

Original Scientific Paper

UDC: 615.1(439.5)"18/19"

615.1(497.6)"18/19"

665.584(439.5)"18/19"

665.584(497.6)"18/19"

DOI: 10.5281/zenodo.4589438

Vanda Marković-Peković

University of Banja Luka

The Faculty of Medicine, Department of Pharmacy

Save Mrkalja 14, 78 000 Banja Luka, Republika Srpska, Bosnia i Hercegovina

E-mail: vanda.markovic-pekovic@med.unibl.org

## PRODUCTION OF PHARMACEUTICAL AND COSMETIC PREPARATIONS IN PHARMACIES IN BOSNIA AND HERZEGOVINA IN THE AUSTRO-HUNGARIAN PERIOD

**Abstract:** In the Austro-Hungarian period (1878–1918) in Bosnia and Herzegovina (BIH) an increasing number of modern pharmacies began to open. According to the regulations passed in 1878 and 1907, which regulated the pharmacy activity, the owner of a pharmacy could only be a Doctor of Chemistry or a Master of Pharmacy with a degree from an Austro-Hungarian university. Only a Master of Pharmacy or an assistant with an appropriate diploma would be able to prepare and dispense medications, in accordance with the current pharmacopoeia and list prices. Advertisements for various medications and preparations, mostly made in pharmacies throughout the Austro-Hungarian Monarchy, can be found in printed publications from that period. Over time, the local pharmacists also began to advertise the products made in their pharmacies. The existence and availability of certain products were advertised that way, the people were getting used to it and the consumer market was being shaped. Advertisements often contained detailed health problems that could be cured or suppressed by the use of the advertised pharmaceuticals, so it could be said that they partly promoted health and disease prevention, and improvement of the health care system at that time. Pharmacists from BIH who advertised their preparations mostly made cosmetics, certain pharmaceutical drugs and preparations for domestic animals. Some products would be awarded at exhibitions, sold in the Monarchy and beyond, used by prominent people, and the existence of many grateful users would be stated. The cosmetic preparations would eliminate certain skin problems and contribute to the preservation of beauty. Pharmaceutical preparations treated or eliminated a number of different problems, contributed to oral, dental and hair hygiene, and some helped with domestic animals' health problems. This could lead to the conclusion that BIH pharmacists tried, with their knowledge and the offer of preparations they made, to

be competitive with the numerous imported products of other pharmacists from the Monarchy who also advertised.

**MeSH keywords:** cosmetics, pharmaceutical preparations

Non-MeSH: Bosnia and Herzegovina, Austro-Hungarian period, production of preparations

## Introduction

With Austro-Hungarian annexation of Bosnia and Herzegovina, the health conditions in the country changed significantly and the Europeanization of medicine and pharmacy began. The county's health and hygiene conditions during the Ottoman rule had been poor. There had been numerous epidemics and the presence of chronic infectious diseases, along with the lack of health facilities and qualified health personnel. [1] Immediately at the beginning, the new government, as part of the regulation of health conditions activities, sent a public invitation to all interested educated people in the Monarchy to settle in Bosnia and Herzegovina (BiH). Doctors, veterinarians and pharmacists are among the first to settle. [2] The pharmaceutical industry in BiH was regulated as the pharmacy trade as early as 1879 by the order of the Provincial Government. [3] From then on, an increasing number of public civic pharmacies began to open, and concessions were mostly obtained by foreigners because of a lack of local apothecaries. The owner or manager of a pharmacy could only be a Doctor of Chemistry or a Master of Pharmacy with a degree from an Austro-Hungarian university. The Law on Pharmacies from 1907 regulated the pharmaceutical industry in BiH in a more comprehensive way, but still as a trade. [4] Pharmacy activity was regulated, as were the founding and activities of the Pharmaceutical Society, qualifications, official positions and duties of pharmacy staff, as well as penalties. Only a Master of Pharmacy or an assistant that has passed the pharmacy qualifying exam or, since the 1907 Law, an assistant with a Master's degree in Pharmacy, would be able to prepare and dispense medications, in accordance with the current pharmacopoeia and list prices. The pharmacy industry was making a slow breakthrough, as the accustoming of the people to be treated with the medications they could procure in pharmacies was slow. The people had been treated by the old methods of folk medicine and pharmacy for a long time. Because of that, the owners of pharmacies complained about the low turnover, so they had to work additional jobs, such as soda-water production, collecting medicinal herbs, and raspberry syrup production. They ran grocery stores and practiced photography. [1, 5]

## Advertising of medical and hygienic products

During the 19th century, many medical professionals, such as doctors, dentists and pharmacists increasingly advertised their services or some of their legally protected medical preparations in daily newspapers, calendars and similar publications. At that time, the press became more and more accessible to a wider population, and the published advertisements began to contribute significantly to the sales. Advertise-

ments from the medical and hygienic field such as medications, medical and pharmaceutical supplies, cosmetic products, spas, mineral waters, etc. were becoming increasingly interesting to consumers. [6]

For the needs of a research of pharmaceutical industry in BIH in the Austro-Hungarian period (1878–1918), a systematic review of the archival material of the Archives of the Republika Srpska and the Museum of the Republika Srpska and the sources of digital library material was performed for several months. It can be noticed in the available printed publications that advertisements for medications, medical and pharmaceutical supplies, pharmaceutical preparations, cosmetic and hygienic products, mineral water, medical wines, etc. were published. The existence and availability of certain products were advertised that way, the people were getting used to it and the consumer market was being shaped. Advertisements were published for various products that could be purchased in pharmacies throughout the Monarchy and for preparations made by pharmacists and certain doctors. Many local owners have also advertised their pharmacies, richly supplied with official medications and specialties, as well as other local and imported medical, pharmaceutical and cosmetic products. Over time, they also started to advertise products made in their pharmacies. Therefore, it could be concluded or expected that these products represented certain expert views in resolving particular health problems. Although this kind of advertising was likely primarily consumer, with the aim of boosting sales, I am of the opinion that it also served the purpose of informing and educating people of possible treatments for the usual health problems of the time.

