

Lifestyle and in vitro fertilization (IVF) success

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Abstract

OBJECTIVE:

The impact of specific behaviors on the advanced reproductive technologies is poorly understood. It is vital for healthcare professionals to understand which lifestyle behaviors can have the greatest negative impact in an effort to improve patient recommendations. The purpose of this article is to assess how patients perceive various lifestyle behaviors impact IVF success.

METHODS:

An extensive literature search was conducted to review publications from the late 2000 to the present. Online sources of medical databases included the US National Library of Medicine (NLM), the National Center for Biotechnology Information (NCBI) at the NLM and PubMed.

RESULTS:

The majority of research in this area is epidemiological; there are a few randomized controlled trials (RCTs) regarding weight loss in infertility patients, but no RCTs on other lifestyle behaviors.

We know several of the key interlocutory signals between the oocyte and follicle, the sperm and oocyte, and the conceptus and uterus, but their full identity and interaction with environmental factors and reproductive disorders remains to be elucidated. Some of the most potent stressors for embryos and gametes are lifestyle factors - very young or older age, obesity, sexually transmitted infection, drugs, alcohol, diet, vitamin deficiency, and psychosocial stress.

High or low BMI, alcohol, vigorous exercise, nicotine, and antidepressant medications may have an adverse impact on fertility. It is unclear whether dietary supplements can have a positive impact on fertility. Patients do not appear to follow recommendations for lifestyle behavior modifications during infertility treatment

CONCLUSIONS:

Healthcare professionals need to be more effective in making lifestyle behavior recommendations for infertility patients, including those receiving treatment.

Reproductive health critically impacts a couple's wellbeing and functional capacity throughout their life.

Key words: Life style, Infertility, In Vitro Fertilization, oocyte quality, Environmental factors.