In Belarus from the year 1996 to 2003, the new cases of HIV-infection were mainly due to parenteral way of transmission. Heterosexual way of HIV transmission in Belarus achieved 85,0% among the new cases in 2013 and 55.5% among all registered cases. Proportion of female to male is 40,5% (6295) to 59,5% (9265) cases.

Among all the HIV/AIDS cases registered in Sri Lanka from the year 1987 to 2013, the main mode of transmission was by heterosexual way – 82% of registered cases. Homosexual way was reported in 11.3%, intravenous drug users (IDU) – in 0.6% cases. The total number of cases increased drastically from 50 in the year 2000 to 121 in the year 2010. From the year 2010 to 2013, there was an average of <500 new cases every year. A proportion of male to female patients is 60% to 40%.

Risk groups for HIV-infection in Sri Lanka are sex workers (brothel-based, street-based, Beach boys, massage parlors, karaoke bars and casinos) Police, Auto drivers, Business people, and abroad workers in age 35-39 years old. HIV prevalence among IDU is less than 0,6% in Sri Lanka. The higher rate (57%) of HIV infection reported cases is observed in Western Provence of Sri Lanka, the capital Colombo (32%) is the leading city of HIV epidemic.

Total number of HIV-positive children in Sri Lanka is 35 (where 4 of them died) and 214 in Belarus (where 21.4% of them died).

Reported cases of death among HIV-infected persons amount to 2728 (20.9%) and <200 in Belarus and Sri Lanka, respectively.

**Conclusions.** Distribution of HIV-infection in Belarus is nine times more than in Sri Lanka despite the population of Sri Lanka two time more than of Belarus. In Belarus HIV death is near five times more than in Sri Lanka. The epidemic of HIV-infection in Sri Lanka is mainly associated with heterosexual way of transmission. Parenteral way of HIV transmission among IDU (>0,6%) is significantly rare in Sri Lanka in comparison with Belarus where proportion of HIV infected IDU was 42,1% on the end of 2013. The featuring HIV-epidemics in Belarus is associated with increasing of sexual way of transmission and involvement of more females and children.

## LUSHER'S TEST'S DIAGNOSTIC POSSIBILITIES IN ASSESSMENT OF EMOTIONAL STATE IN FOREIGN MEDICAL STUDENTS BEFORE AND AFTER EXAMINATION

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The Lüscher color test is a psychological test invented by Dr. Max Lüscher in Basel, Switzerland. Max Lüscher believed that sensory perception of color is objective and universally shared by all, but that color preferences are subjective, and that this distinction allows subjective states to be objectively measured by using test colors.

Lüscher believed that because the color selections are guided in an unconscious manner, they reveal the person as they really are, not as they perceive themselves or would like to be perceived.

He believed that personality traits could be identified based on one's choice of color. Therefore, subjects who select identical color combinations have similar personalities. In order to measure this, he conducted a test in which subjects we shown 8 different colored cards and asked to place them in order of preference. Colors are divided between "Basic" (blue, yellow, red, green) and "Auxiliary" (violet, brown, grey, and black).

The Lusher color test has two versions, the full test and the short or quick test. For our purposes, the short test will be satisfactory, considering the full test contains seventy three color cards of twenty-five hues and shades and requiring forty-three se-

lections. The short test uses only eight color cards, but is still of good value in its purpose of locating areas of psychological stress and learning about the unique aspects of an individuals personality. We used 8 cards when students came from their countries, before and after exam we used computer for the selection of colors.

The Aim to know that how much stress level is present in first year medical students and how much stress level in second year students, as well as we checked stress level and emotional state in the students of first year when they came from their countries to assess that how much stress and emotional state towards the adaptation in foreign country.

Finally we have results of 40 medical students of first year and second year. First year 26 students in which 14 are boys and 12 are girls. Second year 14 students in which includes 4 girls and 10 boys. All students are living in hostel. First year students they had Chemistry exam which is really important subject for the first year students, we assessed their mental state before and after exam to compare the stress level in different situations. Second year students had Anatomy and Histology exams which are basic subjects in medicine, in the same manner we assessed their mental state before and after exams and compare in different situation and compared within boys and girls of the same year and with first year students.

Five tables are used to interpret the meaning behind the Lusher test's sequences. We will not include these tables due to their extraordinary length and detail, but we will give a brief summary of what each table says only on conference.

Because the four basic colors represents psychological needs, they should be placed within the first 5 positions. If they do not, then this indicates a possible psychological or physiological problem, worsened if the basic color is placed further back in the sequence. If a basic color is placed further back than the fifth position, then that particular need is unsatisfied. This is therefore a 'stress-source' causing anxiety and deprivation.

## GLYCINE, DICARBOXILIC AMINO ACIDS AND GABA IN SERUM OF RATS AFTER 1 AND 6 HOUR AFTER INTRAPERITONEALY MORPHINE ADMINISTRATION

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The **purpose** of study to investigation the morphine intoxication in the plasma of white rats givenintraperitonealy 1% morphine hydrochloride in dose 10, 20 and 40 mg/kg body weight. Morphine is a potentially highly addictive substance. It can cause psychological dependence and physical dependence as well as tolerance. The psychological dependence associated with morphine addiction is complex and protracted. Long after the physical need for morphine has passed, the addict will usually continue to think and talk about the use of morphine (or other drugs) and feel strange or overwhelmed coping with daily activities without being under the influence of morphine. Psychological withdrawal from morphine is a very long and painful process.

**Methods**: Different doses of morphine were given to rat intraperitoneoslyper kg. The experiment was divided into two groups and a control was present. In 1st experiment (1) we injected 10, 20, 40 mg/kg and effect was seen after 1 hour. In the 2nd experiment (2) 10, 20, 40 mg/kg doses were injected and the result was seen after 6 hour. Determination of aspartate, glutamate, GABA and glycine performed by HPLC.

**Results and discussion**: Experiment on 1, it was seen that the rats which were infused by 40mg/kg of morphine for 1 hour interval shows us stable level of amino acids, as compared to 10mg and 20 mg /kg infused rat by morphine.