Prevalence of diabetes among women high in southern India

More than one in 10 women aged 35-49 suffer the disease

Researchers have identified a bunch of districts in India that have the maximum prevalence for diabetes among women. At least 50 of the 640 districts studied have high prevalence of diabetes — greater than one in 10 — among women aged 35-49 years. Tamil Nadu, Kerala, Andhra Pradesh and Odisha have districts with the highest prevalence. The results were published in the Journal of Diabetes & Metabolic Disorders.

While Cuttack in Odisha has the highest prevalence of 20%, 14 districts in Tamil Nadu — the maximum among all States — have high prevalence, prompting the researchers to classify them as ‘hotspots’.

In all, 254 districts have a “very high level” (greater than 10.7%) of diabetes burden, and 130 have a moderately high (8.7-10.6%) burden. The burden is higher in the southern and eastern parts of the country and lowest in central India.

The researcher’s sourced data from the National Family Health Survey-4 (2015-16) as it provides district-level health indicators for women. Demographic details of 2,35,056 women from 36 States/Union Territories were analysed for gleaning disease spread and analysing relationship among disease and socio-economic category, location, number of children, obesity and hypertension among others. This was also the first NHS survey to collected blood glucose levels in men and women thus helping determine diabetes.

Factors at play

“Results portray that prevalence of diabetes among women in their late reproductive ages is highest among those with two or fewer children ever born, who are educated, belonging to economically prosperous households, living in urban areas and hence enjoying changing lifestyle... increased access to high energy (refined and processed) food and development,” the authors Shrikant Singh, Parul Puri and S.V. Subramanian note.

Previous studies of the incidence of diabetes in men and women in India have thrown up mixed results with some finding greater evidence of the disease in women, in North India, and others reporting men in South India as more susceptible. However, a skewed gender ratio as well unequal access to medical care has led to the disease being under-reported in women, says a 2014 article in the Indian Journal of Endocrinology and Metabolism.

Mortality and women

The study focused on women who were approaching menopause, which was also a period when the risk of obesity, hypertension rose as well as complications from late pregnancy, Ms. Puri told The Hindu. It also provided a greater perspective on why mortality
from diabetes is higher among women. Knowing this will help design programmes and interventions to lower community-based prevalence of diabetes, especially among women in their late reproductive ages.

Previous work had found that diabetes-related mortality is higher among women in India. According to Ms. Puri, the prevalence of diabetes among women in India didn’t substantially differ from that of men.

Rise of diabetes

The number of people with diabetes in India increased from 26.0 million in 1990 to 65 million in 2016. The prevalence of diabetes in adults aged 20 years or older in India increased from 5.5% in 1990 to 7.7% in 2016. The prevalence in 2016 was highest in Tamil Nadu and Kerala, according to the Global Burden of Disease Study, 2018.

The authors also point to the higher levels of diabetes in the southern and eastern parts of India as being linked to diets of “rice-meat-and-fish” and a higher intake of “sweets and snacks” that were rich in trans-fats. These however weren’t explanatory, the authors note. “Being a cross-sectional survey, we found correlations not causation,” Ms. Puri added.