

Selected aspects of OTC sales in a pharmacy and by seller of reserved drugs

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Abstract

Purpose of the article Medical care suffers from a lack of funds, especially for the financing of patient care and salaries. The Czech Republic has ceased payments for medicines that can be dispensed without a prescription. One of the possibilities for higher patient participation is to expand the supply of OTC medicines.

Methodology/methods Logical methods were used to process the paper; in particular, this includes induction and deduction, analysis, synthesis, and comparison. In order to assess the development of the supplies of medicinal products to pharmacies and healthcare facilities in the Czech Republic, the period 2014-2016 was used.

Scientific aim The aim of the paper is to compare the conditions for the sale of a selected range of OTC medicines, which can be sold both in the pharmacy and outside the pharmacy by the sellers of reserved drugs. The comparison will be made for the example of the most common pharmacy with an annual turnover of CZK 5-10 million and the MEDIPOINT sales point.

Findings Sales of OTC medicines outside pharmacies do not have an impact on the financial results of pharmacies. The training costs for each employee of the service station are the only costs associated with the sale of medicines. All kinds of pharmabox are the property of MEDIPOINT Services. A partner, such as a gas station, will receive it free of charge for use with complete service. The pharmacy must employ pharmacists and is therefore burdened with much higher wage costs, is legally responsible for sales, and is forced to sell under a competitive market with a lower mark-up.

Conclusions The state should consider the risks associated with this type of drug sales by very poorly qualified petrol station staff. Risk preparations containing ibuprofen and paracetamol should only be available in a pharmacy.

Keywords: OTC medicine, pharmabox, pharmacy, seller of reserved drugs, State Institute for Drug Control

JEL Classification: I11, I15, I18

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Introduction

Health policy in the Czech Republic is one of the most important parts of social policy. Total spending on health care in the Czech Republic amounted to CZK 299.907 million in 2014. Total expenditures on health care were thus 7.04% of the gross domestic product of the Czech Republic (Popovič, 2016). The expenses for health insurance companies for the year 2014 amounted to CZK 239.012 million from the total volume of expenditures. The remaining portion of the expenditures were represented by the state budget, public budgets, and private expenditures. In 2015, the expenses for health insurance companies increased to CZK 251.913 million, which represents a year-on-year increase in expenditures of approximately 6% compared to 2014 (Institute of Health Information and Statistics of the Czech Republic, 2016). For comparison, the total welfare expenditures were CZK 489.152 million in 2015. Thus, health spending represents the second most significant social policy expenditure as a part of the total amount of social benefits (Ministry of Labour and Social Affairs, 2016).

Over the past five years, the share of total healthcare spending as a percentage of gross domestic product has fluctuated between 6.9% (2011) and 7.8% (2014). Compared to other EU countries, the Czech Republic's spending on health together with Hungary, Poland, and Slovakia are among the lowest. In more developed countries such as Belgium, France, Germany, or Austria, the share of total healthcare spending as a percentage of gross domestic product is higher than 10% (Institute of Health Information and Statistics of the Czech Republic, 2016). However, the level of medical care provided in the Czech Republic is comparable to abroad.

Most healthcare expenditures in the Czech Republic are covered by health insurance. In 2015, the total income for health insurers from health insurance amounted to CZK 260.112 million, which in comparison with 2014 represented an increase of less than 5% (Institute of Health Information and Statistics of the Czech Republic, 2016).

Medical care suffers from a lack of funds, especially for the financing of patient care and salaries. Total hospital costs reached CZK 141.6 billion at the end of 2015, up 5% compared to the previous year. The largest cost item is represented by personnel costs (CZK 65.6 billion, i.e. 46.3% of total costs), which increased by 6.5% year-on-year. Total revenues resulting from hospitals providing acute care in comparison with 2014 increased by 5 bln. CZK (i.e. +3.7%) to 141.9 bln. CZK as of 31.12.2015. The main source of hospital financing (83.1%) in 2015 resulted from reimbursements from health insurance companies (Institute of Health Information and Statistics of the Czech Republic, 2016).

