Editorial:

Lifestyle Changes in the Management of Non-Communicable Diseases in Low and Middle-income Countries

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Keywords : Way of life, Alteration, Management, Avert, Handle, Deal with, NCDs, Non-Communicable Diseases, Resource-Constraint, Developing, Countries.

International Journal of Human and Health Sciences Vol. 05 No. 01 January'21 Page : 4-6
DOI: http://dx.doi.org/10.31344/ijhhs.v5i1.223

Non-communicable diseases (NCDs) embracing cardiovascular disease, stroke, diabetes, and chronic obstructive pulmonary disease, are increasing all over the globe, but disproportionately in high frequency in low- and middle-income countries (LMICs). [1-4] Although our planet has achieved a lot in reducing deaths from infectious and contagious diseases. [5] A significant portion of patients suffering from NCDs did not get enough healthcare support in LMICs, although treatment options are available and access in high-income countries (HICs). [2, 6] The globe is observing high death rates due to NCDs, but the situation turns into a grave public health risk in LMICs. [6-8] The chronic NCDs on most occasions to date do not have much curative treatment. The current pharmacological invention possibilities clinically available are controlling and prevention strategies. Furthermore, LMICs because of resource constraint management of NCDs is quite limited to address the whole population. Additionally, research regarding NCDs management principally conducted in HICs. [2] Usually LMICs follows management strategies for NCDs developed in HICs. The need for research regarding NCDs management has been recognized to improve prevention and control strategies for specific country context; again, resource constraints remain a major issue for research. [2, 6, 9]

Lifestyle is an essential component that has been identified as the primary cause of NCDs around the globe. [10] Tobacco, and alcohol consumption, unhealthy dietary practice, overweight and obesity, hypercholesterolemia, with sedentary life has been recognized as a significant cause of NCDs. [6, 11, 12] These causative factors are the part of lifestyle disorders correlated to NCDs and considered as the modifiable risk factors. [13] All these risk issues act as a leading role in producing NCDs, a group of them called as metabolic syndrome had been extreme apprehension for the last few decades. [13] NCDs appears as a significant cause of morbidity and mortality. The situation much worse in LMICs because of resource constraints. It is additionally speculated that NCDs will cause around seventy percent mortality in LMICs by 2020. [12] Metabolic syndromes are the most common metabolic disorder, which ultimately causes cardiovascular diseases and diabetes.[13] Additionally, these risk factors of NCDs are correlated with cancer and chronic pulmonary disease.[12] The principal preventive measures regarding NCDs are focused on the road in modifying lifestyle-related risk factors. [14, 15] One Indian study conducted in Barwala village, Delhi, India, reported that the study participants were contacted on their cell phone once a month for about 20 minutes. Researchers during discussion emphasis repeatedly the necessity of adaptation of a healthful lifestyle in promoting their overall health. Investigators additionally meet the study participant's health-related questions and on condition that optimistic support. This research package also included weekly short message service (SMS). The SMS contained 25–30 words mentioning within brief but attractive sayings and

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limericks on the significance of amendment of risk factors. This finally reported that this cost-effective strategy of counseling had a positive outcome in turning-down lifestyle-related risk factors and promoting health.[14] Another multicentre study from South Asia conducted among fourteen to seventeen years old population of six different schools found that more than 80% of the study-participants consume unwholesome foods, and 54% were physically inactive especially girls (OR, 4.07; 95% CI, 2.69 to 6.17). Much of the study-participants often exposed to passive smoking (OR, 2.57; 95% CI, 1.72 to 3.83), and 14% were regular smokers more observed among males (OR, 2.17; 95% CI, 1.19 to 3.91). More than 33% of study-participants chewed betel nut (OR, 2.03; 95% CI, 1.34 to 3.06), and 25% used oral tobacco. This finally concluded that these lifestyle-related risk factors are preventable with the comprehensive and integrated intervention program. [15] Another research similarly reported that educational intercessions targeting to alter dietary habits, and lifestyle features, varying the environment, changing the food supply, commissioning community involvements, and instigating economic policy strategies. [16] Multiple countries around the globe implemented high-level tax for tobacco, sugar-sweetened beverages, and many other unhealthy foods and improved in maintaining a healthy lifestyle.[17-19] Bangladesh and other LMICs should stringent policy measures to modify lifestyle-related risk factors of NCDs to safeguard their ordinary people. Furthermore, LMICs need to amend their health policy planning based on primary health care strategies to improve the the overall health care system.[20-24]

Funding

This research did not obtain any financial support.

Conflict of Interest

The authors do not possess any conflict of interest.

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