



THE MAIN FEATURES OF ONLINE SALES STRATEGIES IN PHARMACEUTICAL SECTOR

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ABSTRACT

The Internet has developed over the last decade into a first-line source of information about all aspects of life for many people. The interest in online shopping has increased in all areas, including medicines. In addition, the Covid-19 pandemic has dramatically shaped the e-commerce landscape, including the pharmaceutical sector. Online pharmacies have proven to be a good alternative to physical pharmacies. Consumers using online pharmacies can easily maintain social distance and have medications delivered to their home. Due to the pandemic, the demand for online pharmacy services has increased significantly in many countries. It is also likely that it has permanently changed preferences for some consumers and therefore the demand should remain at a higher level in the future. In general, online pharmacy has a place in the future provision of medicines and can explore its potential to provide cognitive services along with medicines. This paper will present a number of issues related to the working mode of online pharmacies, within the broader context of health care, and will conclude with an overview of current sales strategies that can be used by pharmaceutical companies as well as the preferences and attitudes of citizens of the Republic of North Macedonia, who buy drugs online.

Introduction

The pharmaceutical sector is a global sector that deals with the production and sale of medicines. It is a dynamic sector with exceptional investment potential, characterized by stable annual revenue growth. Certain premium medicines generate billions of dollars annually, but introducing a medicine to the market is a long and financially difficult process. The method of sale and distribution largely depends on state policy. For the production of the medicine, millions of dollars must be invested in research, development and testing.

One of the important aspects of success in the pharmaceutical sector is the company's management strategy. Using strategic management, pharmaceutical companies determine the main tasks and specify key business activities. Strategic management includes a comprehensive analysis of the internal and external environment, the formation of a mission, vision, goals, source of strategy and its implementation and control.

The aim of the paper is to analyze the strategies for online sales in the pharmaceutical sector with a focus on Macedonian pharmaceutical companies. That is, to determine the characteristics of strategies used in the pharmaceutical sector and to examine which of the registered pharmacies in the Republic of North Macedonia also have online pharmacies and what content they share when conducting online sales.

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1. Literature review

The Nordic Joint Report: Online Pharmacy Markets in the Nordics (2021), examine the online pharmacy market in the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). Thus, based on the experience of more liberalized markets, online pharmacies can increase competition in the sector and improve accessibility to pharmaceutical services. In some markets, regulations linking online pharmacies to the operation of traditional pharmacies hinder the development of the online pharmacy market, as these regulations prevent the entry of online-only pharmacies.

Medicines are available for sale on both sites that identify themselves as “pharmacies” and those that do not (Gray, 2011). In parallel with other types of online retailers, the market is divided between those that have expanded their online presence (Boots and Walgreens) and those that have entered the market as a purely online brand (Pharmacy2U and Kwikmed).

Thus, Gallagher and Colaizzi (2000) argued that: “As the Internet pharmacy grew, it became apparent to large chain pharmacies that they had to pursue the online route to prevent losing market share.”

According to the definition of Fung et al. (2004), an online pharmacy is an Internet-based store that sells medicines and can operate as an independent website, an online branch of a traditional pharmacy, or a partnership between pharmacies. In short, an online pharmacy is a website that offers delivery, distribution, or dispensing of medicines online directly to consumers (Orizio et al., 2011; US Congress, 2008).

According to Gray (2011), an online pharmacy can fulfill one or all of a number of functions: selling or purchasing medicines; selling or purchasing other health products; providing information about medicines; providing advice on symptoms; hosting online support groups.

Information or advice can be personalised (via personal email/message board/live chat contact) or general (hosted on static pages and as FAQs). Information can also be self-generated or syndicated (such as the partnership between Boots UK and WebMD, or Pharmacy2U and Patient UK).

In addition, online pharmacies use various forms of technology to extend and enhance the functionality of their site, such as video streaming on health topics and mobile applications and text reminders for ordering prescriptions. Attached is a table describing the possible benefits and risks of using online pharmacies. It seems that access and convenience are weighed against security, with costs emerging as an issue on both sides.

