ISTANA ISKANDARIAH
KUALA KANGSAR

ADDRESS
BY
HIS ROYAL HIGHNESS
SULTAN NAZRIN MUIZZUDDIN SHAH

AT THE
OPENING CEREMONY OF THE
CONFERENCE OF THE ASIAN SOCIETY FOR VASCULAR SURGERY

DATE: 27TH OCTOBER 2017 (FRIDAY)
TIME: 3.00 PM
VENUE: SHANGRI-LA HOTEL

Ladies and Gentlemen :

1. I am delighted to be here today, and very pleased that this biannual event is taking place this year here in Kuala Lumpur. I warmly welcome all those attending from overseas and from here in Malaysia.

2. I want to speak today on the theme of 'prevention is better than cure'. Although this is a very well-worn and well-accepted adage, I do think it is worth repeating and expounding upon, in the context of the urgent challenges presented by the growing global epidemic of non-communicable diseases or NCDs. Here in Malaysia, we are experiencing the dire consequences of this epidemic. Both mortality and morbidity due to various types of NCD have been relentlessly increasing over the past two to three decades. Deaths from these sources now

account for more than 70% of the total here. Similar trends are found in all but the least developed countries, with rising incidence of NCDs now occurring at far lower levels of affluence than in the past. This worrying pattern reflects in part the ever-increasing exposure to the risk factors that contribute to NCDs, particularly the urbanization that accompanies development, and the resulting lifestyle and dietary shifts. Longer life expectancy is another important factor, as the sheer number of those susceptible to NCDs rises inexorably.

3. Vascular-related conditions of course contribute significantly to the death and disease burden associated with NCDs. This includes via heart disease, the leading cause of death in Malaysia and globally. Cardio-vascular related diseases are estimated to have risen by 40% in Malaysia just in the past decade, with similar trends found regionally and globally. Other vascular-related NCDs display equally alarming growth rates, including chronic kidney disease, cerebro-vascular diseases, and diabetes, again, both here in Malaysia, and more broadly. Death, premature death and disability attributable to diabetes for example, have all increased by around 40% in Malaysia over the past decade.

4. Significant recent technical advances in the field of vascular surgery do seem to offer some hope of relief in this area of the NCD epidemic at least. The evolution of laser technology and endo-vascular approaches is contributing to what is likely to become the total

transformation of the field in the coming years. The ability to treat vascular-related aspects of NCD is improving immeasurably as a result, although many countries including Malaysia do face considerable challenges in developing the capacity necessary to implement these advanced techniques. This further exacerbates the existing widespread shortages of specialized vascular surgeons, and of training mechanisms to produce more. Despite such challenges, this exciting transition is well underway, and is already leading to lower morbidity and mortality in some areas.

5. But however much we innovate and invest, and build our capacity to deliver these next generation and high-tech treatments, the fundamental problem of the relentlessly rising number of new cases, will still remain unresolved. And with it, the escalating cost of responding to the tremendous medical needs that are created by the rising incidence of these diseases. Estimates for the likely costs of the global NCD epidemic are daunting. They include the direct costs of the long-term treatment of chronic and acute conditions that are suffered by ever-increasing numbers. There are also substantial indirect economic costs from the loss of productive working years of those affected. One World Health Organization estimate puts the economic cost of smoking alone at around US$ 500bn. And these economic costs don’t include the untold human costs of this heavy and growing disease burden.

6. For some, these costs may prove over-whelming. Many lower and middle-income countries are already struggling to finance the considerable investments in infrastructure and personnel that are necessary to respond to the rising incidence of NCDs. At the same time they are still tackling health problems associated with their relative under-development.[1] In countries where healthcare provision is not publicly provided or subsidized, whether developed or developing, lives already blighted by disease will be further devastated by the inability to afford the necessary treatment. This in turn will worsen the economic impacts.[2]

7. These high and even insurmountable costs are a key reason why prevention of NCDs is perhaps even more important than treatment and cure, however advanced and effective these may become. The development of greater capacity to treat vascular problems effectively is of course also absolutely vital, including with the new technology now available. This is especially urgent for developing countries such as many here in Asia, that are developing such capacity as part of the broader modernization of their health systems. But it is not enough only to treat vascular and other non-communicable diseases more effectively. They must be more effectively prevented from developing in the first place, including through tackling the major risk factors. This includes

[1] Economist Intelligence Unit (2017), 'Tackling Obesity in ASEAN : Prevalence, impact and guidance on intervention'
[2] Ng et al (2014), 'The rise of chronic NCDs in South-East Asia : a time for action'

more effective and earlier diagnosis, and better management upon diagnosis, again in a way that emphasizes prevention rather than cure.

8. The seemingly unremitting increase in the incidence of NCDs, including vascular-related ones, is due in large part to the greater exposure to the risk factors that cause them. It is a sad irony that the progress that has been made in many developing countries, including in relation to health, is now being threatened by these very same processes of development. Demographics play a key role, as the increased life expectancies now so widely achieved in lower and middle income countries, are themselves serving to push the numbers of NCD sufferers ever higher.

