

COMPOSITION DEVELOPMENT AND TECHNOLOGY OF SYRUP FOR CHILDREN COLD DISEASES TREATMENT

Scheglova E.V.

Scientific supervisor: PhD. Chushenko V.N.

The National University of Pharmacy, Kharkov, Ukraine

chushenkovn@gmail.com

Due to statistics in Ukraine there are about 10-14 million persons suffer from sharp respirator viral infections (acute respiratory disease) a year, that is 25-30 % from all morbidity. One of the most widespread diseases in our time is acute respiratory disease or cold.

Acute respiratory disease is the complex of symptoms, which is characterized running nose, by Ringos, sinusitis, pharyngalgia, fever and cough. Acute respiratory disease in most cases arises up because of infection of man respirator viruses, which count more than 200 exciters. One of the most widespread symptoms is a cough.

A cough (tussis) is a reflex act, playing a large role in self-wiping of respiratory tracts both from foreign bodies, gettings from outside and from endogenously appearing products (mucus, blood, pus, products of tissue disintegration).

Studying literary sources and analysing the assortment of medicinal preparations at the market of Ukraine for treatment of acute respiratory disease and cough concluded that now, not enough preparations for treatment of acute respiratory disease and cough for children from 3-meses. In addition, more senior. In our time, the problem of application of effective and safe preparations for treatment of cold for children becomes actual.

Basic advantages of the extemporal compounding is the individual going near every patient and absence of conservants, emulgators, stabilizators and other harmful compounds in composition preparation. The amount of pharmacies, engaged in preparation of extemporal of medications, diminishes with every year. To date in Ukraine the problem of maintainance and improvement of production pharmacies costs sharply.

Conducting the analysis of samples of writing in a pharmacy № 9, Kharkov has shown that today children have not enough medicinal preparations for treatment cold diseases and cough by age from 3 months and more senior, as an amount of children with a chronic cough in the last few years from data of literature considerably has increased from 10 to 38 %.

The purpose of our work is development of composition and technology of child's syrup for treatment of cold diseases on the basis of digester. In spite of considerable progress of modern organic chemistry, that provides the production of high-quality synthetic bioactive matters, which are used in pharmacy, popularity of

vegetable preparations in the whole world not only does not fall but also grows steadily.

In the practice application of child's medications from a digester is inalienable part of pharmacotherapy. The assortment of LP for treatment of diseases of breathing organs for children is presented by preparations of synthetic and vegetable origin

Most often in the complement of preparations paracetamol enters for cough treatment and acute respiratory disease. Paracetamol is medication, analgesic and febrifuge from the group of anilids, renders a febrifuge action. It is wide-spread central nonnarcotic analgesics, possesses enough weak anti inflammatory properties (and does not have the side effects characteristic for NPVP related to them)

The mechanism of action and type of safety of paracetamol is well studied, his efficiency is clinically approved, in this connection this preparation is included in the list of major medications of Worldwide organization of health protection (WHO Model List of Essential Medicines, 16th list. WHO (March 2009).

Althaea of root an extract is dry – contains vegetable mucus, pectin matters, asparagine, starch, betaine, which in a complex possess secret motorial, by emollient, mucolytic, bronchiolitis and coughing up actions.

Thyme an extract is liquid - 0,8-1,2 contains % essential oil of thyme , basic components of which are Thymolum and carvacol, cymene and caryophyllene., use as a coughing up and antibacterial mean. An extract is able to strengthen the secretion of bronchial glands, dilute a sputum and accelerate evacuation of products of inflammation and mucous the masses.

And cough syrup which paracetamol and vegetable extracts enters in the complement of is offered: root of althea and thyme liquid. As sweetener it is suggested to use glycerol which possesses a less allergen action and can be recommended for people with saccharine diabetes. A sweetness of Sorbitol is approximately 60 % from the sweetness of saccharide, and calorie content of glycerol in 1,5 time less calorie content of sugar.

So on the basis of the conducted researches there was developed by composition and technology of extemporal syrup for treatment of ORVI and cough for children from 3 months and more senior, which paracetamol and vegetable extracts enters in the complement of: root of althea and thyme liquid. .