Physical Inactivity and Development of Diabetes: An Association Worth to be Explored

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Editorial

Globally, non-communicable diseases have been acknowledged as one of the major public health concerns, owing to their universal distribution, chronic nature, a wide range of complications including mortality, augmented out of pocket expenditure, and an added burden on the health system [1,2]. Diabetes accounts for a major share of non-communicable diseases, with a global prevalence of 9% among adults in the year 2014 [1]. Further, diabetes has been identified as the direct cause of death among 1.5 million persons, of which in excess of four-fifth has been reported in low and middle-income nations [1].

Even though, genetic predisposition does play a role in the onset of disease, various lifestyle related modifiable factors (like obesity, unhealthy diet, physical inactivity, etc.) have played a crucial role in the causation of disease [2,3]. Physical inactivity is a major challenge of the 21st century in terms of its aftereffects and the financial / health burden which it imposes on the individual, family, society, and the nation [4,5]. Further, physical inactivity has been recognized as one of the important predisposing risk factors in causation of more than twenty diseases or conditions [4,5].

However, the worst part is that despite the availability of confirmatory evidence that physical activity benefits in delaying the onset of diabetes/complications, very low proportion of people (including children), actually perform sufficient physical activity to extract its advantages [4,6]. In-fact, estimates from the European nation suggest that 33% of adults and 66% of adolescents are insufficiently active, and thus almost 8.3 million disability-adjusted life years are lost per year in the region [6]. Further, a remarkable decline in physical activity has been observed among people in the age-group of 11-15 years, especially among girls [5]. This is primarily because of the living / working environment of the people, which encourage them to have a sedentary lifestyle [4-6].

In order to improve upon the physical activity among people and simultaneously reduce the burden of diabetes, there is an indispensable need to target policy makers to prioritize the issue and negate the existing barriers in the physical environment [2,5]. A wide range of interventions like adopting national guidelines on physical activity for health; planning of the city at various levels including transport facilities and supportive infrastructure to encourage activities like walking and cycling; encouraging recreation activities like participation in different kinds of sports; ensuring provision of high-quality physical education in school settings; targeting vulnerable group of people like differently-abled to enhance the access to relevant local options; creating awareness among the general population about the adverse effects of physical inactivity and advantages associated with sufficient physical activity; and developing an appropriate evaluation mechanism to enable modifications in the actions aimed at increasing physical activity, can be planned and implemented to eventually improve the physical activity [1-6].

To conclude, physical inactivity has emerged as a global pandemic and plays a significant role in the onset of diabetes. However, as it is a modifiable risk factor, all measures should be taken to improve the level of physical activity and reduce the prevalence of diabetes.

References