**Introduction:** The CCR5 gene encodes a chemokine receptor used by HIV-1 to gain entry into CD4+ T cells. The CCR5 Δ32 mutation is a 32 base pair deletion that confers resistance against HIV-1 by introducing a premature stop codon and thus abolishing the receptor. The allelic frequency of this mutation in European populations is on average 10%, while in Indian groups the average frequency is 1%.

**Methods:** By means of molecular genetics techniques, respectively PCR-Simplex (Polymerase Chain Reaction-Simplex), we investigated the genotype and allelic distribution of the CCR5 Δ32 mutation in two study groups from Romania, one consisting of 166 Romanian healthy individuals and the other of 133 healthy Roma ethnics.

**Results:** In the Romanian population group we found 144 wild-type homozygous subjects, 21 heterozygous subjects and one subject which was homozygous for the Δ32 allele, while in the Roma ethnic group 111 subjects were wild-type homozygous and 22 heterozygous. The observed allele frequencies for the Δ32 mutation in the two study groups were 7% in the Romanian population group, respectively 8.3% in the Roma ethnics.

**Conclusions:** This is the first study performed on populations groups from Romania concerning the distribution of the CCR5 Δ32 mutation. At the present moment there is not a single clear explanation to why such a high frequency of the CCR5 Δ32 mutation is found in Roma ethnics and while genetic drift, population mixture, or a specific founder effect can explain in part this required to elucidate the matter.

**Key words:** heterozygous subjects, chemokine receptor.

## STUDY OF EMBRYOTOXIC, FETOTOXIC AND TERATOGENIC PROPERTIES OF ENTOMOLOGIC DRUGS

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**Introduction:** Embryotoxic and teratogenic properties of entomologic drugs were studied preclinically. Studied drugs are obtained from insects Lepidoptera, at different stages of metamorphoses (Imupurin- obtained from pupae, Entoheptin-from eggs, and Imuheptin-from eggs and pupae of Lepidoptera).

**Purpose and objectives:** The research was conducted in two stages, with the aim: determining of embryo- development disorders (I step-antenatal, and II step–postnatal observations).

**Material and methods:** Initially, we tested the embryotoxic and fetotoxic activities of tested drugs in rats. Tested substances were administered in 2 ml of 0,9% NaCl solution via a gastric tube, daily, at the same time; the control group received 2 ml of 0.9%NaCl solution. Daily observations not found behavioral deviations during pregnancy in females, included in the experimental groups in comparison with the control group. In the second step we evaluated the teratogenic action of tested substances, and postnatal development in the first 60 days of descendant's life.

**Results**: After administration of tested drugs, rats became slightly more active for 10 minutes, with subsequent recovery. Examination of skin, mucous membranes and hairiness showed no pathological changes. Body weight in rats of all groups increased an average with 30g. On the 20th day of pregnancy studied females were euthanized. It was studied preimplantation mortality index, which determines the difference between the number of corpora lutea in the ovaries and the number of implanted sites in the uterus, which is equal to 0. Then we calculated preimplantation index equal with the ratio of preimplantation places and the number of embryos, being equal to 0. Number of descendants born by primiparous

females is on average 3-4 individuals, corresponding to the number of descendants born by females from vivarium. In all neonates were determined craniocaudal length and body weight, which are on average 3.74 g and 27.5 mm respectively. External examination revealed no abnormalities. Behavior of studied rats did not differ from the behavior in control group. Tooth eruption took place at the 8th day of life, hair growth on the 11-day, opening eyes to the 15-day, all corresponding age rats. At euthanasia of newborns developmental abnormalities were not detected.

**Conclusions**: No embryotoxic effects were detected in tested drugs use. No differences in reproductive performance (conception and pregnancy) between experimental group and the control group. Thus, no embryotoxic, fetotoxic and teratogenic effects were seen in pregnant females treated with entomologic drugs.

**Keywords:** entoheptin, imuheptin, imupurin, entomology, Lepidoptera, embryotoxicity, teratogenicity.

## ATTITUDES, OPINIONS AND BEHAVIOU OF YOUNG PEOPLE ON REPRODUCTIVE HEALTH FROM THE INSTITUTIONS OF HIGHER EDUCATION FROM CHIŞINĂU

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**Introduction:** Reproductive health is internationally recognized as a fundamental component necessary for human development, on which the general health of population, prosperity and the development of all countriesdepends.Reproductive health is a priority field of the WHO, which in 2001 developed the European Strategy in Sexual and Reproductive Healthand suggested that all 51 countries-members 51 deof the European Councilshould elaborate similar strategical documentsaccording to the national specific.

**Aims and Objectives:** Evaluation of attitudes, practices and sexual behaviour of young people, including: influence of the sexual education received in the family on sexual behaviour; knowledgeon sexually transmitted infections and HIV/AIDS; opinions and attitudes aboutappropriate sexual behaviour and detection of risks associated to sexual experience; contraception and pregnancy;- is a primordial basis of family planning.

**Methods:** Doing this research we used the historical, mathematical, statistical, epidemiological, sociological, comparative analyze methods. This research collected information from Register of the National Bureau of Statistics, which included information from the official documents and some information from the researches in the field. 216 students from 4 institutions of higher education from Chisinau participated at the research. 16.6 % of the participants are boysand 83.3 % - girls, all of them 18-30 years old. Their average age is of 24 years.

**Results:** 39.09% of the young confirmed that they have never discussed with the parents on topics related to sexuality. 51.86% of the respondents didn't know that HIV/SIDA, gonorrhoea and syphilisare sexually transmitted infections. Approximately 40.0% of the sexually active young had more than 1 partner during last year. 76.47% of the respondents don't use regularlycondoms, 40.0 % of which have never used them. About 20% of the sexually active people presented risks associated to anterior aborts.

**Conclusion:** From the analysis of thesexual behaviour and the opinions of the young people we have concluded that there is a number of risk factor for their reproductive health. We haven't found significant