

## REVIEW ARTICLE

# Diabetes and its Burden on Dental Health in India

Arpita Saha Ray<sup>1</sup>, Abhishek Ray<sup>2</sup>

## ABSTRACT

Diabetes is one of the major non-infective diseases, which is increasing globally. The increasingly sedentary lifestyle adopted by majority of the population along with unscientific food habits is the major contributing factors in it except in people with Type 1 diabetes mellitus. Unfortunately, in the Indian scenario, dental diseases are still neglected by a large percentage of the population unless it starts hampering the routine lifestyle of a person. This article reflects on the dangerous association between diabetes mellitus and dental problems and the importance to manage both the issues early without neglecting it.

**Keywords:** Complications, Dental health, Diabetes.

**How to cite this article:** Ray AS, Ray A. Diabetes and Its Burden on Dental Health in India. *Int J Health Res Educ* 2018;1(1):11-12.

**Source of support:** Nil

**Conflicts of interest:** None

Dental health had been among the neglected aspects of health care, especially in the developing countries like India for a long time. This can be attributed to a number of factors such as lack of proper knowledge regarding it, comparatively tolerable symptoms in the early stage of the disease, and most importantly economic issues along with lack of access to a dentist. On the other hand, with an increasingly sedentary lifestyle, non-communicable diseases, namely diabetes, hypertension, dyslipidemia, and cardiovascular diseases, have been on a rise. Alarmingly, it has been predicted that within a couple of years, India is poised to become the diabetes capital of the world. Diabetes by itself can result in a plethora of health-related issues and quite significantly involves the matter of dental health.<sup>[1]</sup>

To begin with, diabetes is a condition characterized by high levels of blood sugar due to insulin deficiency (Type 1) or most often insulin resistance (Type 2), attributed to obesity and sometimes as a part of another

disease process, for example, polycystic ovarian disease. The point to note here is that the high blood glucose level significantly hampers the body's physiological processes which proves to be detrimental for the patient.<sup>[2]</sup>

Diabetic patients are highly prone to infections, especially if the blood sugar levels are on the higher side. These lead to problems such as dental caries and gingivitis. Often ignored in the early stages by the patient, presentation to the dentist is when the symptoms become intolerable or halitosis develops. This affects the personal and social lifestyle of the patient to a great extent. In most cases, surgical intervention becomes necessary which involves removal of the carious teeth is draining the gingival area in the event of an abscess (quite commonly seen in cases of neglected caries). Moreover, diabetic patients are at a risk of prolonged bleeding and postoperatively delayed wound healing. These prolong the recovery period of the patient as well as necessitate prescription of additional medications which economically burden the patient. They also require more frequent follow-up which hampers their professional life resulting in a number of them being lost to follow-up. Those who remain under follow-up appointments often present with the same issues recurrently and thus become a burden on the existing dental health care. Apart from the above-mentioned issues, patient with poor dental hygiene is at an increasing risk of developing rheumatic heart disease and glomerulonephritis causing further burden on the medical health services.<sup>[3]</sup>

Lack of government dental hospitals in many states of India, coupled with mostly an affordable private dental care leaves the patients in a state of limbo and most of them prefer to sit through their problems. These ultimately complicate the overall scenario and lead to the above-mentioned issues. The situation can only be rectified by making people more aware of the preventive aspects of diabetes and the need to keep sugar levels under control in case of already diabetic patients. They should be encouraged to be compliant with their medications and adopt a healthy lifestyle by incorporating active aerobic exercises in their daily schedule. Once diabetes is kept under control and its incidence starts to reduce in the non-diabetic population, the burden will come down significantly.<sup>[4]</sup>

Consultant Dentist<sup>1</sup>, Medical Practitioner<sup>2</sup>

<sup>1</sup>Sri Guru Sangha Trust, Kolkata, West Bengal, India,

<sup>2</sup>St. Helier Hospital London, United Kingdom

**Corresponding Author:** Dr. Arpita Saha Ray, Consultant Dentist, Sri Guru Sangha Trust, Kolkata, West Bengal, India. Email: dent.arpita@gmail.com

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