There is also an increase in drug consumption due to an increase in civilization diseases in the Czech population, especially hypertension, diabetes mellitus, and cancer. In 2015, 267.16 million packs of medicinal products were delivered to healthcare facilities in the Czech Republic (this represents an increase of 1.10% compared to 2014). The number of defined daily doses in total amounted to 6,480.98 million in 2015, an increase of 2.96% compared to 2014 (Institute of Health Information and Statistics of the Czech Republic, 2016).

A possible solution to this situation could be an increase in health insurance contributions. However, higher health insurance contributions mean higher total labour costs. According to Deloitte, employers' costs in the Czech Republic are among the highest in Central Europe – only France, Sweden, Italy, Belgium, and Austria are higher (Deloitte, 2017). According to Act 592/1992 Coll. (Czech Republic, 1992), on Public Health Insurance, the employer pays for health insurance at 13.5% of the assessment base. The employer pays two-thirds of this amount, while the employee pays one-third. For some sections of the population (retired pensioners, students, etc.), health insurance is paid by the state. The part of the health insurance paid by the employer, as well as the part for social insurance, is a tax-deductible expense for companies. But the company must first make money to cover these costs. The increase in health insurance contributions does not appear to be a very appropriate way of obtaining additional funds to cover rising healthcare expenditures.

Another means to obtain money to finance medical care could be the growth of spending from the state budget or from municipality budgets. In the 2016, the state budget concluded for the first time after twenty-one years in excess of 61.6 billion CZK (Ministry of Finance of the Czech Republic, 2017a). For the year 2017, the state budget of the Czech Republic is again planned with a deficit of CZK 60 billion. The Ministry of Finance of the Czech Republic expects GDP growth of only 2.5% for 2017 (Ministry of Finance of the Czech Republic, 2017b). The state debt of the Czech Republic amounted to 1613.4 billion in 2016. In 2015, the state debt of the Czech Republic amounted to CZK 1673.0 billion. Although the state debt decreased quite significantly between 2016 and 2015, it is unlikely that such a result would be achieved in 2017 (Ministry of Finance of the Czech Republic, 2017c). The rise in government spending on health care would increase the level of indebtedness.

To maintain the current level of medical care in the Czech Republic, a gradual increase in patient participation is inevitable. Expenditures on distributed medicines, expressed in producer prices and excluding distributor and pharmacy margins and excluding value added tax, amounted to CZK 61.98 million in 2015, representing approximately one fifth of total healthcare spending this year. There was a 9.8% growth in distributed medicines

against 2014 (Institute of Health Information and Statistics of the Czech Republic, 2016). One part of the drug policy is to determine which medicines will be fully covered by health insurance companies, which will be partially paid, how much the surcharge to them will be, and which will not be paid at all. The aim of this policy is to reduce medical insurance spending and to transfer part of their reimbursement to patients through co-payment or direct reimbursement.

1 Research Purpose and Methods

The aim of the paper is to compare the conditions for the sale of a selected range of OTC medicines, which can be sold both in the pharmacy and outside the pharmacy by the sellers of reserved drugs. On this basis, the impact of sales of OTC drugs by the pharmacy and by the seller of reserved drugs on the economy of a selected pharmacy will be evaluated.

The comparison will be made for the example of the most common pharmacy with an annual turnover of CZK 5-10 million and the MEDIPOINT sales point. There are currently 2299 authorized sellers of reserved drugs in the Czech Republic. The largest market share is held by MEDIPOINT, which operates 781 branches. These are sales points that sell dedicated medicines under the heading of MEDIPOINT. Petrol stations occupy approximately 35% of the total number of operated branches.

Last but not least, the aim of the paper is to evaluate the risks arising from the sale of selected OTC medicines to the retailers of reserved medicines and explore the possibilities of their mitigation.

