The National Family Health Survey-4 (NFHS-4) reveals interesting data regarding the prevalence of metabolic syndrome (MetS) in India. Perhaps the largest exercise of its kind in the world, NFHS assesses the health status of our nation.\[1\] Traditionally, NFHS has focused on family planning, maternal and child health, nutritional makers of health, and communicable disease risk factors.\[2\] In keeping with recent changes in morbidity patterns, NFHS has now begun to monitor metabolic health as well. This approach is welcome, as it helps assess the prevalence of various noncommunicable diseases in India. NFHS uses robust methods to collate data regarding the health of the country and ensures accuracy by comprehensive, well-documented training of field staff.\[3\]

The NFHS-4 (2014–2015) has recently reported findings from 15 Indian states and union territories (UT). The data related to metabolic health makes interesting reading. As part of its data collection exercise, NFHS has measured body mass index (BMI), random blood glucose (RBG), and blood pressure in adults. Prevalence is reported BMI <18.5 and >25.0 kg/m\(^2\), for men and women, as well as urban and rural inhabitants separately. Gender-specific prevalence of adults with “high blood sugar” (>140 mg %) and “very high blood sugar” (>160 mg %) is given. Similarly, the prevalence of high blood pressure has been classified as mild, moderate, and severe, based on systolic and/or diastolic blood pressure.

The prevalence of obesity (BMI >25 kg/m\(^2\)) varies from state to state, with Andaman and Nicobar Islands (AN) men and Puducherry women being the heaviest (38.2% and 36.7%), respectively [Table 1]. The heaviest states for men, after AN, are Puducherry (37.1%), Sikkim (34.8%), Andhra Pradesh (AP) (33.5%), and Goa (32.6%).\[4\] Puducherry women are followed by Goa (33.5%) AP (33.2%), AN (31.8%), and Tamil Nadu (TN) (30.9%) far as the prevalence of obesity is concerned. The least prevalence of male obesity is found in Meghalaya (10.1%), Madhya Pradesh (MP) (10.9%), Bihar (12.6%), West Bengal (WB) (14.2%), and Tripura (15.9%). The lowest percentage of obese women is reported from Bihar (11.7%), Meghalaya (12.2%), MP (13.6%), and Tripura (16.0%) [Table 2]. The high rates of obesity in general, and in some states/UTs in particular, create concern for future metabolic health. Obesity is the forerunner of metabolic dysfunction and predisposes to illnesses such as diabetes and hypertension.

NFHS-4 has captured cross-section data related to the occurrence of “high sugar” as well. Although it does not purport to be an epidemiologic study of diabetes prevalence, it does indicate the burden of uncontrolled glycemia in the community. NFHS-4 uses the word “sugar” in its tables but clarifies in its manuals that RBG was checked. According to NFHS-4, the highest prevalence of “high blood sugar” in adult men is in AN (26.0%), followed Goa (19.6%), WB (17.3%), AP (15.7%), and TN (15.3%). Dysglycemia is relatively less prevalent in women, with AN (14.5%), Goa (14.1%), AP (13.1%), Puducherry (11.7%), and Tripura (11.7%) taking the top five spots. The “least diabetic” states are Haryana (8.2%), Meghalaya (9.3%), MP (9.6%), Bihar (10.0%), and Telangana (10.1%) for men, and Bihar (6.1%), Meghalaya (6.1%), Haryana (6.6%), MP (7.2%), and Uttarakhand (8.6%) for women.\[4\]
Studies have shown that hypertension is more common in men than in women. This trend was observed in states such as Bihar, MP, and Meghalaya, where the prevalence of hypertension was higher in men compared to women. In contrast, women from states such as AN, Sikkim, and Telangana had higher rates of hypertension, reflecting a gender gap in the prevalence of this condition. This gap is likely due to differences in lifestyle, dietary habits, and access to healthcare, which are influenced by cultural and socioeconomic factors. The NFHS-4 data, when analyzed for gender, revealed that hypertension was more prevalent among men in various states, but the prevalence among women was also higher in certain regions such as Sikkim and Telangana, indicating the need for gender-specific healthcare services and interventions targeted at reducing hypertension rates in women. The data from NFHS-4 also highlighted the importance of addressing the underlying causes of hypertension, such as high salt intake, obesity, and physical inactivity, to prevent and control this chronic disease.
obesity, in India, cannot be ignored. A multipronged approach to prevention of the MetS including early screening, diagnosis, and management, public awareness, and legislation is required. Special emphasis must be paid to high prevalence regions such as AN, Goa, Puducherry, and Sikkim. At the same time, it must be noted that “low” prevalence states such as Bihar, Meghalaya, and MP also bear a huge burden of disease in terms of numbers affected. National prevention programmers must take all these factors into account while planning future strategies for control of metabolic health.

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