### **The Contents of Advertised Products**

A large part of the advertised pharmaceutical products were medications and preparations made by pharmacists from all over the Monarchy in their pharmacies or laboratories. Some stood out by their own manufacturing or factory production and export of their preparations. They would very often advertise preparations for eliminating various problems of the digestive and respiratory system (syrups, lozenges, candies, elixirs), for treatment of anemia, bone pain, rheumatism, tapeworm removal, etc., as well as cosmetics (creams, powders, perfumes, soaps), hair preparations (liquids, dyes, creams), mouth and teeth preparations (liquids, powders, pastes, brushes), but also various mineral waters, rubber and bandage materials, photographic supplies (cameras, films, chemicals), imported beverages, teas, French perfumes, etc. These preparations could be purchased in pharmacies or ordered directly from the manufacturer (pharmacist) or in drugstores. They were mostly advertised as genuine and verified and had a trademark symbol on the packaging. Users were instructed to look only for the products with a trademark symbol or a sign that guaranteed quality and efficiency, and to be wary of counterfeits. Some products were advertised very often and in various (or all) press, which suggests that they were profitable. This means that this money could have been invested in (further) advertising and in the development of production and potential expansion of the range. These advertisements often contained detailed descriptions of problems and diseases that could be eliminated very

effectively by the use of the products in question, and in the case of cosmetic preparations, they would describe the expected results from the usage. They would often state the existence of a large number of satisfied users, and sometimes individual letters of thanks would be published. The advertisement would also include different information, such as medals and prizes won from international exhibitions, prices for individual or multiple packages, discounts, shipping information (by mail, advance payment or cash on delivery), address to which orders should be sent, and/or pharmacies / warehouses where preparations could be purchased, as well as the possibility of sending brochures (mostly free of charge). The graphic design was usually only textual, but there were also advertisements showing a drawing of the preparation (a bottle or a box) and a trademark, or sometimes they would show illustrations (of tapeworms, before and after faces, extremely long hair or mustache with the preparation for hair growth and care). In general, by looking at the advertisements from this period, it could be concluded that they represent a very valuable source of information on pharmacies and pharmacists, mainly the owners, in BIH (names, addresses, years of opening or relocation), various products they sold and/or made in their pharmacies and laboratories, their way of doing business (prices, discounts, product availability), terminology used at that time, etc.

The objective of this paper is to present pharmaceutical and cosmetic preparations that were made in pharmacies across Bosnia and Herzegovina in the Austro-Hungarian period, since it was noticed, during the research, that some pharmacists advertised the preparations made in their pharmacies. The advertising material that was used included newspapers, magazines, periodicals and calendars available in their original form or as digital editions in the National Library of Serbia and the National and University Library of Bosnia and Herzegovina. Other publications used are also available in their original form in the mentioned institutions of the Republika Srpska or on the Internet. This topic has, to the best of the author's knowledge, not been presented and published so far.

### Pharmacists and Their Advertised Products

According to published advertisements, pharmaceuticals and cosmetics were made by Masters of Pharmacy Gustav Proche from Brčko, Simon Zaloscer from Tuzla, Theodor Heydušek from Bugojno, Robert Brammer from Banja Luka, Eduard Jecewicz from Goražde and Petar Šotrić from Mostar, with Zaloscer and Proche being the most productive ones.

Gustav Proche, of Czech origin, was the owner of the city pharmacy *Kod Austrijskog Orla* (*The Austrian Eagle*). In addition to the pharmacy, he also owned a registered liqueur factory until 1911. [7] In his pharmacy he produced the famous oriental cosmetics *Zeïdijje-Orientale*, which he advertised intensively. If he produced other preparations and medications, he did not advertise them. The products from this line were advertised very interestingly in various daily newspapers, magazines and calendars, for example in the newspaper *Srpska riječ* (*Serbian Word*) in 1908 as news, [8] and in the periodicals *Bošnjak* (*Bosniak*) in 1909 [9] or *Napredak* (*Progress*) in 1914 (Picture

1). [10] *The Bosnische Post* newspaper also published an advertisement in German language of the great *Zeidijje* cosmetics (cream, cleansing powder, toilet soap, foundation powder, perfume, black hair dye, beard growth cream, mouthwash, toothpaste and tooth powder), created in the chemical-cosmetic laboratory of pharmacist Gustav Proche, and awarded a gold medal at an exhibition in Paris in 1909. These preparations could be found throughout the Monarchy and beyond, in drugstores, perfumeries and pharmacies in Vienna, Budapest, Timișoara, Zagreb, Prague, Lemberg, Plzen, Krakow, Osijek and other cities, as well as with major distributors for Russia and Germany, and in BIH pharmacies in Sarajevo, Jajce, Bijeljina and Bugojno. They could also be ordered directly from the manufacturer, in *Parfumerie Orientale* by Gustav Proche, in Brčko, Bosnia. [11]

Proti sunčanim pjegama, bubuljicama kao i proti svim kožnim nečistoćama, koje pro-  
uzrokuju sunčane zrake jest od upravo čarobne moći

## Istočna poljepšavajuća krema „ZEIDIJE“

(lončić za pokus 80 h., dvostruko veći K 1'60, a veliki pozlaćeni K 2'40). Istočna pomada „ZEIDIJE“ sa istočnim praškom za umivanje „ZEIDIJE“ K 1'50, te sa istočnim sapunom „ZEIDIJE“ K 1'— upotrebljena, uzdržaje kožu trajno mekom kao baršum, te zapriječuje posve svako pucanje, boranje i otvrdnuće kože. Istočni puder „Zeidijje“ bijele ružičaste i žučkaste boje K 2, prekriva diskretno svaku manu lica. Fleur de Roses „ZEIDIJE“ tekuća nevidljiva boja ruža K 3—, jeste potpuno neškodljiva, pa niti najoštrije oko nebi moglo primjetiti vještačko bojadisanje obraza.

