Is ‘Tea’ a real culprit behind lower urinary tract symptoms (LUTS) in men?

Dear Editor,

We have gone through the article “Prevalence, risk factors and quality of life of Lower Urinary Tract Symptoms (LUTS) among men attending Primary Care slum clinics in Bangalore: A cross-sectional study” by Kant et al. published in the Journal of Family Medicine and Primary Care, 2021, volume 10, and we would like to compliment it by exploring the intricacies involved with the factors responsible for the condition. In their conclusion, they have highlighted that diabetes and consumption of more than two cups of tea per day were significantly associated with LUTS. They have not mentioned the exact volume of tea, sugar concentration, whether green tea or black tea or masala tea or any other variety and the time of tea consumption whether in morning or evening or bedtime. They claimed that tea contains caffeine, which is responsible for a diuretic action. They used the formula for sample size calculation as $4pq/d^2$ where, $P = 69\%$, $q = 31\%$ with 10% relative precision and the sample size calculated was 180. However, we tried to calculate the same considering confidence level 95%, but we could not found number 180. In this study, erectile dysfunction was present as a major associated symptom in 54.3% of LUTS patients and in 52.1% of participants overall, while they reported 90.55% were married and more than 50 years of age. They did not elaborate that among them how many patients were sexually active and the association of marital status was not evaluated during the chi square test. They included the data of tobacco smoking but not taken care of tobacco chewers and other kinds of tobacco consumption. In the studied population, 49.7% were diabetic and 32% diabetic were having LUTS complaints. However, uncontrolled diabetes cases were excluded. It is also not clear that how many patients were diabetic among 61.69% of tea consumers, as diabetes itself is responsible for nocturia and increased urinary frequency.

Secondly, in a randomized, double-blind, placebo-controlled, multicenter, clinical trial Katz et al. found just opposite results of green and black tea extract (Camellia sinensis) in 46 men of 30 to 70 age group when evaluated LUTS on American Urologic Association symptom score (AUAss) for 12 weeks. In their study, post voidal residual urine (PVRU) was decreased; average urine flow rate ($Q_{\text{mean}}$) was increased, physical functioning ($Q_{\text{ol}}$, SF-36 health survey) and sexual desire (International Index of Erectile Function) was also increased in the trial group. Authors have tried to support the relationship between increased tea consumption and LUTS by referring Boston Area Community Health (BACH)[3] cohort study ($n = 4144$) in which the comparisons were done among caffeinated, carbonated, and citrus beverages consuming population. This study is totally different from the study of Kant et al.

Miller et al. had conducted a prospective study to observe the effect of elimination of potentially irritant beverages (coffee, tea, alcohol, and carbonated and/or artificially sweetened beverages) to improve LUTS among female patients. However, in this study, they didn’t specifically relate tea consumption to urinary symptoms.

The effect of tea consumption on urinary incontinence and hyperactive bladder is still unclear based on the information available from published studies.

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Conflicts of interest
There are no conflicts of interest.

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