The paper explains the system of drug reimbursement, the possibility of drug delivery in the Czech Republic, an analysis of the OTC market segment, an analysis of the impact of drug sales outside pharmacies on the economic results of pharmacies, and an assessment of the current state of the market for medicinal products. Logical methods were used to process the paper; in particular, this includes induction and deduction, analysis, synthesis, and comparison. In order to assess the development of the supplies of medicinal products to pharmacies and healthcare facilities in the Czech Republic, the period 2014-2016 was used. The analyses were processed on the basis of data provided by, State Institute of Drug Control, Institute of Health Information and Statistics of the Czech Republic, Farmis database, and on the basis of an interview with the Marketing & PR Manager of MEDIPOINT, Ondřej Špiřík.

2 Medicines

Medicines are in accordance with § 2 of Act No. 378/2007 Coll. (Czech Republic, 2007), substances that have therapeutic or preventive properties. Drugs may be given to humans or animals for the purpose of recovering, modifying, or affecting physiological functions by pharmacological, immunological, or metabolic action, or for the purpose of establishing a medical diagnosis. Drugs are divided into original and generic medicines. The original drug is a completely new type of medicine. The process of developing a new type of medicine until its registration takes an average of 10-15 years. The cost of developing a new drug reaches \$800 million to \$1,000 million. (Svobodník et al., 2014).

Due to the high cost of drug development, the new drug is protected by a patent. The price of a new drug is higher than the generic drug because it has no equivalent. The necessity of patent protection for financing expensive development is enshrined in paragraph 3 of the Declaration on the TRIPS Agreement and Public Health: *"We recognize that intellectual property protection is important for the development of new medicines. We also recognize the concerns about its effects on prices"* (World Trade Organisation, 2001). Patent protection is a guarantee for manufacturers that the money spent on researching a new drug returns to them and that further research into new drugs will continue. Revenues from the sales of products also cover the cost of researching "unsuccessful" compounds that are not sold. Patent protection formally takes 20 years. The length of time that the manufacturer has guaranteed exclusivity is much shorter. The active substance of the product must be protected by the patent in the first phase of development, when it is not yet available to patients. The actual exclusivity of a specific drug on the market lasts only 8 to 10 years (Association of Innovative Pharmaceutical Industry, 2017).

The drug will start mass production as soon as the patent protection for the drug has passed. The drug price then drops significantly. This fact means a great loss for the original manufacturer. Pfizer was the world's largest manufacturer in 2013. Its total revenues for 2012 have fallen by 13% compared to 2011 due to the expiry of patents for several major medicines, and amounted to USD 59 billion. Merck & Co was the third largest drug manufacturer in 2013 in terms of turnover. Merck & Co's revenues totalled nearly \$48 billion in 2012. In August 2012, the patent for Singulair (montelukast) expired. Merck & Co's revenue in the US fell by 80% due to competition from generic medicines (Cyrrus, 2014).

2.1 Generic medicines

The generic drug contains the same active ingredient, in the same amount as the original preparation, and it also has the same dosage form and the same biological efficacy. The type and ratio of the excipients used may be different from the original. In order for a generic medicine to be approved, results from pharmacological and toxicological tests or clinical trials need not be presented, as the manufacturer only has to prove that the generic medicine “bioequivalent” to the drug is original. This means that the same amount of medicine as in the original drug is introduced to the bloodstream and its elimination from the body is the same, so the drug acts just like the original medicine (Edukafarm, 2009). Some manufacturers are then diversified by the colour of the tablets, the scratch marks, or, for example, by the coating. However, this does not affect bioequivalence. The type of excipients used may affect the patient, such as causing flatulence, allergic reactions, or digestive problems, but this cannot be estimated in advance.

2.2 OTC medicines

U.S. Food and Drug Administration defines OTC drug as follows: „*OTC drugs are drugs that have been found to be safe and appropriate for use without the supervision of a health care professional such as a physician, and they can be purchased by consumers without a prescription. These drugs are sometimes approved under applications like new prescription drugs, but more often they are legally marketed without an application by following a regulation called an OTC drug monograph*” (Center for Drug Evaluation and Research, 2017).

