Relationship between Body Mass Composition and Primary Dysmenorrhoea

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Abstract : Introduction: A healthy menstrual cycle is a sign of women's sound health.Various variables may influence the length and regularity of menstrual cycle.Studies have revealed that menstrual cycle abnormalities may be associated with psychological stress,lack of physical exercise, alteration in body composition,endocrine disturbances,higher estrogen levels as seen in obese females.Hence there is an urgent need to find out the relationship between variations in body mass composition(BMI & body fat%) with menstrual abnormalities like primary dysmenorrhoea. Aim: To find out the relationship between body mass composition and primary dysmenorrhea. Objectives: 1.To check whether there is any association between body mass index and primary dysmenorrhoea.2.To check whether there is any association between body fat percentage and primary dysmenorrhoea. NULL HYPOTHESES-There is no relationship between body mass composition and primary dysmenorrhea. Hypothesis: There exists a relationship between body mass composition and primary dysmenorrhea. Materials and Methods: The study was conducted over a period of 6 months with 90 samples selected on random basis. The procedure was explained to the participant and a written consent was taken thereafter. The participant was made to stand on the BODY COMPOSITION SCANNING MONITOR, which scanned the physical profile of the participant (height, weight, BMI, body fat percentage and visceral fat).Thereafter, the candidate was asked about her menstrual irregularities and was asked to grade her level of dysmenorrhoea (if present) using the Verbal Dimensional Dysmenorrhea Scale. Results: Chi square test of association was used to find out the association between body mass composition(body mass index,body fat percentage) and primary dysmenorrhea.The chi-square value for association between body mass index and primary dysmenorrhea was 38.63 $p<0.001$ which was statistically significant.The chi-square value for the association of body fat % & primary dysmenorrhea was 30.09,$p<0.001$which was statistically significant. Conclusion: Study shows that there exists a significant relationship between body mass composition and primary dysmenorrhea and as the value of Body mass index and body fat percentages goes on increasing in females, the severity of primary dysmenorrhea also increases.

Keywords : body mass index, body composition screening monitor, primary dysmenorrhea, verbal dimensional dysmenorrhea scale