

## COMPARATIVE CHARACTERISTICS OF THE OINTMENT MADE AT A PHARMACY AND THE OINTMENT PREPARED AT A FACTORY

Gaponenko M.K., Gavrilova N.B., Malysheva Y.O.

The College of the National University of Pharmacy, Kharkiv, Ukraine

gaponenko\_123@mail.ru

The aim: To compare the characteristics of the ointment made at a factory and the ointment made at a pharmacy and make conclusions.

Since time immemorial medicines have been prepared at pharmacies. Today pharmaceutical business is growing in the market system so production of medicines at pharmacies and other traditions are left in the past. But experience shows that, despite the growing range of ready-made medical products, preparation of drugs by prescriptions at pharmacies does not lose its value. Besides, among individual prescriptions for preparing medicines received by the pharmacy, there are a lot of dosage forms for children where individual combinations of drugs and doses are extremely required.

Medicines prepared by pharmaceutical companies seem to be cheaper than their analogues prepared at a pharmacy. But comparing their costs shows vice versa results.

Thus, drugs prepared at a pharmacy are much cheaper than drugs prepared by the pharmaceutical industry. This fact contradicts the well-known economic statements that mass production is less costly than individual and serial.

We conducted the experiment that proved above mentioned arguments.

For comparison we took such medicinal product as Eucalyptus cold BALM Dr.Theiss and extemporaneous ointment made by the prescription.

Ointments (lat. Unguenta - ointment) are soft dosage forms used for application to the skin, wounds or mucous membranes. Ointments consist of a base and medical substances equally distributed in them. Also ointments may contain preservatives, surfactants and other subsidiary substances allowed for medical use.

Eucalyptus cold BALM Dr. Theiss contains such ingredients as:

- Eucalyptus oil
- Pine oil
- Camphor
- Tallow
- Oil corncobs
- Beeswax.

It has anti-inflammatory, locally irritant and expectorant action.

It is the ointment for external use and inhalation.

It is used for inflammatory diseases of upper and lower respiratory tracts.

We have prepared a homogeneous ointment for cough according to the pharmacy prescription:

Rp.; Camphorae 2.5

Olei Eucalypti

Olei Pini  
Olei Abietis ana 3.0  
Cerae flavi 12.0  
Vaselini 4.0  
Misce, fiat unguentum  
Da. Signa. Rubbing for cough.

This ointment contains:

- Eucalyptus Oil - antipyretic, anti-inflammatory and expectorant action.
- Pine oil - stimulates circulation and activates the immune system.
- Camphor - warming and irritating properties.
- Beeswax - softens the overall clinical picture, reducing the severity of

the symptoms.

The ointment can be used for cough by adults and children older than three years old, externally and for inhalation. It is better to use this medicine in a complex treatment of colds. The ointment is used externally, rubbing the skin of the back and the chest with massage movements.

The preparation of the ointment:

1. Prepare the workplace.
2. Take necessary amount of wax and place it in a porcelain cup.
3. Weigh Vaseline.
4. Melt wax in a water bath in a porcelain dish.
5. Add vaseline to the melted wax.
6. Melt wax with Vaseline.
7. Transfer the fusion into heated mortar.
8. Add vaseline oil.
9. Weigh camphor.
10. Dissolve camphor in the fusion.
11. Add essential oils.
12. Mix thoroughly.
13. Transfer to a jar for delivery.
14. Prepare for delivery.

The ointment should be kept out of the reach of children, at a temperature not exceeding 25 C. It can be used during 3 years. Qualitative characteristics of our ointment are the same as the characteristics of the ointment made at the factory. Density, color, uniformity, smells correspond to the national standards. The cost of the extemporaneous ointment is 22.33 UAH. Its weight is 20.0 g.

It is known that factories use advertising services, the cost of which is also included to the price of the finished medicinal product. Pharmacies do not use advertising to sell their products. Thus we see that the ointment prepared at a pharmacy is cheaper than the ointment prepared at the factory.

Conclusions: Today, almost all the pharmacies have become sales outlets. But it is wrong because the traditional pharmacy is, first of all, the place of production of extemporaneous preparations, and just then the place for selling of finished dosage forms. Despite the significant development of industrial pharmacy and decrease of pharmacies making extemporaneous preparations, there is a growing need in preparation of all dosage forms. Extemporaneous production is extremely important for the pharmaceutical industry.