

ABSTRACT

Adolescent polycystic ovary syndrome (PCOS) is one of the endocrine and metabolic disorders characterized by oligomenorrhea and hyperandrogenism. Sedentary lifestyle in adolescence increase the risk of overweight and obesity. Overweight may increase the risk of PCOS in adolescent by the mechanism of insulin resistance and hyperinsulinemia, which affects the function of adrenal and ovarium androgen production. The increase of androgen has an important effect on the PCOS. Therefore, lifestyle management, exercise, and health diet can be applied to the management of adolescent with the risk of PCOS. The aim of this research is to examine the relation of sedentary lifestyle and overweight as the risk of polycystic ovary syndrome in adolescent. This research used observational analytic method and cross-sectional design. The sample of this research is chosen by random sampling on all female students of SMA Negeri 5 Surabaya. The data were analyzed using logistic regression analysis.

Result : From 82 students (100%), 32 students are overweight (39%), 5 students obesity (6,1%), 44 students is performing sedentary lifestyle (53,7%). Logistic regression analytic shows there is a significant relation between sedentary lifestyle and the risk of PCOS ($p=0,004$) and significant relation between overweight and the risk of PCOS ($p<0,001$). People with sedentary lifestyle has 6,373 folds higher risk of PCOS than normal people and people with overweight has 16,260 folds higher risk of PCOS than normal people.

In conclusion, sedentary lifestyle and overweight have the role of increasing the risk of PCOS in adolescents.

Keywords: *polycystic ovary syndrome, adolescent, sedentary lifestyle, overweight.*