Sva kozmetička sredstva su odlikovana sa zlatnim kolajnama u Parizu, Londonu i Pragu. Hiljadu priznanica. Od krlivotvorenja strogo se čuvajte. stoga tražite svagdje izrično „ZEIDIJE“, istočna poljepšavajuća sredstva.

Dobiva se u Sarajevu u ljekarnama, Pleyel, Schlesinger, St. Romčević, Careva ul. i drog. Glusmann. Gdje se slučajno ne dobije, treba se obratiti izravno na izvgjača

Upotrebom orijentaliskih sredstava „ZEIDIJE“ dobiće i Vaše lice mladenačku svježinu i čarnu ljepotu!



### Parfumerie Orientale **G. Proche** Brčko Bosna.

Picture 1.

Eastern cream (or ointment) (cost of 2K / kronen) removed sun spots, redness, impurities and facial blemishes, and if used with Eastern prepared bran (1.50K) and soap (or *safun*) (1K), it would give velvet soft skin and prevent any bumps, wrinkles or lines of the skin. Eastern foundation powder (white, rose, yellowish) (2K) would co-



ver discreetly any flaw of the face, and Eastern fragrance (4K) would give the body freshness and an elegant scent. These great products were guaranteed to be very healing and completely harmless, because they were “not ordinary ointments but extraordinary cosmetic preparations, which heal, refine and rejuvenate the skin”. [12] These cosmetics have “reached the high level of modern inventions in the cosmetic industry”, they were “most needed for beautification and rejuvenation” and could be bought for little money. [13] The cream did not contain any lard, so Muslims could use it at home, [14] and *Zeïdijje Cream*, a local product, was recommended by a barber and wigmaker from Banja Luka, Solomon H. Levi. The Eastern *Zeïdijje* fragrance, an essence with the scent of violet, lilac, lily, lily of the valley, heliotrope, jasmine (or *zeïdijje*), refreshed the body and gave it a refined fragrance. [16]

Keeping teeth and mouth hygiene daily with *Zeïdijje* mouthwash was “necessary for an educated man” because it maintained healthy teeth and thus improved digestion and prolonged life. [14] According to the advertisement, the mouthwash would cleanse natural and artificial teeth thoroughly, relieve toothache, tighten loose teeth, disinfect the mouth, remove any odor, and “enrich water steam with a pleasant smell” (at cost of 1.20K per bottle). The advertisements warned of counterfeits and forgery. “Beware of counterfeits and vigorously reject them!”, [14] “by always looking explicitly for *Zeïdijje*, the eastern beautifiers.” [10]

Simon Zaloscer was the owner of the pharmacy *K Zvijezdi (By the Star)* in Tuzla, and he also produced soda water. [17] He made his own preparations for preserving the health and beauty with *Stella* trademark, and some pharmaceutical preparations for human and animal use. These were advertised in various daily newspapers, magazines and calendars for years, especially *Stella fluid*, *Stella cream* (or ointment) and *Stella gastric salt* (or sol) (Picture 2). [18] He made and advertised health and treatment preparations such as *Stella fluid*, *Breast Anti-cough Liquid*, *Real and Enhanced Swedish Bitters*, *Sarsaparilla decoction with iodine potassium*, *corns removal preparation*, *tapeworm (flake) medication*, *medication for alcoholism*, and, in the cosmetics department, a *cream*, *foundation powder*, *soap* and *face water*.

*Stella fluid* was used to relieve pain and strengthen nerves, and used by rubbing in, to treat bone pain and rheumatism, bone and joint trauma, side stitch, chest pain, cramps, fainting, rheumatic toothache, etc. It had the same calming effect when used internally for various stomach diseases. Due to the low price, it was available to everyone. The price for a bottle was 40 hellers or 5K for 12 basic or 6 double bottles. [18, 19] Interestingly enough, the fluid could also be used to disinfect rooms and apartments. The floors would have to be sprayed with a few drops of fluid which gave off a pleasant and refreshing scent due to menthol and essences. [20] In the advertisement from 1914, it was stated that *Bals. Arom. Comps. Menth.* with *Stella Fluid* trademark was placed on the market by the ministerial permit from September 29, 1911, under no. 211.124. The price had not been changed since 1909. [21] It was prescribed by many doctors, so it was used with great success in local and factory pharmacies, sanatoriums, hospitals, etc. [19] The advertisements warned that care should always be taken not to mix up this preparation with another of similar name, as others were counterfeits that were to be prosecuted. *Stella fluid* could be bought in all pharmacies or or-

dered, along with other products, directly from the pharmacy and drugstore *K Zvijezdi (By the Star)*, in Tuzla no. 2, in Bosnia.



