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## **ASSOCIATION BETWEEN BMI AND WAIST CIRCUMFERENCE AND MOTIVATION TO QUIT SMOKING IN MALE SMOKERS**

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**Relevance.** Tobacco smoking is widely spread and is a risk factor of many diseases therefore it is important to motivate smoking cessation. To more effectively help patients to quit smoking, factors that influence motivation need to be investigated. Previous research has shown that smokers are less motivated to quit smoking due to tendency to gain weight, therefore people with higher BMI could be less motivated to quit smoking. In this study we investigate relationships of BMI and waist circumference with motivation to quit smoking.

**Aim:** to evaluate association between BMI, waist circumference and motivation to quit smoking in male smokers.

**Material and methods.** Male smokers between the age of 40 and 54 were surveyed. They were diagnosed with metabolic syndrome and sent to specialized cardiovascular prevention unit by their primary physicians for detailed cardiovascular risk assessment. All of them were smoking at least for 10 years and smoked at least 10 cigarettes per day. Smokers' motivation for smoking cessation was evaluated by Prochaska and DiClemente Transtheoretical model and motivational rulers for preparing, importance, self-confidence to quit smoking and fear to gain weight after quitting.

**Results and its discussion.** A total of 257 men were included in the study. There were 13 (5,1%) smokers with normal BMI, 91 (35.4%) smokers with overweight (BMI between 25,00 and 29,99 kg/m<sup>2</sup>) and 153 (59.5%) obese smokers. 66 (25.7%) participants were in preparation to quit smoking (ready to quit in 1 month), 104 (40.5%) participants were in contemplation (ready to quit in 6 months) and 87 (33.9%) precontemplation (not willing to quit) stage. There were no association between BMI or waist circumference and motivation to quit smoking. There was a positive correlation between BMI and fear to gain weight ( $p < 0.001$ ) and a positive correlation between waist circumference and fear to gain weight ( $p = 0,001$ ).

**Conclusions.** In our study sample we found no association between BMI or waist circumference with motivation to quit smoking. Therefore, other factors that could influence motivation to quit smoking must be explored.