9. Urbanization in particular contributes to greater exposure to packaged and processed food high in sugar and fat, and to tobacco and alcohol products. It is also associated with higher disposable incomes to fund the increased consumption of such unhealthy items. Processed food on the other hand can sometimes be cheaper than more nutritious options, and may be preferred by those on lower incomes for this reason. This dietary transition contributes directly to the risk factors of obesity and diabetes, which are then exacerbated further by the high rates of smoking found in many Asian countries. China and Indonesia have among the highest number of smokers anywhere in the world, a

future public health disaster for both countries. Here in Malaysia, roughly half of the adult male population smokes.

10. Obesity, the closely related diabetes and smoking of course all contribute significantly to vascular and other NCD conditions. The negative health impacts of such lifestyle choices are then further aggravated by the increased stress levels and decreased levels of physical activity resulting from changing work patterns. These are again both closely associated with the urbanisation that inevitably occurs as countries develop. Lack of exercise is a key risk factor that contributes to the NCD health burden in Malaysia, along with poor diet and smoking. Asian populations may also be particularly vulnerable to some NCDs due to genetic and physiological features that contribute to a pre-disposition to obesity and diabetes, and to their damaging effects.

11. Economic growth and rapid urbanization have in this way contributed significantly to the NCD epidemic in Asian countries. The gradual expansion of the middle class, aggressive advertising, and general absence of public education or regulation, are all contributing to greatly increased demand for unhealthy consumables, with highly negative consequences as a result. As mentioned, these trends are being observed at earlier stages of economic growth than in the past, as long-impoverished rural populations abandon their active physical work patterns and basic diets for immobile factory or service sector jobs,

inadequate or harmful diets, and higher consumption of tobacco and alcohol products.

12. Such depressing trends may appear inescapable as development and urbanization proceed, also of course delivering numerous benefits to these same rural migrants. But given that lifestyle choices do play such an important role, many NCDs are in fact very much preventable. Some estimates suggest that as much as 80% of all NCDs could be avoided if different choices were made.[3] Moreover, there are many examples of effective preventative policies, some of which are making headway in stalling these negative trends. Some countries have managed to slow or reverse growth rates of smoking and of obesity. Although other socio-economic factors may also be at play in these generally higher income examples, such successes are at least in part due to explicit preventative strategies.

13. Efforts to improve understanding of the negative health impacts of poor diet, smoking and alcohol among at-risk populations, lie at the heart of these. Successful strategies typically include well-designed and carefully targeted health education, accompanied by restrictions on advertising. This has been replaced in many cases by strong negative messaging. The kind of shock tactics employed in traffic safety campaigns have proved equally effective in anti-smoking efforts.

[3] Lim et al. (2014) Innovation in NCD management in ASEAN : a case series

Targeting education and messaging towards those most at risk, including youth as well as lower income groups, is a further important element.

14. Bans on smoking indoors in public places, as implemented in numerous European and North American cities, have played a key role, in part by increasing awareness of the health implications. In the UK, for example, although the strict smoking ban was unpopular at first, it has promoted far greater understanding of the benefits of smoke-free public environments, and is now widely respected. Growing understanding of the health cost of smoking to passive smokers, overwhelmingly the wives and children of smokers, has also helped to shift attitudes towards smoking. An estimated 10% of the 6 million annual deaths due to smoking are due to second hand smoke.

15. The positive impacts of public smoking bans are felt immediately, both directly in decreased respiratory issues among children and bar staff for example, and indirectly in reductions in hospital admissions for smoking-related illnesses. A reduction in this one risk factor alone thus has important knock-on effects in other areas. One study showed falls of an average of 17% in hospital admissions for heart attacks in cities across 8 countries in Europe and the Americas in the year after strict smoking bans went into effect. By the third year, admissions had fallen

by 30%.[4] Significant benefits are also of course seen in the decreasing rates of lung and other cancers and respiratory diseases.

16. Taxation is a further important preventative mechanism. Taxes on cigarettes have increased significantly in every country where smoking rates have been brought down. The impact of price-based measures is even more effective in lower and middle-income countries, and among lower income groups within more advanced countries. This is due to the high price inelasticity of demand for tobacco products especially, as a non-essential purchase for those with limited incomes. The combination of higher prices, far stronger regulation, and better understanding of the negative health impacts, has thus helped to reduce smoking rates in at-risk populations in some countries, in an encouraging example of the relative success of well-designed preventative measures.

17. The other area in which preventative efforts are similarly urgent is in relation to obesity. This is perhaps the key risk factor that contributes to and worsens many NCDs, from diabetes to cardio-vascular conditions. It has been estimated that obesity contributes directly to approximately 10% of all deaths globally from NCDs. One recent study put the costs of obesity in Malaysia at US$ 1-2 bn, and at US$ 2-4bn for Indonesia, with a loss of productive years of between 4 and 9 on

[4] The Economist, 'Smoking rates still rising', www.economist.com/news/international/21657383

average. These are the highest costs in the ASEAN region.[5] Yet obestiy should in most cases be entirely preventable.