## Čuvaj zdravlje!

**Najdragocjenije blago** na svijetu je zdravlje.  
Slavni poljski pjesnik pjeva:  
„Oj zdravlje milo, slično si domovini,  
Jer oženit te, tek onaj zna — koj' te izgubi.“

**Zato** neka čuva i njeguje svako svoje zdravlje i neka bude na oprezu u biranju lijekova, jer kao što nije zlato sva, što se sjaji, tako nije ni svako razvikano sredstvo dobro, kao jedino od najboljih domaćih sredstava poznati i mnogo hvaljeni

# „Stella fluid“

buduć, da on po svojoj sastojbini u mnogim slučajevima djeluje vrlo **brzo utišavajući boli** i umirujući te jačajući žilve, a osobito uzajanjem (trljanjem, ribanjem) kod trganja u zglobovima, mišićju, nedađe kod mrtvila i slabobe, umornosti uda, kod reumatične kostobolje, prehlade i prenapinjanju. Jednako umirujuće svojstvo imade „Stella fluid“ i kod unutarnje uporabe, kod raznih bolesti želuca (stomaka), i t. d. K svakoj boci (flaši, sreći) priložena je točna uporaba. Cijena je malena, tako, da je svakomu omogućena uporaba.

1 omot od 12 jednostavnih bočica ili	6 dvostrukih stoje	franko	K	5—
„ 24 „	12 „	„	„	8:50
„ 36 „	18 „	„	„	12—
„ 48 „	24 „	„	„	15:50

Narudžbe neka se šalju na jednog proizvođača, sa točnim imenom i prezimenom, oznakom mjesta, okružja, ulice i t. d. na

**„Ljekarna k Zvijezdi“, S. Zaloscer, ljekarnik, D. Tuzla, Bosna.**

**Drugi** uslov zdravlja je zdrav želudac (stomak). Gledaj uvijek, da ti želudac (stomak) hranu dobro prokuha i probavi, s toga upotrebljavaj tjerajuću

## „Stella želučnu sô“

koja služi kao izvrstan lijek proti žgaravici, slaboj probavi i t. d. Neka se upotrebljava iza masnih jela i prekomjernog upotrebljavanja vina, rakije ili pive i t. d. Neka ne manjka ni kod jednog obroka.

— Cijena 1 kutije 1 krunu. —

Jedino proizvođača  
**S. Zaloscer, ljekarnik**  
„Ljekarne k Zvijezdi“ Dönja Tuzla, Bosna.



Nakon njegovanja zdravlja, slijedi njega za

LJEPOTU!

Najbolje sredstvo, da si čovjek pribavi i uzdrži ljepotu je poznata mirisna

## „Stella krema“ (pomada),

koja čini kožu finom, baršunastom, kao snijeg bijelom, odstranjuje sunčane i crne pjegje, te čuva kožu protiv svake nečistoće.

Cijena je jednom lončiću sa uporabom 1 krunu.

— 12 lončića šalju se franko. —

Narudžbe točno potpisane (ime, prezime, mjesto, ulica, kućni broj, zemlja) neka se šalju jedino na Ljekarnu (apoteku) „k Zvijezdi“, S. Zaloscer, ljekarnik, Dönja Tuzla, Bosna.



Picture 2.

*Stella* gastric salt served as an excellent remedy against heartburn, indigestion, belching, stomach and abdominal cramps and similar ailments, and was “at the same time the most pleasant, mild laxative.” It was recommended to be used after fatty meals and excessive use of wine, brandy or beer, i.e. “should be in plentiful supplies for any meal”. The price of one box was 1K or 5K for 6 boxes and it didn’t change in the period of 1909–1914. [18, 21]

In some advertisements, the emphasis was on the importance of the preparations for preserving health. An advertisement published in 1909 began with “Maintain your health! The most precious thing in the world is health... So everyone should ma-

62

intain and improve their health and be cautious when taking medications because, just as all that glitters is not gold, not every famous medication is beneficial". In that case, it was necessary to use the best domestic remedy, the well-known and much praised *Stella Fluid*. In the same advertisement, it was further stated that the second prerequisite for good health was a healthy stomach. "Always make sure that your stomach cooks and digests food well, so use the purgative *Stella* gastric salt which serves as an excellent remedy against..." above mentioned ailments (Picture 2). [18]

Breast anti-cough liquid consisted of Bosnian mountain herbs extracts, and was used for cough, nausea, whooping cough, hoarseness, to promote the excretion of mucus, etc. (3 bottles for 5K). Real and enhanced Swedish bitters were used for stomach upset, indigestion and bowel disorders (3 bottles for 3.60K), toothache drops would immediately take away the greatest pain (3 bottles for 3K), the problem of corns would be solved in 2 to 3 days by using Zaloscer's preparation, and the pain of it would go away after first application (3 bottles with a brush for 3.60K). Zaloscer's nutritional powder for domestic animals and his powder for pigs were recommended for slow growth and disease in livestock, and for fattening of livestock respectively (both at a price of 6.60K for 6 boxes, with instructions). His fluid for horses was used for bone pain, bruising, swelling, and injury (3 bottles for 9K, with instructions). [19] Sarsaparilla decoction with iodine potassium was recommended for syphilis, scrofula, old bone pain and chronic skin diseases (1 bottle with instructions for 4K, 3 bottles for 10K). Zaloscer also made a completely harmless medication for alcoholism (1 bottle for 5K, 8K for chronic disease). The tapeworm (flake) medication was effective in adults and children (1 box for adults for 4.65 K, for children 2.65 K). [21]

A good example of an advertisement describing certain health problems that could be solved by the advertised product is an advertisement for the medication for the treatment of tapeworm. "By what does one know that someone has tapeworm or fluke? By that !! A man who has fluke often gets stomach cramps, vomits, has poor circulation, lethargy of the body, coughs up phlegm. Great appetite and loss of appetite alternate, and the man feels as if a ball rises all the way up to his neck, especially under his chest, and sucks up his lower body, he burps and always feels sad. Also, blue shade appears under eyes, cornea becomes unusually pale, tongue and face go white, and there is loss of weight and swelling of the body." [20]

