

Non communicable diseases : Silent Killers in Northern Sri Lanka

After about 30 years of conflict in Northern Sri Lanka which ended in 2009, the government has been working on the process of rebuilding the nation including its health sector¹. This protracted civil war in the North caused severe setback to the health facilities including a dearth of qualified staff and leaving behind a severely disrupted health and education services². However, the challenges faced by the public during those difficult times have been ameliorated to some extent with improvement in the physical infrastructure such as roads and transportation.

Nevertheless, there are new challenges faced by the country today. There is an epidemiological transition in which the disease burden shifts towards non communicable diseases (NCDs), also referred as lifestyle diseases, from communicable diseases³. NCDs include cardiac and vascular system diseases (ie. Heart attacks, stroke), cancers, neurodegenerative diseases (Parkinson's disease and Alzheimer's disease) chronic respiratory diseases (COPD), asthma, obesity and diabetes. According to the statistics available, the proportion of deaths caused by cardiovascular diseases has increased by eight fold in the past fifty years⁴. The current mortality rate due to NCDs ranges from 20%-50% which is higher compared to the developed countries⁴.

There has been an increasing trend of NCDs in the North in the recent past. Main reasons which fuel this shift could be urbanization, acute lifestyle transformation, and related factors. Sudden introduction of different culture and lifestyle by the diasporic communities resulted in urbanization in the war torn Northern Province. Generally, in the past seven years the frequency of their visit is higher during the summer and winter. While paying visits to their relatives back in their hometown, they also introduce some cultural aspects from western countries that could be easily adopted by the local people; for example, consumption of alcohol, high caloric low fiber-containing diet, fast foods containing high amounts of trans fat, smoking, etc.

Evidence also show that urbanization not only has a direct effect on people's food consumption, behavior and lifestyle practices, in turn affecting their level of

physical activity, sedentary behavior and diet but also body composition⁵. In addition to this, establishment of multinational companies selling processed foods has replaced the consumption of traditional healthy foods. Even the local restaurants tend to include such fast-foods in their menu in order to increase their sales. It is also regrettable that the parents of the young generation encourage their children to adopt this hybrid lifestyle. As a result, the next generation is growing unhealthy; childhood obesity has also been emerging and morbidity and mortality due to NCDs among young population has also been increasing. This imposes a great risk on the Northern population as pointed out by *Sathiadas MG* in review paper on childhood obesity that these epigenetic changes lead to acute increase in NCD burden⁶. School, medical officers, and teachers have a great responsibility to arrest this trend.

Besides the diseases caused by the life style changes, there are other NCDs such as cancer, and neurodegenerative diseases like Parkinson's disease with increasing incidence in the North; this could be related to the increasing ageing population in the region. Sri Lanka is currently being burdened by the plethora of changes after war. As we are aware, our country has been cited as an example for achieving high health indices with minimal expenditure and it is moving towards an upper middle income country¹. However, recently this has been threatened by the increased occurrence of NCDs due to epidemiological and demographic transition. Further, in the long run the existing trend would result in major challenges to overall health system, especially the maternal and child health as well as imposing a huge economic burden by decreasing the efficiency of the productive age group. Mainly in less industrialized countries, agendas on NCDs are not prioritized since undernutrition and communicable diseases still require attention⁷. In the mean time, NCDs have silently been becoming a major threat. Thus, it is important that we accelerate the preventive methods or implement the existing steps more aggressively.

Some important initiatives which could possibly be effective in reducing the occurrence of NCDs are food product remodulation, encouraging physical activity,

early screening programs in the rural settings, and ensuring sufficient knowledge on NCDs among school children and the general public. School children must be educated on the virtues of traditional foods and the evils of processed fast foods. Food remodulation refers to promoting healthy eating by modifying a recipe for a processed food using several tools such as reducing the fat, sugar or salt content and increasing whole-grains' content⁸. In addition to that, increasing the taxes for high calorie foods and fast foods will reduce the consumption and their inflow in the region. All food packages should contain the details of nutrition composition and general public should be educated about the dietary guidelines such as serving size per day which is recommended in the packages. Furthermore, frequent screening programs could be organized especially in the rural areas where people have poor medical facilities and knowledge on NCDs. Mobile medical units consisting initial screening equipment with trained staff would make this feasible and effective. These mobile units could also create awareness by continuous educational programs.

Moreover, in creating awareness among the public the medical officers should also be involved in preventive initiatives. A recent study conducted in two selected hospitals in Colombo district states that, the overall knowledge in NCD and NCD prevention strategies remain poor among a majority of grade medical officers⁹. Hence, this study recommends that post graduate education should give more space to improve knowledge of medical officers on NCD prevention. Likely, the knowledge among the medical officers in the North should also be measured and if necessary, they should be encouraged to improve their knowledge. Thus, as mentioned above, a multidisciplinary approach towards prevention of risk factors of NCDs, the silent killers, is a must in the Northern region.

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Ajantha K
Editor in Chief