# **EDITORIAL**

# Surge of Non-Communicable Diseases in Pakistan

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Pakistan is not only undergoing a demographic progression but it is also tormenting from epidemiological transition. Demographic transition is evident because birth rates are increasing (28.6 per thousand population in 2017) while death rates (7 per thousand population in 2017) are decreasing consequential to a population explosion<sup>1</sup>. In Pakistan and many other developing countries epidemiological evolution has led to a twofold encumber of disease<sup>2</sup>.

In 2010, global disease burden study estimated that cardiovascular diseases including, hypertension, ischemic heart diseases and cerebrovascular diseases of arteries and veins were the cause of death in around 30% of all global deaths. Major causes of death due to non-infectious ailments are cardiovascular diseases, cancers, chronic respiratory diseases and diabetes<sup>2</sup>.

Nearly 29% of the proportional mortality of all the diseases can be attributed to cardiovascular diseases in Pakistan. Just about 3% of all deaths in Pakistan can be attributed to occur due to diabetes mellitus, while 10% of all the adults above the age of 18 have high blood glucose levels. About a quarter (25%) of all individuals above the age of 18, have elevated blood pressures. Approximately 32% of the individuals aged 18 years and above are physically inactive, whilst 19% of children and adults above 15 years of age are smokers or use other forms of tobacco<sup>3</sup>.

Urbanization and junk food have largely added to wave of obesity through decreased levels of physical activity, consequently leading to diabetes mellitus and ischemic diseases of arteries and veins. Shahid Hussain Foundation (SHF) and Department of Community Medicine Shalamar Medical and Dental College, Lahore joined hands to find out and reduce the prevalence of Coronary Heart Diseases and their causative factors among urban slum dwellers of Lahore by active interventions and advocacy based theoretical models. In this model, the social cognition in the community is mainly identifying the changing behaviors of high-risk individuals above the age of thirty.

According to the baseline survey, the family history of diabetes mellitus was positive in 41% of the individuals and 38% of individuals had a familial tendency of hypertension. Approximately 19% of the individuals also had a familial tendency of ischemic heart diseases whereas; about 8% of the people had a family history of stroke. When measured in the community about 21% of the individuals above the age of thirty tested positive for raised random blood glucose levels on glucometer using capillary blood. Approximately 40% of the individuals above the age of 30 suffered from hypertension whereas 33% of the individuals were obese.

The frequency of changeable and non-amendable risk factors for atherosclerosis is disturbingly soaring in the Pakistani population<sup>4</sup>. Behavior change counseling requires extensive periods of social interventions. The preventive measures suggested by the World Health Organization to prevent cardiovascular diseases are to motivate and support high-risk persons to decrease their cardiovascular risk by relinquishing tobacco, formulating healthy food choice; becoming physically active; reducing body mass index and waist–hip ratio, lowering blood pressure, decreasing blood cholesterol including LDL-cholesterol and controlling glycaemia. Health education, habitual physical workouts, dietary information of food must be made available to the public to manage non-communicable diseases in Pakistan. Heath expenditure in terms of GDP in Pakistan was 0.91 percent during year 2017<sup>5</sup>. Keeping in view the changing trend of diseases and significant increase in non-communicable diseases, more public health ventures to reduce the burden of non-communicable disease should be planned.

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