

## Prevalence of Tobacco Smoking among Infertile Couples in Tehran

Aryanpur, Mahshid (M.D.)<sup>1</sup>; Heydari, Gholamreza (M.D.)<sup>1</sup>; Tarahomi, Majid\* (M.D.)<sup>2</sup>; Akhondi, Mohammad Mehdi (Ph.D.)<sup>2</sup>; Zeraati, Hojjat (Ph.D.)<sup>3</sup>; Masjedi, Mohammad Reza (M.D.)<sup>1</sup>

1. Tobacco Prevention and Control Research Center, National Research Institute of Tuberculosis and Lung Diseases, Masih Daneshvari Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

2. Reproductive Biotechnology Research Center, Avicenna Research Institute, ACECR, Tehran, Iran.

3. Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran.

### Abstract

**Introduction:** Cigarette smoking is a major public health hazard which may cause different diseases such as fertility disorders through numerous mechanisms. Smoking decreases sperm quality and its fertilizing capacity; it prevents growth of ovarian follicles and decreases female fertility. The objective of this study was to determine the prevalence of smoking in infertile couples referring to Avicenna Infertility Clinic.

**Materials and Methods:** This cross-sectional study included 342 infertile couples referring to Avicenna Infertility Clinic during 2000-2008. The data were collected via interviews using WHO Fagerström test for nicotine dependence and questionnaires by the International Union against Tuberculosis and Lung Disease (IUATLD).

**Results:** Out of 684 cases, 246 (36%) had cigarette smoking experiences, with more prevalence among men than women (59.4% of men vs. 12.6% of women), ( $p < 0.01$ ). The mean age for smoking initiation was  $20.1 \pm 5.8$  years. Totally, 141 subjects (20.6%) were cigarette smokers, with a significant prevalence among male subjects (37.7% of men vs. 3.5% of women), ( $p < 0.01$ ). The mean value for nicotine dependency (Fagerström test) among the smokers was  $2.9 \pm 2.8$ ; with high, average and low nicotine dependencies, 16.1%, 18.3% and 65.6% respectively.

**Conclusion:** The prevalence of cigarette smoking among infertile couples in Tehran was about 14.4%; quite similar to that of the prevalence among the Iranian general population (12.5%).

**Key Words:** Cigarette smoking, Current smoker, Infertility, Nicotine dependence, Occasional smoker, Quit smoking, Tobacco.

**Corresponding Author:** Majid Tarahomi, Reproductive Biotechnology Research Center, Avicenna Research Institute, Shaid Beheshti University, Evin, Tehran, Iran. P.O. Box 19615-1177  
**E-mail:** tarahomi@avicenna.ac.ir

Received: Aug 26, 2008; Accepted: Dec 24, 2008