18. Preventative measures have been widely adopted in many countries, with the same mix of taxation, regulation and public education used for anti-smoking strategies. As with these, boosting health literacy is a key element of effective approaches, particularly among the most at-risk groups. Approaches include clearer food labelling as well as public information campaigns on the importance of healthy diet and exercise, delivered through schools, community health services and other means. Restrictions on advertising, including to children, are an important element, while as with smoking, taxation is another key policy option. There have been some successes in slowing rates of increase in obesity, including among children. These have occurred mainly in higher income country settings including the UK, Canada and some European countries. Overall levels of obesity remain high however even in these cases, reflecting in part the strong push factors associated with rising affluence and modern dietary and other habits.

19. Closer to home, a number of more bottom-up, community-based initiatives, do seem to be having some positive impacts, albeit on a very small scale as yet. Various programs in the Philippines, Indonesia, Thailand and here in Malaysia, use existing primary healthcare

[5] EIU (2017), ibid.

infrastructure and staff to deliver culturally appropriate health and lifestyle education to selected at-risk populations. Such bottom-up approaches have the advantage of being able to reach lower income rural and urban population groups that may be particularly at risk. As such, they can contribute to the early detection and education on self-management that are both so key to addressing risk factors. The use of existing capacity means such approaches are low cost and so achievable for middle and lower income countries. They are also suitable for upper middle-income countries such as Malaysia, which have retained primary healthcare delivery mechanisms, despite also developing more modern hospital-based sectors.

20. In Singapore, the emphasis has also been on public education campaigns, again delivered using a highly tailored and bottom-up approach. Health messaging strategies have been developed through market research and consultation with different stakeholders. As a result, even local food manufacterers and hawker centres have become part of national efforts to promote healthier lifestyles, by reducing the use of unhealthy ingredients for example. Rates of growth in obesity in Singapore have slowed, as in other advanced countries, particularly among children, but overall levels are still high. Singapore has among the highest prevalence of obesity in Asia, reflecting its higher income status.

21. Further afield in Brazil, obesity prevention measures are delivered using existing but adapted primary healthcare systems, as part of broader nation-wide efforts. The community-based obesity prevention awareness and management program has been implemented through the country's decentralised municipalities, with the flexibility to target funds and programs where the needs are greatest. A key element is a focus on exercise, with the provision of community facilities such as parks and bike and running routes. Education to develop health literacy is highly targeted to the most at-risk populations, and delivered via schools and other community mechanisms. Public education and awareness raising also take place at the national level, with the development of National Dietary Guidelines that emphasise a balanced healthy diet, a widely praised innovation.

22. It is crucial that we learn from these relative success stories from around the world and identify the key characteristics that contribute to their impact. Although different elements work better in particular settings, strong leadership at the local and national level, carefully targeted public education campaigns, and collaboration among multi-stakeholder partnerships, all seem to be important common factors in the development of effective prevention strategies. These need not require significant financial investment or new technology. On the contrary, existing primary healthcare structures may be ideally suited to

the targeted promotion of health literacy that lies at the heart of effective prevention, due to their unique local access and knowledge.

23. Rather than a lack of funding, preventative approaches are more likely to suffer from a lack of the collective will that is ultimately necessary to mount an effective strategy. This reflects the more macro-economic dimensions of the NCD epidemic, which must be addressed as part of any preventative strategy. The same 'unhealthy consumables' that are contributing to obesity and other risk-factors, are also creating employment, paying taxes, and generating economic activity. Their domestic and global manufacturers wield considerable political influence as a result. These political-economy aspects must be taken into account as part of comprehensive preventative strategies. In some settings, this may involve harnessing the interests of food producers to contribute to healthy eating approaches, through better labeling, portion control and reduced use of harmful ingredients such as sugar. In others, it may require more forceful challenges to powerful vested interests such as the tobacco industry. In all cases, it is likely to entail restrictions on advertising and greater regulation. Whatever the particular strategy, integrated approaches that take macro-economic aspects into account must be adopted if preventative measures are to have any broader impact.

24. In conclusion, I want to return once more to the cliché that prevention is better than cure. In relation to NCDs, and vascular-related conditions, it really cannot be emphasised strongly enough. The prevention of further growth in risk factors such as smoking and obesity must be prioritised far more urgently than at present, if we are to avoid having to administer the escalating number of treatments and cures that will otherwise become necessary. And the costs of this eventuality will ultimately be far more than many can bear. So as well as investing in building our capacity to deliver the exciting high tech procedures that are transforming the field of vascular surgery, we must also thus focus our greatest efforts on tackling the underlying causes of the NCD epidemic.

25. Ladies and Gentlemen, it now gives me great pleasure to declare this conference open.