Table 1. Benefits and risks of buying medicines online

Benefits and risks of buying medicines online	
Benefits	Risks
<ul style="list-style-type: none"> • Lower prices • Privacy / Anonymity • Convenience (e.g., home care patients) • Medical information • Available 24/7 • Added value through functionality such as personal medication profiles • Price comparison possible through online intermediaries • Regulated drugs available without a prescription • Not limited by traditional pharmacy supplies 	<ul style="list-style-type: none"> • Unlicensed dispensing • Counterfeit medicines • Failure to protect personal and financial information • Lack of pharmacy information (e.g. address) • Additional fees (e.g. delivery fee) • Prices can change rapidly • Inadequate personal health safeguards • Sale of medicines that are dangerous if taken without medical supervision • Pharmacist not always immediately available online • Concerns about the integrity of the medicines supplied • Damage due to inadequate storage or precautions during delivery • Concerns about the qualifications of the prescriber • Circumvention of the healthcare professional-patient relationship

Source: (Mahé et al.,2009; Anand et al.,2010)

According to a survey by Fitler et al (2018), on a nationally representative sample of Hungarian outpatient clinics, the majority (82.65%) of respondents were aware that medicines could be purchased online, but only (4.17%) had used the internet for previous drug purchases. The respondents had an average age of 45 years, of whom 43.22% reported having chronic health conditions. Attitudes towards the different retail

channels of the pharmaceutical supply chain showed significant differences, with respondents accepting retail pharmacy units as the most appropriate source of medicines while rejecting online pharmacies. A significant contribution to the discipline of strategic management is also the insights generated in the study by Filipović (2020) through a detailed analysis of the management of Croatian pharmaceutical companies. Filipović not only analyzes the characteristics of Porter's strategies, but also shows that by implementing well-designed activities, pharmaceutical companies can not only gain an advantage, but also ensure profitability, ultimately contributing to market competitiveness. In addition, Filipović examines the competitive advantage of Croatian pharmaceutical organizations through the implementation of Porter's strategic methodology and a model based on the theoretical framework of the interaction of the five forces. Competitiveness is key to the long-term sustainability of a company, and according to Porter, there are three types of generic strategies to stimulate competitiveness. Firms gain market advantage through differentiation, low cost and focus. The choice of management strategy depends on the company's position in the industry, since such a position determines profitability.

2. Characteristics of the online sales strategy in pharmaceutical companies

Strategic management is a continuous process that clearly defines the mission and goals of the company, and includes detailed market and competition analysis, monitoring the internal structure of the company, examining current activities and implementing new strategies at all levels. The strategy is based on the long-term focus and reach of an organization that achieves advantage by reconfiguring resources in changing conditions to meet the expectations of stakeholders. Competitive strategy is based on the continuous understanding and anticipation of changes in market trends and consumer preferences.

Strategic changes in the global pharmaceutical sector include changes in policies, regulations, market trends, organizational and ownership structure and the introduction of new technologies.

2.1. The impact of the Covid-19 pandemic on the operation of online pharmacies

The COVID-19 pandemic has imposed a need to change the strategies that companies have been using until then.

According to a research by Focus from May 2021, pharmacies in the Northern Republic of Macedonia in 2020, under the influence of the Covid-19 pandemic, significantly increased sales of medicines, supplements, minerals, vitamins and everything else that pharmacies sell. At the same time, profit growth was recorded compared to 2019 among nine of the ten largest and most profitable pharmacy companies in the country.

The three largest pharmacy companies with the highest revenues in 2020 are Zegin Farm, Eurofarm and Moja apteka.

