### Occupation as the predicting factor of a premature ovarian failure

Health and medical science

Gynecology and Obstetrics

Ukraine, Kharkiv

Kharkiv national medical university

Obstetrics and gynecology department #2

Professor , MD, PhD Lazyrenko V.V.,

assistant professor PhD Gradil O.G.,

associate professor , PhD Lіashchenko O.A.,

associate professor , PhD Ovcharenko O.B.,

associate professor , PhD Kalinovskaya O.I.

Introduction: Nowadays, a growing number of women have an active social position, make a successful career. They also want to become mothers but in contemporary economic situation more and more women plan their maternity in later period. A woman's age is negatively correlated with ovarian reserve. Insufficient number of oocytes decreases chances to become pregnant. Purpose of the study is to identify relationships between reproductive health of women and the profession.

Patients & methods: The study involved 120 women with infertility in age from 28 to 43 years. All participants had a variety of professions and belonged to different social groups. The average time the workload is 8 hour day, 5 days a week. Types of work were grouped depending on the predominant component: А. Manual Labor (light industry, agriculture) - 12%; В. Intellectual Labor (analysts, engineers, economists) - 25%; C. Communication (managers, consultants, vendors, service sector) - 35%; D. Creative Work (designers, artists, writers) - 8%; E. Mixed Labor, two or more dominant factor (teachers, doctors) - 20%. Stress load was assessed by psychological questioning. Ovarian function and ovarian reserve were assessed using hormonal examination (FSH, AMH, melatonin), ultrasound procedure. Results: The maximum degree of stress load was observed in groups B, C and E. Such profession as a teacher, journalist, physician, manager more than others exposed to stress loads. These women have the worst indicators of ovarian reserve, that the evidence in favor of premature aging and ovarian failure. Low ovarian reserve leads to a syndrome of poor response during ovarian stimulation, there is a very low efficiency of the use of assisted reproductive technologies. In such cases, the recommended oocytes donation or special training before the stimulation of ovulation. Positive correlation between professions related with intellectual labor and intensive communication is identified in the study group.

Conclusion: Type of occupation can be additionally used as a predictor of reproductive aging for the risk group selection of a premature ovarian failure.