Prevalence of Risk Factors of Polycystic Ovarian Syndrome (PCOS) among School Going Female Students of Kolkata, West Bengal

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Abstract: Background: Polycystic ovarian syndrome is an endocrine disorder that affects one in 15 women worldwide with global prevalence of 5-10% among young women.

Aims and Objectives: To find out the prevalence of risk factors of PCOS among female students.

Methods: A school based, observational, descriptive, cross sectional study was conducted among school going female students for three months. The final sample size was 110. Equal number of students studying in class 11 and 12 were selected from three Bengali medium schools of Kolkata. Data on risk factors was collected by a pre designed, self administered proforma. Anthropometric measurements were recorded with calibrated equipment and general examination was done for some clinical parameters.

Statistical analysis: Data was analyzed by SPSS 22.0(licensed) software. The qualitative variables were presented in percentage and the quantitative variables by mean, SD.

Results: Most of the students were aged between 16 and 17 years, Hindu. (92.73%), lived in nuclear family (74.54%). More than one third experienced menstrual cycle abnormality. Seventeen and 62 students had family history of PCOS and diabetes respectively. Half of students consumed fast food diet more than 3 days, majority did physical exercise less than 3days, had acne and alopecia. One fourth had excess growth of body hair and 43 had hirsutism. Most were not aware about PCOS. The prevalence of overweight and obesity was more as per waist hip ratio than body mass index (23.63% vs. 16.36%).

Conclusions: There was increased prevalence of family history of PCOS, diabetes, menstrual problems and fast food habits. Careful monitoring and school level awareness generation through organized health talk session can prevent the diseases to develop or delay and management of the disease.

Keywords: Risk factors, PCOS, Body mass index, Weight hip ratio, Obesity.