Tab. 2: List of pharmacies with the highest revenues in 2020

Company name	Revenue in 2020	% growth compared to 2019
Zegin pharm	49,5M euros	5%
Europharm	35M euros	21%
Moja apteka	26M euros	25%
Eliksir	2M euros	21%
Ble medika	2.4M euros	15%
Via pharm	2.4M euros	36%
Viola	4M euros	11%
Alpi pharm	4,1M euros	15%
Herba	2.4 M euros	9%
Menta pharm	2,1 M euros	30%

Source: (Faktor, 2021)

The study by Pop-Nikolov et al. (2021), assesses and describes the use of social media marketing as the most common type of digital marketing used for self-promotion of the pharmaceutical sector in the Republic of North Macedonia. The conducted research shows that the use of the Internet as a tool for digital marketing in the Republic of North Macedonia is not sufficiently developed, especially when websites are

used as a marketing tool for the promotion of the pharmaceutical business and their services. The results show that Facebook as a social media is most often used for publishing health advice, promoting new products and answering customer questions. The promotion of professional pharmaceutical services is lower than the promotion of products. This leads to insufficient data for the implementation of the principles of evidence-based medicine in everyday practice.

2.2. Elements of a Marketing Strategy for Online Sales among Pharmaceutical Companies

Just creating a website is not enough to sell online. You need to know everything about the starting position - where to start and what the main obstacles will be - in order to develop an appropriate strategy (Doofinder, nn):

Market Research

Thus, market research includes

- understanding who the ideal customer is and what his needs are - defining products, creating content and channels where he should be present.
- spying on the competition - identifying the businesses with which the company competes and analyzing their strategy to find out how to overcome them.

Attracting visits (and converting them into followers)

Traffic is the lifeblood of e-commerce. But to get sales, you first need to attract users to the website. Some of the ways include:

- SEO - the strategy used to optimize a website so that it appears first on Google.
- online advertising - refers to advertisements that are published to attract paid traffic to your pharmacy's website, whether through: Google Ads, Google Shopping or social networks (mainly Facebook and Instagram ads).
- Content marketing - from publishing content on an e-commerce blog that is useful to the target audience
- Social networks - allow you to communicate more directly with followers and create a stronger connection with them.

Email marketing - it is facilitated when a user subscribes to an email list, which will allow the pharmacy to maintain contact, create a relationship based on trust and ensure that he buys from it (Doofinder, nn).

Taking care of the user experience

Even when the user arrives on the website, there are no guarantees. He needs to find the product he wants, add it to his cart and continue shopping.

Increasing invoice value

Most pharmaceutical products have a fairly low price; therefore, obtaining a stable income and a high average ticket is complicated.

The strategy is to increase the value of the products in the buyer's basket and increase customer loyalty.

Measurement and optimization

There are many indicators that can be taken into account, but these are the most important:

- Conversion rate: the percentage of people who come to the e-pharmacy and eventually become customers.
- Average ticket price: how much each customer spends on average on their purchases.
- Cart abandonment rate: it is essential to identify where the most abandonment occurs in the purchase process.
- CAC (customer acquisition cost) and CLV (customer lifetime value)
- Exit pages: those URLs on the site where users usually close the page (a sign that there is a problem with the user experience).
- Return on investment: how profitable marketing actions are.

These are general metrics, but it should be borne in mind that depending on the age of the e-commerce site, more or less attention will need to be paid to certain parameters. Because if it is not measured, it cannot be improved (Doofinder, nn).

2.3. Generic Competitive Strategies

Cost Management

The cost management strategy is aimed at reducing product prices and increasing revenues (Malburg, 2000). Rival companies are often willing to reduce product prices and incur losses in order to remain competitive in the market. Organizations that implement cost leadership will successfully cope with competition, which makes them more resilient in times of crisis, while companies with significant costs are not sustainable in the long run.

Cost management refers to the overall decisions about the price level, price range and the relationship between price and quality. Price is a flexible element subject to frequent and rapid changes (Peter & Donnelly, 2007). Cost management strategy focuses on a tactical approach to pricing and provides instructions on how to respond to changes in competitive prices, when to give discounts, and what payment terms to implement.