2.3 Conditions for the sale of a medicinal product in the Czech Republic and abroad

Each medicine available on the Czech market must be registered with the State Institute for Drug Control, SIDC. A medicine that is not registered in the Czech Republic may be brought only on the basis of individual import. The patient must pay for it in full.

SIDC determines whether a medicinal product may be given only for prescription or restricted medical prescription or whether it can be given without a prescription or without a prescription with restriction according to § 39 of Act No. 378/2007 Coll. (Czech Republic, 2007). If the manufacturer requires a medicinal product to be given for prescription only, he is satisfied, even though the drug could be prescribed without a prescription in accordance with the law. For comparison, in the United Kingdom of Great Britain and Northern Ireland, the new drugs automatically receive the status of prescription-only medicines for a period of two years, and after this time the status will automatically change to that of pharmacy-supervised medicines unless the manufacturer asks for maintaining the status of a prescription-only medicine. An EU directive that affects UK legislation presents 4 main reasons for maintaining prescription-only medicines: medicines are given parenterally; based on the results of the previous use, it was found that the medicines were used inappropriately; the usage of medicine requires medical control; and, last but not least, there is a direct or indirect threat to health if the medicine is used without medical supervision (Bond, Hannaford, 2003).

Table 1 Amount of drug supplies to pharmacies and healthcare facilities

Year	Number of packages of pharmaceuticals total (mil.)	Total amounts of pharmaceuticals - price without trade margins and VAT - (mil. CZK)	OTC pharmaceuticals - price without trade margins and VAT - (mil. CZK)
2016	260.83	64,254.40	6,542.85
2015	267.16	61,954.98	6,495.51
2014	264.23	56,460.88	6,306.02

Source: Knobová, 2017

Table 2 Amount of drug supplies to pharmacies and healthcare facilities

Year	Number of OTC pharmaceuticals (mil.)	OTC pharmaceuticals - price without trade margins and VAT - (mil. CZK)	OTC pharmaceuticals - daily recommended dose (mil. CZK)
2016	78.52	6,467.89	603.93
2015	82.13	6,438.81	604.96
2014	80.71	5,939.33	577.40

Source: Knobová, 2017

Medicines in the Czech Republic can be purchased at pharmacies or via e-shop. The mail-order pharmacy sales must have an authorisation issued in accordance with § 84 par. 4 Act no. 378/2007 Coll. (Czech Republic, 2007) from the SÚKL. Prescription drugs are given exclusively by pharmacies. By way of delivery, only over-the-counter products, OTC food supplements and cosmetic products, and others can be purchased. OTC drugs are available to patients without a prescription. The development of the supply of drugs to healthcare facilities is shown in the following tables. Only the supply is shown, not the direct consumption of drugs.

2.3 Conditions for selling drugs in a pharmacy

A pharmacy must meet a number of legally defined conditions. The first one is possessing a certificate of technical and material equipment of a pharmacy issued by SIDC pursuant to Decree No. 221/2010 Coll. on Requirements for the Physical and Technical Equipment of Medical Devices, as amended. The Pharmacy must also have a Sanitation Code approved by the appropriate sanitary station. The pharmacy must have a lease contract if it does not operate in its own facility. The pharmacy must have a professional representative (pharmacist with attestation) and the head of the pharmacist (both activities may be performed simultaneously by one person, but only when the two functions are combined in one place. Once these conditions are fulfilled, a pharmacy may obtain registration as a private healthcare facility and being its business. The pharmacy employs staff with a university degree in pharmacy. Pharmacists are entitled to perform all activities, in particular to sell prescription drugs. Assistant pharmacists are authorised to sell drugs without a prescription.