*Stella* cream was advertised as the best fragrant face ointment, completely harmless, not sticky or greasy, and it removed "all freckles and blemishes, liver spots, hard and rough skin, and made it soft, velvety and white like snow". The foundation powder, in white, rose and beige colour, was characterized by fineness, imperceptible on the skin. The price of one box (sometimes a small pot) of these preparations was 1K, and a bar of soap was 70 hellers. [19] In advertisements for his cream, Zaloscer emphasized the importance of beauty ("After maintaining health, follows taking care of BEAUTY!") [19], as well as the harmfulness to the skin when using inappropriate preparations ("Beauty is the greatest wealth! Which many do not understand. So they use frivolously some well-known ointments harmful to the skin, and therefore to the beauty itself"). It was emphasized that this cream was the best ("according to the latest world expert opinion and regulations, the best cosmetic product up to date") [22] cer-



tainly with the intention of increasing sales. However, the advertisement would indicate that caution should be taken when using cosmetics. It would often mention a few words of thanks from satisfied users, of which there were many and they were available for everyone to see. It would also say that instructions came with the preparations and that a large illustrated list of medications and cosmetics would be delivered upon request, free of charge.

Eduard pl. Jecewicz was the owner of a pharmacy in Goražde. He had been awarded the Golden Cross of Merit with the Crown. [23] He advertised his hair nourishing agent Trichotin, Methyl-Taenia tapeworm (flake) medication, and a powder for cattle (Picture 3). [24] The advertisement stated that Trichotin should not be mixed up with foreign products, often useless, because great care was taken in the production of this product to strengthen hair roots and remove dandruff, and it was also harmless. According to the advertisement, Methyl-Taenia differed from other similar products because it did not taste bad and did not cause pain. The Cattle powder strengthened the bodies of the cattle; it treated coughs, and relieved stomach pains. Trichotin was made in the form of tincture (3K for a bottle) and as hair pomade (2K per dose).

<p style="text-align: center;"><b>▲ КЕЛAVOCT НАСТАЈЕ ▲</b> <b>▲ САМО ЗБОГ НЕМАРА. ▼</b></p> <hr/> <p><b>По проф. Др. Хебри:</b> И старим и младим људима може се помоћи, ако коријен косе није посве оболио или се осушио.</p> <p><b>Проф. Др. Напоси</b> је мнијења, да се и болесни коријен косе даде излјечити, ако се право средство у право вријеме опроба.</p> <p>Овоме принципу одговара моје средство за храњење косе:</p> <p style="text-align: center;"><b>„ТРИХОФИТИН“</b></p> <p>кога ево иза многогодишње успјешне пробе са чистом савјести публици нудим.</p> <p>Ово средство не треба замјенјивати са разним иностраним производима, који су обично бескорисни, јер се је при прављењу овога средства пазило како на јачање корјена косе, као и освјежавање коже на глави, тако и на одстрањење перути са главе, а ја јамчим, да нема у овоме средству баш никаквих по здравље штетљивих састојака. О томе имадем много потврда од лијечника у овим земљама.</p> <p>Цијена је умјерена, па с тога нека свако, ко опази да му коса опада, макар мало опроба. Начин употребе прилаже се свакој пошиљци.</p> <p>Осим тога препоручујем под заштитним знаком:</p>	<p style="text-align: center;"><b>„МЕТИЛ-ТЕНИА“</b></p> <p>изванредно средство за одстрањење тракавице (метиља) из човјека. — Ово се средство од осталих сличних разликује тим, што је без хрђавог куска а врло је угодно за узимање, те не проузрокује никаквих болова.</p> <p><b>Јамчим, да ће тракавица заједно са главом иза два сата, како је ово средство употребљено, изаћи.</b></p> <p>Признања и потврде од овдашњих цивилних и војничких лијечника, прилажем свакој наручи.</p> <p>Добија се код произвађача <b>Мг. Едварда К. Т. Јенцевића у Горажди (Босна).</b></p> <p>У Сарајеву код гг. апотекара: <b>Х. Шлезингера, Јосифа Патера</b> и у <b>Маријиној апотеци, као и у многим другим апотекама у Босни и Херцеговини.</b> Главно складиште за Аустрију: <b>Медицинска дрогерија на велико Бруно Рабе у Бечу.</b></p> <p>Осим тога произвађач ванредан — <b>„ПРАШАК ЗА МАРВУ“</b>.</p> <p>Ово је сигурно дјелујуће средство за <b>коње, говеда, овце, свиње и остало благо.</b> Овај прахак поправља вољу за јело — јача читав организам, — лијечи кашаљ, — олакшава произвађање слузи, — ублажује боли у стомаку и многе друге болести говеда.</p>
--	---

Picture 3.

