australia, which not only suggest that consumption of SSBs will decrease, but overall drink sales will be largely unaffected – a crucial factor for securing support from industry – and the tax will generate a significant amount of revenue for governments implementing it. This gives it the relatively unique benefit of being a policy measure that is simultaneously good for public health and increases government revenue. (19)

Childhood obesity

In 2015, over 42 million children were overweight or obese, and this number is growing. Although childhood obesity is a global issue of concern to all nations, almost 75% of

overweight and obese children live in Asia or Africa, creating a disproportionate burden on children living in LMIC. (20)
Factors driving this rise include poor diet and lack of exercise, and are mainly driven by systemic factors such as a lack of fiscal policy discouraging intake of unhealthy food and drinks, poor access to healthy food and exercise-conducive environments, rather than individual choice. (21) Many children, particularly in LMIC, are growing up in a society which promotes high energy intake while encouraging physical inactivity. Consequently, many are becoming overweight or obese.
Most of these children will remain above the recommended BMI into adulthood, which makes them more susceptible to develop non-communicable diseases (NCDs). (22)

Urbanization and its impact on NCDs
Over the last few decades, traditional societies in many developing countries have experienced rapid and unplanned urbanization, which has led to lifestyles characterized by unhealthy nutrition, reduced physical activity and tobacco consumption. (23)

Throughout the process of development and urbanization, national economies shift away from physically active economic activities such as farming, mining, and forestry, and move towards more sedentary occupations, many of which are office-based. Technological innovation leads to decreased activity in previously physically demanding jobs. (24)

The United Nations (UN) recognizes that urbanization has implications for health including increased pollution and higher rates of both communicable non-communicable diseases (25). In 2009, Allender et al found that urbanicity is negatively associated with physical activity. In this study, the prevalence of high BMI was greater among both males and females in the high urbanicity group, with the prevalence of daily smoking and high blood pressure higher in men. (26)

Mental health and other NCDs
While falling outside the banner of the four major NCDs discussed above, mental illness bears an enormous disease burden, and remains a neglected area of health worldwide. Mental, neurological and substance use disorders account for 13% of the global burden of disease, disproportionately affecting poorer people and poorer countries. (27) Including other non-communicable diseases, such as digestive and kidney diseases, gynaecological conditions and musculoskeletal disorders, NCDs contribute 19.6% of deaths and over half of disability-adjusted life-years (DALYs). (28) Mental illnesses in particular are inextricably linked to socioeconomic disadvantage, and a complex array of factors including social environment, vulnerability, stigma, and financial security play an enormous role in their prevalence and outcome. (29) Though not as pronounced, the same is true for many of these 'other' NCDs. Clearly, for any comprehensive strategy to be effective, such conditions must be adequately considered, prevented, and managed.

The role of youth as a vulnerable group but with an operational role
Adolescents and youth are a tremendous resource that are overlooked in the fight against NCDs, yet they are a natural partner for preventing NCDs. WHO estimates that 70 percent of premature deaths in adults are the result of behaviors begun during adolescence and youth. (30) Two thirds of premature deaths in adults are associated with childhood conditions and behaviours, and behaviour associated with NCD risk factors is common in young people: over 150 million young people smoke; 81% adolescents don't get enough physical activity; 11.7% of adolescents partake in heavy episodic drinking and 41 million

children under 5 years old are overweight or obese. Adolescence is an opportunity to reinforce the benefits of positive behaviors through appropriate messages and programs. Experts estimate that the projected burden of NCDs could be cut in half or more by focusing on health promotion and disease prevention. (31)

Apathy to change current behaviours will add to the current NCD burden, with severe consequences for future populations and their health systems. Today's youth are tomorrow's leaders and carers will bear the brunt of these costs, both financially and personally. Youth everywhere therefore have a vested interest in NCD prevention.

Young people have the capacity to add value to solutions for NCDs. As part of the emerging 'New Power' crowd, young citizens are increasingly empowered and enthused to participate in shaping their everyday lives, including health, than generations before. Complementary to the technical expertise that older generations might offer, the voices of youth may offer new perspectives, media channels and solutions to NCDs.

Youth have a right to the highest attainable standard of health and well-being. However, too few have access to relevant and reliable health information and to high-quality and youth-friendly health services without facing discrimination or other obstacles. Young people are often targeted by companies advertising unhealthy food, tobacco or alcohol use, and many grow up today in environments that are not favourable to adopting healthy lifestyles, such as participating in sports and adopting and maintaining a balanced and healthy diet. Amongst young people living in low- and middle-income countries, the barriers are even greater. (32)

Beyond policy and structural changes, successful NCD interventions promote protective factors such as a positive sense of self; good decision making skills; and strong, supportive relationships in all aspects of adolescents' lives. Family and peers are particularly influential and can ensure a sense of connectedness and model good health behavior.

Since youth spend much of their time at school, the school environment should also promote healthy lifestyles and reduce NCD risk factors, for example, by ensuring that any meals served are nutritious, implementing physical activity programs, and teaching important life skills for a healthy future. (33)

NCDs in the medical curriculum

In the preparation for the IFMSA March Meeting 2017 and NCD Youth Caucus, Budva Montenegro, a survey was conducted within IFMSA National Member Organizations (NMOs) on current medical education practices around NCDs. There were 128 respondents of the survey, each representing the medical student population in their respective country. In the survey, around 75% of NMOs agreed or strongly agreed that more teaching was required on the topic of upstream determinants of health - that is, the social, cultural, environmental, and political conditions in which we are born, grow, study, work and age - at their medical schools. Only 7% believed that teaching on upstream determinants was adequate. Another question revealed that perceptions are hugely variable concerning the perceived quality of teaching on preventive health, including the four main risk factors for NCDs. Encouragingly, almost 40% of NMOs thought the quality of their education on preventative health was good or excellent. However, 32% rated it as insufficient, and 5 countries rated the quality of their medical education on preventive health as very poor. These results demonstrate the need for new and innovative ways to incorporate important topics, such as the social determinants

of health, into the medical curricula, such that future medical professionals are equipped to address NCDs in a holistic and effective fashion. (34)

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