Pharmaceuticals are required to perform their profession under §49 of Act No. 372/2011 Coll. (Czech Republic, 2011), on Health Services: “...to provide the health service for which they have acquired professional or specialised competence under other legislation, ..., according to the patient’s medical diagnosis, at the appropriate professional level and with respect to ethical principles”. Another important duty of the pharmacist is provided by § 83 of Act No. 378/2007 Coll. (Czech Republic, 2007), on Pharmaceuticals: “The pharmacist will not sell the medicinal product if it could be misused”.

2.4 Conditions for the sale of medicines by a reseller of reserved medicines

The reseller of reserved medicines is required to ensure that each person selling the reserved medicines has a certificate of professional competence as a reseller of reserved medicines (Institut zdravotního a odborného vzdělávání, 2014).

The most famous reseller of reserved medicines in the Czech Republic is MEDIPOINT, which offers medicines through its pharmabox, especially at petrol stations. The Pharmabox is free of charge. Pharmabox is the exclusive property of MEDIPOINT Services a.s.

The gas station does not need a license / concession for the MEDIPOINT service. The business relationship between the point of sale and MEDIPOINT Services is contractually determined. The sales place is registered by SIDC and after their training, the employees can begin selling. Checking the expiry date of the products at the partners is one of the services provided within the MEDIPOINT project service. Goods are ordered either by MEDIPOINT Services a.s. or the seller himself. The reseller of reserved medicines does not have a medical and pharmaceutical education and therefore cannot provide consultation services (Špiřík, 2017).

3 OTC segment

The OTC segment of the pharmaceutical market is becoming more and more important. The main reason for this is the decline of drug prices and a drop in the sales of prescription drugs. The OTC segment is not price regulated; SIDC does not provide the OTC drug price. The price of the drug is determined by the manufacturer, distributor, and vendor. If the OTC medicine does not have the prescribed reimbursement, the prescription receipt will not provide for the reimbursement of the medicine. The patient will pay for it as he would for medicine without a prescription. OTC products, unlike prescription-only medicines, can advertise, and it is therefore possible to directly influence the end-user behaviour of the patient. Pharmaceutical companies will therefore be increasingly interested in moving their products to OTC.

3.1 Development of the OTC segment in the Czech Republic

The Czech Republic has ceased payments for medicines that can be dispensed without a prescription. This was done on the basis of the amendment to Act no. 48/1997 Coll. (Czech Republic, 2007) on Public Health Insurance of 30 June 2012. The exception are products for which SIDC has received a request from all health insurance companies, before June 1, 2012, to leave reimbursement for the provision of ambulatory health services in the public interest. These medicines have been reimbursed. The healthcare payers – health insurance companies –

have decided to keep the reimbursement for over-the-counter medicines. The amount of the reimbursement from public health insurance is determined by SIDC for each medicinal product (Pavličková, 2017).

As of July 1, 2012, out of 428 out-of-pocket products, which also had a fixed reimbursement from health insurance, only 21 products remained with reimbursement according to data from the General Health Insurance Company: *“These medicines are intended for patients with cystic fibrosis, chronic pancreatitis, pancreatic cancer, and pancreatic resections. There are also medicines for the treatment of pain and rheumatic illness of paediatric patients, and medicines for patients with dry eye syndrome. These medicines are still available for sale at full cost and at the same time as a prescription-only medicine. This ensures that money from public health insurance is spent efficiently”* (Všeobecná zdravotní pojišťovna, 2017).

3.2 Sales of OTC medicines in pharmacies

OTC drug sales bring a number of benefits. OTC sale brings the choice between different drugs and prices to the patient. The patient can obtain medicine without a doctor’s visit, saving them time and money spent on traveling. At the pharmacy, a pharmacist has the status as a healthcare professional and is able to provide expert information and recommend the appropriate treatment.

