We should understand how to treat the acquired immune deficiency syndrome and why we should give it such importance and studies.

HIV is a virus that attacks the immune and destroys the process of response and resistance to foreign substances this immune continue to be attacked by viruses.

They act like impediment to cure from habitual illness, the immune is destroyed little by little by different phases till the end of state when it becomes very weaker and can't resist to simple inflammation. In the last level, a simple illness can lead to death. Nowadays scientists developed some treatment to be able to live with AIDS and extend the period of life.

Aim. Although scientists discovered sorts of treatment to this chronic disease, the number of deaths noted due to HIV still important in absence of a cure which remove the virus definitely here is a diagram which notes the number of deaths, number of people living with HIV and amount of the new infection of AIDS/HIV from 1990 to 2016.

Results and discussion. In the 90s the tree amounts start to increase progressively from 0 deaths from HIV till 2005 when it was noted the maximum of deaths by approximately 2 million of people and then we note an important decrease till 2016 by number of 1.03 million person.

The new infection with the virus starts from 2 million in 1990 and attends more than 3 million in 1995 and also 2000 then decrease till 2016 by two parts where the minimum was 1.87 million. The number of people living with HIV is increasing from 1990 by number of 870000 to 3.64 million in 2016.

All of this statistics shows how it's important to treat this subject and try to understand why the number of deaths decreased from 2000 and the people living with AIDS increase with years.

As it's already noted scientists are working and trying to discover a cure which delete the virus completely but till now they just developed some treatments to live with it that's why after the year 2000 when they discovered how to extend the duration of life with some treatments, the majority of patients were habituated to live with the disease, thing that explain the drop of the deaths due to the AIDS.

In the other hand we can see the important number of new infection of HIV that we can't be neglected. So we should think how the disease still transmits easily and faster? And, what if we can limit the number of infected person with stopping the spread of the disease?

Conclusions. To sum up, the acquired immune deficiency syndrome should not be neglected. Because there is no cure for it, a lot of preventions should be taken and for the simple doubt, a test should be done because it can't be only sexually transmitted but also there are some fluids which can pass the virus from attended person to another such as breast milk, blood, semen, vaginal fluid, rectal fluids, and pre-seminal fluid.

Years ago a German patient was cured from HIV when they extracted some blood and immune cells and modified them to be resistant to AIDS and returned them to the body, after that he didn't even need to take antiretroviral drugs.

Nowadays, a man from United Kingdom may be second person to be cured from this disease. He was diagnosed in 2003, and received a transplant resistant of HIV similar to the first German cured person of bone-marrow and actually he is now in his 18's month of cure without a need of any medicines.

Maybe the final exact cure is near to be discovered, but since nothing is sure we can just say that «Prevention is better than cure».

PHARMACOLOGICAL STUDY OF THE LORATADINE AND ITS COMBINATION WITH BUPLEURUM AUREUM EXTRACT LONG-TERM EFFECT ON IMMATURE RAT LIVER BIOCHEMICAL PARAMETERS

Melnik O.M., Filiptsova O.V. Scientific supervisor: prof. Naboka O.I. National University of Pharmacy, Kharkiv, Ukraine melnikolga867@ukr.net

Introduction. Accordingly to WHO, currently about 5% in the world adult population and 15% in the pediatric population suffer from allergic diseases. Among the pharmacologicals, which are related

to the histamine H1 receptor antagonists, Loratadine has become widely used. It is known that from its side effects there may be liver function abnormalities in clinical patients.

Aim of the study is the experimental research of the Loratadine and its combination with Bupleurum aureum dry extract effect on the liver functional state, which is the xenobiotic metabolism center, of immature rats.

Materials and methods. The study of the long-term Loratadine monotherapy effect at a dose of 0.15 mg/kg, the equivalent of which is the therapeutic maximum daily dose for the child, and its combination with Bupleurum aureum dry extract, obtained by aqueous extraction (BAAE), at a dose of 10 mg/kg, on the liver functional state for blood biochemical parameters was conducted out on immature (at the age of a month) rats (60-100 g).

Results and discussion. The data obtained indicate that the course administration of Loratadine at a dose of 0.15 mg/kg led to a significant change in the serum biochemical parameters relative to the intact control group (IC). There were found the increased activity of cytolysis marker enzymes, ALT by 60.3% (p<0.05) and AST by 44.4% (p<0.05), increase in the cholesterol content by 70.8% (p<0.05), in urea content by 57.7% (p<0.05), in bilirubin content by 80% (p<0.05), in average molecules pool (AM) by 22.7% (p<0.05), the increase in the alkaline phosphatase (LF) activity by 62.9% (p<0.05) relative to the IC, which indicates a defect in the liver detoxification function. The use of BAAE at a dose of 10 mg/kg in combination with Loratadine at a dose of 0.15 mg/kg contributed to maintenance of blood serum values (ALT, AST, AP, cholesterol, urea, glucose, bilirubin, AM) within the normal range (p<0.05). As to activity on metabolic and cytolytic processes, the reference drugs Quercetin and Silibor were inferior to BAAE.

Conclusions. In accordance to the results of pharmacological research, the utility of the Loratadine combined use at a dose of 0.15 mg/kg with BAAE at a dose of 10 mg/kg, which has demonstrated a hepatoprotective effect, was experimentally proved. The approach allows to optimize a proper antihistamine therapy.

GENETIC STUDIES, THE POSSIBILITY OF USING IN THE PRACTICE OF MEDICINE AND PHARMACY

Mouad Baba Ahmed, Ekaterina Luchko Scientific supervisor: prof. Olga Filiptsova National University of Pharmacy, Kharkiv, Ukraine Mouadbabaahmed@gmail.com

Introduction. In past pharmaceutical innovation was purely based upon organic synthetic chemistry, followed by random screening of "small molecule" medicines. While it was successful in the 50s and 60s, it drastically slowed down right after, forcing the creation a series of biological and genetic-based technologies in the 70s, up until recently, when the steady growth of approved drugs has suddenly plummeted yet again, to open up the path for genomics, and along with it great and ambitious promises In the therapeutic and commercial department, which led all the major pharmacompanies and fully commit to genomics, as of now, more than 450 genomics firms are currently in the US and Europe, which shows that most have abandoned the chemistry based drug development. Most would argue that the integration of genomics will dramatically improve the efficiency of the drug discovery and development process and will lead to better drugs and improved healthcare. Which makes it vital to understand what may be one of the most important shifts in the development of the modern pharmaceutical industry. Until now, very little social research has been done concerning this

Aim. In this thesis, we will be introducing the concept of pharmacogenetics and pharmacogenomics, as well as highlighting its potential in the medical and pharmaceutical domain, we will also briefly mention some of the constraints and ethical and societal impacts that might face the advancement of this fairly new and developing branch of science.

Materials and methods. Before we get to how genetics can help us move forward in the field of pharmaceuticals, we have to familiarize ourselves with two very important terms in this domain: pharmacogenetics and pharmacogenomics. Pharmacogenetics is phenotype related, meaning that it