Jecewicz made cosmetics, namely *Orient Yildiz* beautifying liquid (3K per bottle), face cream (2K per bottle), *Yildiz de Mecca* face soap and soap for children (96 hellers a piece) and *Orient* face powder for the occasions such as going out for a walk, to the theater, a dance or a party. It would come in white, rose and beige colour (3K per box). By using these products one could achieve and maintain beauty, but it was also pointed out that they could be used to treat various skin diseases (freckles, spots, blackheads, wrinkles, redness, “frostbite”). The Master guaranteed that his products, unlike some others, do not have harmful metal ingredients such as bismuth, lead, zinc, which was confirmed by chemical analyses. He considered the perfume *Sophie's Carnacion* to be the crown of his toiletries. It was made from a very rare type of carnation “Carnacion”, and it was used by Duchess Sophie Hohenberg, the wife of Archduke Franz Ferdinand. Because of “the excellence of this perfume, she awarded him with the title of her court supplier” which Jecewicz later pointed out in advertisements. [25] The perfume won an award at the *National Society* exhibition at the Horticultural Hall in London in 1910. The proof of the perfume quality were many other recognitions along with the fact that it was being used by the wife of a Field Marshal, Mrs. Emilia Slonicka, Countess Potocki. The prices of the perfume were 7.5K and 4K per bottle. All of Jecewicz's products had a trademark sign (family coat of arms) and a Turkish crescent moon. [26] They could be bought from him as the only manufacturer, or in many other pharmacies in BiH. The main warehouse for Austria distribution was in the wholesale medical drugstore *Bruno Raabe* in Vienna.

Theodor Heydušek was the owner of a pharmacy in Bugojno, but he also produced soda water [17] and owned a grocery store. [27] He advertised the cosmetics he made in the pharmacy, *Lily's Milk* at first, [28] but later also an ointment, face powder (foundation) and soap (Picture 4). [29] The price of one bottle of the milk was 1K, and it was not changed in the period 1908-1911. A small pot of cream cost 90 hellers, a bar of soap was 80 hellers and a box of powder was 1.20K.

**ЉИЉАНОВО МЛИЈЕКО**

апотекара Хеидушека изврсно је и нешкодљиво  
спедство против нечистоћи, мрљама, сунчаним  
рјегамма, црвенилу и наборима на лицу бијело  
или ружичасто.

Цијена једне боце 1 Круна.

**ЉИЉАНОВА ПОМАДА ЗА ЛИЦЕ.**  
Један лончић помаде за лице 90 хел.

**Најфинији Љаљанов прашак за лице (ма-  
сни пудер), бијели и ружичасти.**  
Једна кутија 1 К 20 хелера.

**ЉИЉАНОВ САПУН 1 КОМАД 80 ХЕЛЕРА.**  
Произвађа се и апотеци

**Т. ХЕИДУШЕКА У БУГОЈНО, БОСНА.**  
За паковање не рачуна се ништа.

Picture 4.

Petar Šotrić, a “Master of Pharmacy and an apothecary”, was the owner of a medical drugstore in Mostar. Of his preparations, he recommended *Narcis* (*Narcissus*) cleansing cream and *Narcis* milk for morning toiletry, as well as *Odontol* mouthwash and *Resorcinol-Tannin* liquid for hair growth (Picture 5). [30] As he stated, the cream was a cosmetic product made on a scientific basis and it had won thousands of awards. [31]

**МЕДИЦИН. ДРОГЕРИЈА**  
**Mr. pharm. П. ШОТРИЋ,**  
**МОСТАР.**

Препоручује складиште разних медицинских и фармацеутских специјалитета, хирургичких справа, памука, овоја и т. д. На даље кемичко техничких продуката, парфумерију најбоље кавоће, љековитих и тоалетних сапуна, кефица за зубе, кефа за косу, одијело и чешљева.

Од властитих препарата препоручује

**НАРЦИС КРЕМ**

најбоље сретство против нечистоћи лица (против бобулицама, пјегама, осипу и т. д.). **Нарцис крем** је једино на чисто знанственој основи направљено косметичко сретство, те је стекло хиљадама признања.

Препоручујем надаље **ОДОНТОЛ вода за уста, зубе и зубно месо, РЕСОРЦИН- ТАНИН вода за косе**, поспјешује раст косе и отстрањује перут,

641 3—

Picture 5.

Robert Brammer, the owner of the pharmacy *K Zlatnoj Zmiji* (*By the Golden Snake*) in Banja Luka (Picture 6), also made his own preparation for hair growth and prevention of dandruff called *Brammer's Hair Liquid*. [32]

**„БРАММЕРОВА ВОДА ЗА КОСУ.“**

Призната као најбоља вода за косу и то за поспјешење пораста косе, за освјеживање и јачање власног корјена, спречавање опадања косе и стварање перути, као и тим проузрочено сврбљење.

**Многобројне признанице. — Цијена једне боце 1.20 К.**

**Р. Браммер, Љекарна к' златној змији. Бањалука.**

749 2—5

Picture 6.



## Conclusion

This paper has covered all data available for research on all pharmacists and pharmaceutical and cosmetic preparations they made and advertised as their products in various newspapers, magazines and calendars. I do not currently have any further information about the possibility of existence of any other products made by the above-mentioned pharmacists or other pharmacists.

These pharmacists mostly made cosmetics, certain pharmaceutical medications and preparations for human and animal use. Cosmetics eliminated certain skin problems, but also contributed to the preservation of beauty. Pharmaceutical preparations treated or eliminated a number of different problems, improved the hygiene of the mouth, teeth, hair and scalp, and some also helped with problems with domestic animals. According to advertisements, some products were made on a larger scale and sold in the Monarchy and beyond, some were awarded at exhibitions, and used by prominent people. The existence of many grateful users would be stated in the advertisements. They had trademark signs and warned about possible counterfeits. They advised against using various foreign, well-known products, which could be harmful sometimes, were not used, and that only their tested and harmless products should be used. Similar messages could be noticed on advertisements of other pharmacists' products. It was not specified which products should be avoided and why. The only example found was an advertisement for *Elsa-Fluid*, a herbal tonic made by pharmacist Eugen Feller from Stubica, Zagorje, in which it was especially emphasized that this preparation should not be mixed up with *Stella Fluid* because it was a fake. Elsa Fluid was often advertised in various publications, with a similar purpose as Zaloscer's tonic. [33] Their advertisements were similar in content to others published in that period.

