# A CYTOGENETIC SURVEY OF MALINGERING CLIENTS OF AN IRANIAN FORENSIC MEDICINE DEPARTMENT

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**Introduction:** Malingering is a considerably important issue in legal medicine and imposes a heavy financial burden on the health services all over the world. It is defined in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) as "the intentional reporting of symptoms for personal gain". The disorder is mostly due to the psychological profile of individuals, in turn, are attributable to genetic and environmental factors. Malingerers may have physical and psychological presentations from subjective complaints to more serious events such as self-mutilation injuries or even trying to commit suicide. Since chromosome studies on malingering are very limited, we conducted this study to find out the frequency of chromosome aberration in these cases.
**Methods:** This study was conducted in legal medicine department of Gilan Province. The 100 male and 100 female (age range: 20-45 years) malingering clients according to DSM-5 criteria and by answering to the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) were surveyed. Blood samples of subjects were analyzed for the cytogenetic study.
**Results:** Out of 100 men studied, 2 (2%) were found to show Sex Chromosome Aneuploidy (SCA). One of them (1%) with 47XXY- Klinefelter's Syndrome- and the other (1%) with 47XYY karyotyping. Among 100 women only 1 case was found to have 47XXX (1%). Overall, this study revealed a normal diploid number of chromosomes in 197 cases (98.5%) and SCA was found in 3 cases (1.5%). No other chromosome aberrations were detected (Neither in number nor in structure).
**Conclusions:** Malingering is one the fundamental personality disorders and requires basic evaluation in different fields. In this study, the cytogenetic analysis showed the frequency of SCA in malingering cases that was nearly 10 times higher than the general population, based on recent World Health Organization (WHO) incidence statistics. It suggests that extra sex chromosome may have a positive role in malingering and can be a clue for further large-scale investigations to confirm this association.

**Keywords** - Cytogenetics, Malingering, Chromosome aberrations