

# THE IMPACT OF STRESS ON SEMEN QUALITY

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**Background:** Stress is one of the most important health and social problems. Psychological stress has long been suspected as having an important impact on infertility. Studies on the effects of psychological stress on male fertility, especially semen quality, have so far yielded equivocal findings.

**Methods:** The study population consists of 179 men registered to an infertility clinic in purpose of diagnosis with normal fertility (semen total concentration 15-300 mln/ml) or with little oligozoospermia (semen total concentration 10 do 15 mln/ml). The semen samples were analysed in one laboratory according to the WHO manual for basic semen analysis. The main semen parameters were assessed: volume, motility, % atypical, % of progressive spermatozoa.

To assess the occupational stress the General Health Questionnaire 28 (GHQ-28) was used. As a result of this questionnaire we used the sum of the points obtained by men taking part in the study and the number of stressful events at work (if the stressful events or situation appeared) announced by studied subjects.

**Results:** The level of stress measured by General Health Questionnaire 28 (GHQ-28) taking into account the number of stressful events, such situations affect semen volume and % of progressive spermatozoa after controlling for factors that can have an impact on semen quality like: time of couple infertility, abstinence and diseases in the past that can affect fertility.

**Conclusions:** The study confirms that occupational stress can affect male semen quality, but as there are few studies in these directions the results need to be confirmed. This cohort being assembled will form a basis for further longitudinal observations.