

## “Prevention and control of diabetes can be done at several levels”

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By : Rahul Koul - January 22, 2018



**Dr Mohan’s Diabetes Specialities Centre is a diabetes speciality chain founded in the year 1991 headquartered in Chennai, Tamil Nadu. It is one of India’s leading diabetes care providers offering comprehensive services for diabetes patients. In an exclusive interaction with the Biovoice News, Dr V Mohan, Chairman and Chief Diabetologist, Dr Mohan’s Diabetes Specialities Centre shared his insights on the diabetes scenario in India. Read on:**



**How do you view the current diabetes prevalence scenario in the country? Are we closer to becoming the world's diabetes capital?**

**Currently India stands second in the world in the number of people suffering from diabetes. China due to its larger population stands first. However India will overtake China soon for several reasons. Firstly India's population will exceed that of China in the next 10-15 years. Secondly, the demography of China shows that it consists mainly of older people, most of whom have already converted to diabetes. On the other hand, India has the highest youth population in the world and as this population grows older, the diabetes rates will grow very high.**

**From all these angles, it is almost definite that India will have the largest number of people with diabetes in the world. The current numbers stand at around 70 million people with diabetes but there are more than 80 million people with pre-diabetes and these are the people who will convert to diabetes in the next 5-10 years. According to the International Diabetes Federation, it is estimated that there will be 123.5 million people with diabetes by 2040 but this is only a gross underestimate.**



**What does the latest statistics tell us about the impact of diabetes on our women population?**

**Diabetes can affect women in many ways. To start with the prevalence of diabetes in women is equal to that of men. So, when we say that there are 70 million people with diabetes in India, 35 million of them would be women. While women without diabetes are usually protected from heart attack, women with diabetes are as prone to develop heart attack as men with diabetes. Hence the protection from heart disease in women in the premenopausal age group is removed once they develop diabetes. Women with polycystic ovarian disease have insulin resistance and they are the ones who have a greater tendency to develop diabetes.**

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**What is 'Gestational Diabetes' and how does it affect the mother and her child?**

**Gestational diabetes is a condition in which diabetes sets in during the pregnancy.**

**Gestational diabetes can affect both the mother and the child. Women with gestational diabetes have greater chances of developing type 2 diabetes and cardiovascular disease in the future. They may also develop pre-eclampsia and hypertension.**

**Regarding the child, gestational diabetes leads to a large baby, a condition called as ‘Macrosomia’ which is defined as a birth weight greater than 3.5 kg. Moreover, the child may develop hypoglycaemia or low blood sugar levels, respiratory distress syndrome and congenital anomalies. The chances of still birth is also high. Shoulder dystoica leading to difficult delivery and higher caesarean section rates are other problems in women with gestational diabetes. However if gestational diabetes must be detected early and treated aggressively, we can ensure both the mother and the child are healthy as we have shown in a large study called ‘WINGS’ that we carried out at Chennai.**



**What are the latest tools to check the sugar levels and how effective are these compared to conventional methods?**

**Apart from the conventional blood glucose meters which have been there for long time, we now have various gadgets to continuously monitor the blood sugar levels throughout the day. One of the older systems introduced in India was called as the “Continuous Glucose Monitoring” (CGM) system. Recently, another popular device has been introduced. This is called as the “Ambulatory Glucose Profile” using the Freestyle Libre. This is a sensor – the size of a 2 rupee coin which is fixed on the upper arm which can provide the blood sugar levels throughout the day for a 14 day period. This helps the physician to adjust the doses of antidiabetic drugs much better. I have used this in thousands of patients and it has been a game changer in the field of diabetes.**

**“Women with gestational diabetes have greater chances of developing type 2 diabetes and cardiovascular disease in the future”**



**What proactive measures do you suggest as a way forward to control the situation by 2020?**

**Prevention and control of diabetes can be done at several levels. Firstly ‘Primordial Prevention’ which means that if the risk factors for diabetes are controlled e.g. obesity, physical inactivity, stress etc. then even the stage of pre-diabetes can be prevented.**

**‘Primary Prevention’ refers to the prevention of diabetes in those who have already developed pre-diabetes. This can also be achieved by diet, exercise and weight reduction. The large D-CLIP study done at our centre showed that one third of individuals with pre-**

diabetes can be prevented from developing diabetes by these simple measures.

**‘Secondary Prevention’ of diabetes refers to prevention of complications in those who have already developed diabetes. This can be achieved by tight control of diabetes, blood pressure and lipids right from the time of diagnosis of diabetes.**

**Finally, ‘Tertiary Prevention’ of diabetes, which refers to prevention of late stage complications in those who already have developed some complications of diabetes. Thus at every stage of natural history of the disease, diabetes prevention can be achieved. The figure below shows the various levels of Prevention of diabetes.**