



## Obesity and Infertility: Persian Medicine Perspective

### Dear Editor,

We read enthusiastically the paper written by Bond et al. (1). In this retrospective cohort study, the efficacy of metabolic global approach has been evaluated in 127 obese (BMI  $\geq 30$  kg/m<sup>2</sup>) women. This investigation showed that lower BMI significantly improves the rate of pregnancy in obese women. Another recent study not only revealed that higher levels of physical activity are associated with reduced risk of fertility problems in women but also, once again, emphasized the negative impact of higher body mass index (BMI) on fertility (2). In this survey, which included 6130 women participated in The Australian Longitudinal Study on Women's Health (ALSWH), those who were overweight had the hazard ratios (HR) of 1.18 (95% CI: 0.99-1.39) while this index was 1.36 (95% CI 1.14-1.63) in obese women.

It is worth mentioning that about a millennium ago, Avicenna (980-1037 AD) has pointed out such associations in his feat, "The Canon of Medicine". In the third volume of his book, this Iranian physician addresses the causes of infertility in both sexes in details in "sexuality weakness" section. Avicenna mentions that the decrease in the quantity and quality of sperm/ovule which could happen due to various causes plays a crucial role in the male/female fertility (3).

According to the Persian medicine which is one of the oldest comprehensive medical schools relying on humoral medicine and theory of temperaments (4), the process of reproductive cell production requires a normal temperament of the body organs (Especially vital organs, *i.e.*, brain, heart, liver, and gonads). When there is excessive wet humor or wetness increase (The situation which is associated with increased BMI), the quantity and quality of sperm/ovule are negatively affected. Consequently, assisted reproduction techniques could be virtually ineffective, too (5, 6). In addition, this increase in wet humor negatively affects the digestive system of the patient, impairs the normal production of reproductive cells, and ultimately disrupts the sperm production in the testicles and the same happens in the female reproductive system (7-9).

On the other hand, it should be kept in mind that the increase in wet humor or BMI could have a harmful effect on the vital body organs including

heart which is also involved in blood and nutrients supply of the reproductive process (10, 11).

Considering the holistic experiences in use of complementary and alternative medicines, applying Persian medicine as an integrative evidence-based approach could provide new promising horizons in the treatment of infertility.

### Conflict of Interest

Authors declare no conflict of interest.

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