The pharmacy will get money immediately when selling an OTC drug. There is no delay that arises between the delivery of the prescription drug and the reimbursement from the health insurance company. The OTC segment offers more options for negotiating with the manufacturer about discount options when purchasing the drug in the store, as these products are not price regulated. The pharmacy can effectively influence its profit through the sale of OTC products, or by their professional cross-selling. The direct purchase of OTC drugs and self-medication saves money for health care payers. Insurance companies can allocate the money saved, for example, for the treatment of seriously ill patients.

The transfer of Paralen to a non-paid medicine saved CZK 235,017,790 for health insurance companies in 2013. This calculation is made by multiplying the average packing price of CZK 35 for the most frequently sold packs of 24 tablets. In 2013, 6,714,794 Paralen packages were consumed (Sprinx, 2015).

3.3 Sale of OTC medicines by a reseller of reserved medicines

OTC products may be sold by a pharmacy, by a pharmacy with permission for mail order sales, and by a reseller of reserved medicines. According to SIDC’s press department, it consists of a “very limited group of over-the-counter medicines, such as teas, disinfectants, or mild pain medications. As of July 2, 2017, these products had 318 in total, of which 66 were traded. The number of resellers of reserved medicines has grown from 316 (2012) to 2212 (2016)” (State Institute for Drug Control, 2017).

There are 2299 authorised sellers of reserved medicines in the Czech Republic. Currently, MEDIPOINT operates 781 branches. Petrol stations currently occupy approximately 35% of the total number of branches, with others consisting of retail outlets, spas, and rehabilitation facilities. MEDIPOINT’s most-sold items include Paralen 500 por.tbl.nob.12x500mg, Ibalgin 200 por.tbl.film 12x200 mg, and Nurofen 200mg por.tbl.obd. 12x200mg (i.e. pain relievers). Products of the same kind for children are also very popular (Nurofen for children por.sus.1x100ml tubes and Ibalgin BABY por. Sus 1x100 2mg / ml). For another type of indicator, see Kinedryl against the symptoms of kinetosis or Carbo Medicinalis / Black Coal (Špirík, 2017).

3.4 Risks arising from the sale of OTC medicines by a reseller of reserved medicines

The code of ethics for a reseller of reserved medicines contains the following: *“The seller does not check the health of the customer”* (Institut zdravotního a odborného vzdělávání, 2014). The pharmacist in a pharmacy has the status of a healthcare professional. The pharmacist is entitled to examine the patient’s health condition and is obliged to provide him with a dispensation minimum, i.e. instruction on the correct and safe use of the drug in accordance with §11 of Decree No. 84/2008 (Czech Republic, 2008): *“A part of the sale of medicines is to provide the information necessary for the proper and safe use of the sold medicinal products”*.

A reseller of reserved medicines does not have this obligation by law. He does not provide information about the proper and safe usage of the drug.

The pharmacist, due to his education and technical equipment, is able to prevent the inappropriate use of drugs. Many pharmacies are equipped with software for the control of the potential for drug-drug interactions. The most commonly sold OTC drugs are analgesics, most often with paracetamol and ibuprofen. According to a British study, paracetamol hepatotoxicity is the most common cause of acute liver failure in the UK. Between 1992 and 2008, 663 patients were diagnosed with an overdose of paracetamol and subsequent severe liver damage. From this number of patients, 110 overdoses (16.6%) caused were unintentional, the rest deliberately. Unintentional

overdoses had a higher mortality, as 42 out of 110 patients (38.2%) died. From the number of deliberately overdosed patients, 128/500 (25.6%) died (Craig et al., 2011).

The Czech Pharmacy Chamber also supports the ban on the sale of all drugs containing paracetamol and ibuprofen outside pharmacies. It justifies its position as follows: *“Both active substances can severely damage health and endanger the patient’s life. Selling them as a reserved drug may lead to misuse”* (Bažantová, 2017). The Czech Chamber of Pharmacists gives an example from Sweden, where paracetamol started being sold outside pharmacies a few years ago: *“However, the subsequent increase in unintentional and deliberate poisoning with this relatively safe drug has led to paracetamol being sold again only in pharmacies. Similar conditions will soon apply in the case of ibuprofen in Denmark”* (Bažantová, 2017).