An effective cost management strategy is based on the requirement that the company has a large market share (Hyatt, 2001). The ability to set prices is influenced by demand, competition, distribution channels, government regulations, and authorities (Barbosa et al., 2004). The strategy is based on the company's decision to generate lower prices in the market. When a company has lower selling or raw material costs than its competitors, it can choose to offer lower prices or higher quality.

Strategic cost management allows for flexible management of product value. Using this strategy, companies can differentiate themselves from the competition by implementing promotional campaigns, offering customers promotions, discounts, and rebates. Strategic cost management allows companies to safely invest in experimentation and development of new products that differentiate the company from the competition in terms of the number and variety of offerings, as well as the volume of potential users it intends to attract in the future.

Differentiation Strategy

A differentiation strategy is defined as positioning a brand in a unique way that distinguishes it from its competitors. This strategy drives business development by improving the activities of companies that are responsible for creating a unique product. It is implemented in order to make the product unique to consumers, different from the competition, and unique in the market in its category.

Companies must improve their competitive power to successfully implement this strategy (Hyatt, 2001). To begin, managers conduct a detailed analysis of the company's strengths and weaknesses, as well as consumer preferences and current market trends.

A company that intends to stand out from the competition uses a differentiation strategy. Managers must clearly define which products the company will focus on. One of the key prerequisites of this strategy is a clear definition by managers of which products the company will focus on. In fact, the manager produces and develops unique products that are of great value to consumers.

This methodology allows manufacturers to compete with companies whose strategy is based on reducing prices (Bauer & Joe, 2001). They maintain their advantage by continuously working to improve the quality standards of the product and its features, so that it will be more successful than products that are available at lower prices. It is the users who decide whether they want to buy superior products at higher prices or inferior products at more affordable prices.

Focus Strategy

A central aspect of the focus strategy is the exploration of new markets. To successfully implement this strategy, companies need to conduct a detailed analysis of the current market situation and future trends, while at the same time predicting changes in consumer demand. After an in-depth analysis, managers gain insight into the market situation, therefore they are able to develop original products at reasonable prices (David, 2015). The focus strategy allows the pharmaceutical company to manipulate price, by relying either on low costs compared to the competition or on the potential to offer other members of the industry a product that is different from the competition. The focus strategy is related to the differentiation strategy, and by combining them, a perfect marketing strategy is achieved (Richardson & Dennis, 2003). In most companies that apply this strategy, the goal is to promote and strengthen brand loyalty in a narrow circle of users, thereby gaining a monopoly in the market. Such a technique is characteristic of large companies

with a significant circulation of products and a large number of loyal users, who will always remain loyal to their favorite brands. By concentrating on the combination of uniqueness and availability, the focus strategy is the main driver of differentiation. The focus strategy implies balance because it increases value for customers while at the same time helping the company build resistance to competitors.

3. Research, discussion and results

3.1 Methodology

The study consists of two parts, i.e. it has two main objectives. Considering the impact of digital marketing, one of the objectives of this paper is to evaluate and describe the use of social/digital marketing in the pharmaceutical sector in the Republic of North Macedonia and to evaluate the quality of health information used in marketing in the part of online pharmacies' strategies with an emphasis on online sales, The second objective is to collect information on the frequency and attitudes of citizens of the Republic of North Macedonia who purchase medicines online. The benefits and disadvantages of the impact on purchasing medicines online are also discussed.

To achieve the objectives, descriptive analysis and the comparison method will be carried out as research methods. The descriptive method describes statistical data, numerical and graphical methods are used to present the collected data in an understandable and clear manner. That is, the results of the research are presented in tables and graphs, and they are interpreted using the descriptive and comparative methods. The instrument used for data collection was a survey questionnaire.

3.2 Research Problem

The Covid-19 pandemic has dramatically shaped the e-commerce landscape, including in the pharmaceutical sector. Online pharmacies have proven to be a good alternative to traditional pharmacies. Consumers using online pharmacies can easily maintain social distancing and have their medicines delivered to their homes. Due to the pandemic, the demand for online pharmacy services has increased significantly in many countries. It is also likely that this has permanently changed the preferences of some consumers and therefore the demand should remain at a higher level in the future.

