ABSTRACT

Metabolic Syndrome (MetS) is a cluster of risk factors that may result to the development of Non-Communicable Diseases (NCDs) and economic losses. It has been suggested that weight loss program may prevent or reduce the incidence of MetS. However, there are numerous factors that may affect the success of a weight loss program, such as age, gender, and knowledge. This study investigates the weight loss success of employees at a high risk of developing MetS, denoted by an elevation in one of the MetS parameters, working in a company based in Jakarta, Ciawi, and Cibitung. The measurements were done by collecting weight data of employees at baseline and final. From this study, it is concluded that there are 10 participants (17.9%) that successfully achieved the target weight loss (> 3.33%). Additionally, this study also aims to find the relationship between the success of weight loss to age, gender, and knowledge. In this study, age, gender, and knowledge did not have any relationship with the weight loss success. Rather, the success of the weight loss might be attributed by factors that are not captured in this study (e.g. energy expenditure, caloric restriction, motivation, etc). The program is more effective to reduce weight in older adult group ($- 1.63 \pm 1.92$ kg, p = 0.013) as well as lowering BMI in obese participants (n = 3 vs. n = 1). Nonetheless, the program worked well to reduce weight but not up to the point until it reaches the weight loss goal. The lack of relationship between the knowledge and success of weight loss might be attributed to the difference in topics addressed, age of participants, as well as frequency of education session. Furthermore, the application of the guideline given is not mandatory, which led to the low compliance of the participants towards to guidelines, resulting in the low percentage of successful participants.

Keywords: Age, Body Composition, Gender, Knowledge, Metabolic Syndrome, MetS parameters, Prevalence, Weight Loss