It can be concluded that these pharmacists, with their knowledge and offer of cosmetic and pharmaceutical preparations they made, tried to be competitive with numerous imported products of other pharmacists from the Monarchy, which were advertised a lot. Most of the above-mentioned pharmacists invested in their advertisements frequently and in various publications, over longer periods (in some instances even for years). In addition to their professional work in the pharmacies, they were also engaged in the production, distribution, sale and marketing of their products, i.e. they were skilled traders and entrepreneurs too.

Undeniably, the advertisements from this period were primarily aimed at introducing the general population to the advertised products and, consequently, at increasing sales. However, they often contained detailed health problems that could be cured or suppressed by the use of these advertised pharmaceuticals, so it could be said that they partly promoted health and disease prevention, and improvement of the health care system at that time.

The Austro-Hungarian period had big health challenges as a reflection of inherited poor health hygiene, ignorance and negligence. Today, COVID-19 disease caused by the new coronavirus (SARS-CoV-2) represents a serious health challenge for all countries of the world, with the consequences it has on the lives and physical and mental health of individuals and the society. In the Austro-Hungarian period, they adverti-



sed pharmaceutical preparations that could help citizens cope with the problems they had, similar to today's advertisements for various dietary supplements, probiotics, vitamins and micronutrients, the medically justified use of which, along with a healthy diet and physical activity, can help against coronavirus infection and preserve health.

The contents of some advertisements from the Austro-Hungarian period can certainly be critically observed today, regarding the efficiency and expediency of the recommended use. However, they do give insight into a part of the medications and preparations used in medicine at that time. Even today, it is necessary to stay objective when recommending various preparations advertised for boosting immunity, and to study the evidence and the quality of certain products.

### References:

1. Mašić, I. *Korijeni medicine i zdravstva u Bosni i Hercegovini*. [Online]. Sarajevo: Avicena doo; 2004. [quoted on Nov 30 2020]. p.103. Available on: [https://www.researchgate.net/publication/257298363\\_Korijeni\\_medicine\\_i\\_zdravstva\\_u\\_Bosni\\_i\\_Hercegovini.pdf](https://www.researchgate.net/publication/257298363_Korijeni_medicine_i_zdravstva_u_Bosni_i_Hercegovini.pdf)
2. Hadžibegić, I. *Bosanskohercegovački gradovi na razmeđu 19. i 20. stoljeća*. [Online]. Sarajevo: Institut za istoriju; 2004 [quoted on Nov 30 2020]. p.49, 56. Available on: [http://www.cidom.org/wp-content/uploads/2015/12/Iljas-Had%C5%BEibegovi%C4%87-Bosanskohercegova%C4%8Dki-gradovi-na-razme%C4%91u-19-i-20-stolje%C4%87a\\_opt.pdf](http://www.cidom.org/wp-content/uploads/2015/12/Iljas-Had%C5%BEibegovi%C4%87-Bosanskohercegova%C4%8Dki-gradovi-na-razme%C4%91u-19-i-20-stolje%C4%87a_opt.pdf)
3. *Verordnung der Landesregierung in Sarajevo vom 19. Februar 1879. Nr. 1999 pol., betreffend die Regelung des Apothekergewerbes in Bosnien und der Hercegovina. Sammlung der für Bosnien und die Hercegovina erlassenen Gesetze, Verordnungen und Normalweisungen*. I Band. Wien: Aus der Kaiserlich-Königlichen Hof- und Staatsdruckerei; 1880. p.91-2. German.
4. *Red za ljekarnice u Bosni i Hercegovini. Glasnik zakona i naredaba za Bosnu i Hercegovinu*. 1907. Sarajevo: Zemaljska štamparija; 1909. p.254-73.
5. Đuričić A, Elazar S. *Pregled istorije farmacije Bosne i Hercegovine*. Sarajevo: Grafičar; 1958. p. 267, 272.
6. Fatović-Ferenčić S, Brkić Midžić S. *Počeci i strategije marketinga tvornice Kaštel d. d. (1920.-1945.)*. Medicus [Online]. 2018 [quoted on Dec 3 2020];27(2 Sumamed):211-22. Available on: <https://hrcak.srce.hr/214617>
7. *Sarajevski list* (God. 34.). Aug 12 1911., No. 173. Oglasi: 6 (kol. 2)
8. *Srpska riječ* (God. 5.), Sarajevo. Dec 4 1908, No. 263. Reklame: 4 (kol. 1)
9. *Bošnjak. Kalendar za prostu godinu 1909* (God. 27.) [Online]. Sarajevo: Zemaljska štamparija; 1908 [quoted on Nov 30 2020]. p.25 (XXII). Available on: <https://digitalna.nb.rs/>
10. *Napredak. Hrvatski narodni kalendar za просту godinu 1914* (God. 8.). Sarajevo: Vogler i dr.; 1913. p.418.