In 2016, SIDC carried out 106 inspections of resellers of reserved medicines, and in seven cases serious deficiencies were identified. In 6 cases, the Pharmaceuticals Act was violated by the fact that the reseller of reserved medicines did not provide a certificate of professional competence for each person issuing the reserved medicinal products. In addition, proper storage conditions were not observed in 9 cases (State Institute for Drug Control, 2017).

4 Comparison of pharmacy sales and MEDIPONT reserved points of sale

The sale of OTC medicines by resellers of reserved medicines, unlike pharmacies, is not subject to mandatory reporting. It is not possible to directly compare the sale of OTC medicines by the resellers of reserved medicines and by pharmacies. For this reason, a year-on-year comparison of OTC sales of identical items in the range of medicinal products and by MEDIPOINT resellers of reserved medicines in 2015 and 2016 was made in one of the most typical pharmacies in the Czech Republic with an annual turnover of 5-10 billion CZK. The comparison of sales in the pharmacy showed that sales of the most-sold drugs Paralen and Carbosorb (a direct substitute for Carbo medicinalis) and Kinedryl increased between 2015 and 2016. This increase in sales has occurred, despite the 22.68% increase in the number of resellers of reserved medicines between 2012 and 2014.

Table 3 Comparison of sales of selected assortment in the pharmacy in 2015 and 2016

Medicine	Amount of sold pieces in 2015	Amount of sold pieces in 2016	Year-on-year change in sales (%)	Share of revenue in 2016 (%)
Carbosorb tbl. 20 (*)	177	197	+11.3	0.2128
Nurofen sus 100 ml (*)	83	125	+50.6	0.2532
Kinedryl tbl. (*)	94	129	+37.2	0.2195
Panadol Novum 12 tbl. (*)	20	The pharmacy sold only packs of 24 tbl.	-	-
Nurofen 100mg (*)	31	39	+25.8	0.0765
Brofen syrup (*)	19	The pharmacy excluded the product from the assortment.	-	-
Betadine fusion 30ml (*)	60	72	+20	0.1343

Notes: (*) Medicinal product

Source: Interpretation of authors based on data from Farmis, 2017

The sales of reserved products do not represent competition for the pharmacy economically, because despite the increase in the number of sales places, people buy more in pharmacies. The reserved drugstore places are only points for an occasional purchase. The significant difference between sales in a pharmacy and a reseller of reserved medicines lies in costs.

Table 4 Development of the annual cost of a pharmacy for the sale of a selected assortment in 2015 and 2016

Costs (CZK/year)	2015	2016
Total annual labour costs	1,463,521 Kč	1,514,349 Kč
Annual pharmacy rental without VAT	174,855 Kč	178,206 Kč
Total costs of pharmacy excluding VAT for 2 OTC shelves	20,480 Kč	21,156 Kč
Revenues excluding VAT from the sale of 7 selected OTC medicines	34,320 Kč	42,844 Kč
Cost of a petrol station for training 4 employees	12,000 Kč	12,000 Kč

Notes: (*) Medicinal product

Source: Interpretation of authors based on data from Farmis, 2017

The products in the pharmacy are located on the shelves. The pharmacy has 160 shelves, which offer OTC, a supplementary assortment, and medical aids. The OTC drug itself is exposed on 34 shelves. A comparison range of 7 OTC drugs that are sold in a pharmacy and at a pharmabox petrol station can fit into a pharmacy across 2 shelves.

All kinds of pharmabox (i.e. showcases, floor stands - such as My Ambulance, Travel Free shops, and more) are the property of MEDIPOINT Services. A partner, such as a gas station, will receive it free of charge for use with complete service (replacement of goods, consultations, educational materials, etc.). Upon termination of the cooperation, the pharmabox is withdrawn. MEDIPOINT currently offers 9 medicines at pharmaboxes located at petrol stations.

