



# The Compare of BMI in fertile and infertile men

<sup>45</sup>Keshavarzi F, <sup>1</sup>Nankali A, Omidvar Borna MH<sup>2</sup>, Khoshay A<sup>3</sup>, Bakhtyari F<sup>4</sup>, Hemati M<sup>5</sup>

## Introduction

The obesity is not only related to chronic diseases, but can also affect the reproductive system. Many studies have been done on the relationship between increasing BMI and decreased semen quality. Some studies have defined the increase of broken DNA fragments index in obese men, while the other studies, have reported the hormonal changes and increase of oxidants as a fertility decline factor in obese men.

## Methods

In this study, both infertile and fertile men were studied as cases and controls groups. Infertility was defined on the basis of abnormal semen analysis. The fertile group was men who had no history of infertility and had one child. This study was conducted at the Infertility Center, located in Mo'tazedi Hospital in Kermanshah.

## Findings

514 persons were studied, including two 257 case and control groups. The mean age of the case group was  $38.05 \pm 6.68$  and the control group was  $39.79 \pm 6.87$  that was no significant difference between the two groups ( $P > 0.05$ ).

In case group, the mean BMI was  $25.95 \pm 2.16$  and in control group was  $25.99 \pm 2.25$  that was no significant difference between the two groups ( $P > 0.05$ ).

## Conclusion

In both groups, BMI were slightly higher than the normal index but BMI in infertile men was not more than fertile.

## Key words

Fertile, Infertile, BMI, Obesity

1-Associate Professor of Obstetrics & Gynecology, Maternity Research Center, Imam Reza Hospital, Kermanshah University of Medical Sciences (KUMS), Iran

2-Urologist, Imam Reza Hospital, Kermanshah University of Medical Sciences (KUMS), Iran

3-Master of Science in Nursing, School of Nursing, Kermanshah University of Medical Sciences (KUMS), Iran

4-General Practitioner, Kermanshah University of Medical Sciences (KUMS), Iran

5- Master of Science in biostatistics, Maternity Research Center, Imam Reza Hospital, Kermanshah University of Medical Sciences (KUMS), Iran