11. *Bosnischer Post* (God. 27.)[Online], Sarajevo. Jul 2 1910, No. 148 [quoted on Dec 3 2020]; *Reklame*: 9 (kol.1). Available on: <http://kolekcije.nub.ba/items/show/16>. German
12. *Srpska riječ* (God. 6.), Sarajevo. Maj 2 1909, No. 95. *Reklame*: 8 (kol. 3)
13. *Srpska riječ* (God. 6.), Sarajevo. Feb 4 1909, No. 25. *Reklame*: 4 (kol. 1)
14. *Musavat* (God. 5.), Sarajevo. Jun 22 1910, No. 54. *Oglasi*: 4 (kol. 2)
15. *Država* (God. 1.), Banja Luka. Okt 19 1919., No. 56. *Reklame*: 4 (kol. 2)
16. *Napredak. Hrvatski narodni kalendar za godinu 1910* (God. 4.). Sarajevo: Napredak; 1910. p.333.
17. *Bosnischer Bote. Die Universal Hand- und Adressbuch für Bosnien-Herzegovina* (God. 2.). Sarajevo: Adolf Walny; p.1898. 188. German.
18. *Bošnjak. Kalendar za prostu godinu 1909* (God. 27.)[Online]. Sarajevo: Zemaljska štamparija; 1908 [quoted on Dec 4 2020]. p.292 (VI). Available on: <https://digitalna.nb.rs/>
19. *Bošnjak. Kalendar za prostu godinu 1910* (God. 28.) [Online]. Sarajevo: Zemaljska štamparija; 1910 [quoted on Dec 4 2020 ]. p.275 (2), 282 (9), 287 (15). Available on: <https://digitalna.nb.rs/>
20. *Napredak. Hrvatski narodni kalendar za prestupnu godinu 1912* (God. 6.). Sarajevo: Napredak; p.1912. 421.
21. *Napredak. Hrvatski narodni kalendar za prostu godinu 1914* (God. 8.). Sarajevo: Vogler i dr.; p.1913. 398.
22. *Napredak. Hrvatski narodni kalendar za godinu 1911* (God. 5.). Sarajevo: Napredak; 1911. p.354.
23. *Sarajevski list* (God. 34.). Dec 16 1911, No. 274. *Zvanično*: 1 (kol. 1)
24. *Srpska riječ* (God. 5.), Sarajevo. Nov 24 1908 , No. 254. *Reklame*: 4 (kol. 1)
25. *Napredak. Hrvatski narodni kalendar za godinu 1910* (God. 4.). Sarajevo: Napredak; 1910. p.324.
26. *Srpska riječ* (God. 6.), Sarajevo. Jan 21 1909, No. 14, 3 (kol. 3)
27. *Bosanski glasnik. Bosnischer Bote pro 1908. Die Universal-Hand- und Adressbuch für Bosnien-Herzegovina* (God. 12.). Sarajevo: Redakcija Bosanskog glasnika; 1908. p.209.
28. *Srpska riječ* (God. 5.), Sarajevo. Jul 12 1908, No. 151. *Oglasi*: 4 (kol. 4)
29. *Srpska riječ* (God. 8.), Sarajevo. Sep 3 1911, No. 178. *Sarajevske radnje*: 6 (kol. 2)
30. *Srpska riječ* (God. 7.), Sarajevo. Aug 5 1910, No. 168. *Oglasi*: 4 (kol. 3)
31. *Srpska riječ* (God. 7.), Sarajevo. Jul 1 1910, No. 139. *Oglasi*: 4 (kol. 2)
32. *Srpska riječ* (God. 3.) Sarajevo. Maj 7. 1906, No. 67. *Oglasi*: 6 (kol. 1)
33. *Napredak. Hrvatski narodni kalendar za godinu 1910* (God. 4.). Sarajevo: Napredak; 1910. p.352

### Rezime:

U austrougarskom periodu (1878-1918) u Bosni i Hercegovini (BiH) počinje otvaranje sve većeg broja savremenih apoteka. Prema propisima donesenim 1878. i 1907. godine kojim je uređena apotekarska djelatnost, vlasnik apoteke je mogao biti samo

doktor hemije ili magistar farmacije sa diplomom stečenom na nekom austrougarskom univerzitetu. Izrađivati i izdavati lijekove mogao je samo magistar farmacije ili asistent sa odgovarajućom diplomom, u skladu sa važećom farmakopejom i taksom lijekova. U štampanim publikacijama iz tog perioda objavljujane su i reklame za razne lijekove i preparate koji su se većinom izrađivali u apotekama širom Monarhije. Vremenom i naši apotekari počinju reklamirati i proizvode izrađene u svojim apotekama. Na taj način oglašavalo se postojanje i dostupnost pojedinih proizvoda, i vršilo se navikavanje stanovništva i oblikovanje potrošačkog tržišta. Reklame su često sadržavale detaljno navođenje zdravstvenih problema koji su se upotrebom reklamiranih farmaceutskih preparata mogli izliječiti ili suzbiti, te bi se moglo reći i da su dijelom vršili promociju zdravlja i prevenciju bolesti i unapređenje zdravstvene zaštite stanovništva tog doba. Apotekari iz BiH koji su reklamirali svoje preparate većinom su izrađivali kozmetička sredstva, određene farmaceutske lijekove i preparate za domaće životinje. Pojedini proizvodi su bili nagrađivani na izložbama, prodavani u Monarhiji i šire, korišteni od strane uglednih osoba, navođeno je postojanje mnogobrojnih zahvalnih korisnika. Kozmetička sredstva su otklanjala određene probleme kože i doprinosila očuvanju ljepote. Farmaceutski preparati su liječili ili otklanjali niz različitih problema, doprinosili higijeni usta, zuba i kose, neki su pomagali i kod problema domaćih životinja. Moglo bi se zaključiti da su se predstavljeni apotekari svojim znanjem i ponudom preparata koje su izrađivali trudili da budu konkurentni mnogobrojnim uvoznim proizvodima drugih apotekara iz Monarhije koji su se reklamirali.

**Ključne riječi MeSH:** kozmetička sredstva, farmaceutski preparati

Ne-MeSH: Bosna i Hercegovina, austrougarski period, izrada preparata

*Received: 12/10/2020*  
*Reviewed: 20/10/2020*  
*Accepted: 30/10/2020*