The calculation is made for the same number of employees in the pharmacy and at the petrol station – 4 employees. Employees at the petrol station primarily provide the sale of fuel and small goods (car cosmetics, newspapers, tobacco, certain foodstuffs, etc.) The only condition that must be fulfilled by petrol station employees in order to have a MEDIPOINT point of sale is to attend a course for CZK 3000 excluding VAT mandatory for all employees. The training costs for each employee of the service station are the only costs associated with the sale of medicines, dietary supplements, and medical aids. Information on the sales of pharmaceuticals, dietary supplements, and medical aids at a petrol station with a MEDIPOINT dispensary was not presented to the authors because it is a trade secret.

The pharmacy must employ pharmacists and is therefore burdened with much higher wage costs, is legally responsible for sales, and is forced to sell under a competitive market with a lower mark-up (especially the private brands of large chains such as Dr. Max and Ben). The reseller of reserved medicines is only required to provide staff training and has no extra expenses (Gas Station, My Ambulance, COOP Shop). At petrol stations the sale is realised with a higher surcharge than in the pharmacy: *“As for the price, we respect the principles of the pharmaceutical market and, in general, recommended prices that are slightly above the pharmacy average. We do not try to dump prices, on the contrary, as the customers get used to the higher prices of any goods, for example at petrol stations”* (Špiřík, 2017).

5 Discussion

Serious risks are associated with the sale of ibuprofen and paracetamol-containing medicines that may pose a high risk of interacting with other drugs that the pharmacist will evaluate immediately, but cannot guarantee safety when sold outside the pharmacy because it only depends on reading the package leaflet. According to the author’s opinion, public health is a priority, the integral part of which is to ensure the correct use of medicines. For this reason, preparations containing ibuprofen and paracetamol from the range of reserved medicines should be discarded and sold only by pharmacists in pharmacies. Only pharmacists have the sufficient education to sell these medicines, as well as legal support to prevent them from selling the OTC product if they have doubts.

On the other hand, it is advisable to maintain the option of selling Kinedryl for OTC sellers, which, for its specific purpose of treating nausea while traveling, has its place at the point of need – that is, in the case of long-distance journeys. The risk of misuse appears to be low, as Kinedryl is intended for children from two years of age and must not be used by pregnant women; during pregnancy, women tend to be extremely cautious and often read leaflets. It is also a long-known product that has been on the Czech market since 1969 by Slovafarma since 2004, it has been produced by Noventis. OTC resellers of reserved medicines could further sell disinfectants and patches. Their use is not associated with any danger. Customers can also appreciate the possibility of purchasing, for example, a Vincentka lozenge.

Conclusion

Due to the rise in wage and salary costs for health care workers, bed and rehabilitation care, and the increase in the number of consumed medicines, the direct financial participation of patients must be increased. One of the possibilities for higher patient participation is to expand the supply of OTC medicines. OTC drugs can be offered both by pharmacies and by surrogate drug retailers. The sale of OTC drugs at petrol stations is generally appropriate with regard to their proximity and ease of access. Most petrol stations are open 24 hours a day. The state should consider the risks associated with this type of drug sales by very poorly qualified petrol station staff. Risk preparations containing ibuprofen and paracetamol should only be available in a pharmacy. Sales of OTC medicines outside pharmacies do not have an impact on the financial results of pharmacies. Topics like the reimbursement policy and the amount of reimbursement for medical prescriptions have a more significant impact on the economy of pharmacies.

It would also be appropriate to prohibit mail order sales of OTC medicines even in the case of pharmacy e-shops. Only the pharmacist is able to assess which medicine is at risk from misuse or dosage. If a pharmacist evaluates the sale of the medicine to the patient as a risk, he will not give it to him. The main task of the pharmacist's work is professional counselling. The pharmacist has a professional education that allows him to evaluate the patient's health and possible drug interactions.

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