After all, over the past two decades, the Internet has become an accepted way to purchase products and services, so buying medicines online is no exception.

Despite its benefits, several patient safety risks are associated with purchasing medicines outside the traditional supply chain. Although thousands of online pharmacies are available, the true size of the market is unknown. Currently, limited data is available on the use of online pharmacies, the number and proportion of people who obtain medicines and other healthcare products online.

In addition, reforms in the overall regulation of pharmaceutical markets are needed to realize the benefits of online pharmacies. Reforms in terms of entry, ownership and price regulation are potentially important factors, for example: online pharmacies offer great potential for more efficient organization of pharmaceutical services and regulation should facilitate this.

Specifically, in the retail market of Macedonian pharmaceutical products, online share is 12.3% and will increase by 5.1% to 14.9% on average by 2027. This section will also present the results of the research conducted through internet searches and from the conducted survey questionnaire.

3.3 Identification of pharmacies that have their own websites and social media profiles

The identification of pharmacies with their own website and social media profiles was carried out through an internet search engine (Google) using the following keywords: pharmacy, pharmacies in the Republic of North Macedonia, pharmacies in Macedonia, pharmacy Macedonia.

According to the data available on the website of the Central Register of Medicines (nn), 1172 active pharmacies have been identified in the Republic of North Macedonia. If we compare it with the results of the research conducted by Pop-Nikolov et al. (2020), in the period November 2019 – April 2020 the number of pharmacies compared to that period, today that number has increased.

Online pharmacies also operate through the "Find a Pharmacy" application. This is the third hackathon "Open Data Hackathon" organized by the Metamorphosis Foundation within the framework of the USAID

Civic Participation Project, held in March 2022. The goal of the hackathon was to develop a web/mobile application that enables visualization, interactive display or digitization of the processes for filling and updating publicly available databases.

It is interesting that some of the pharmacies did not have an official website, but only a social media profile. A list of some of the pharmacies with active websites will be shown in the appendix (Table 3).

Table 3. List of active websites of some pharmacies in the Republic of North Macedonia

Website	Pharmacy name
https://aptekieuropfarm.com.mk/	Europfarm
http://www.remedika.com.mk/apteka-danea-farm/	Danea pharm
https://24apteka.mk/	24h pharmacy
https://zmc.mk/apteka/ -	Fila pharmacy
https://www.clubeconomy.com.mk/sarafarm	Sara pharm
https://betty.mk/	Betty pharmacy
http://bilnaapteka.com.mk/	Herbal pharmacy
http://viafarm.mk/	Via pharm
http://pluspharma.mk/apteki/	Plus pharma
https://viola.mk	Viola
https://www.zegin.com.mk/mk/zegin	Zegin pharmacy
https://aptekibruno.mk/	Bruno pharmacy
https://alkaloid.com.mk/mk/botanical-pharmacy-biljana-lazareska-mk	Herbal pharmacy by Alkaloid
https://novamed.mk/	Novamed - sales company, importer and distributor

Source: (author)

3.4. Evaluation of the content presented on the websites of pharmacies in the Republic of North Macedonia

When researching active websites, the types of content on them were also analyzed, that is, the type of information presented to end users and the sources of information. In addition to the official websites, the data was also extracted from the profiles on the social networks Facebook and Instagram, with some of the pharmacies being present online only there.

According to the analysis and results in Table 4, the most frequently presented information on the home page of pharmacy websites is:

- Contact (contact information – address, phone, email, social media);
- About us (information related to the pharmacy and its business, mission and vision);
- Products (information about the product portfolio and new products on the market, including types of brands);
- Promotions and actions (information about products at promotional and action prices)
- Newsletter - (information related to consumer health);
- News - (news and advice on the treatment of certain health conditions);
- Pharmacies - (information on the number of pharmacies in the chain);
- Pharmacy locator - (map of pharmacies and their exact location)

3.5. The attitudes of citizens of the Republic of North Macedonia who purchase medicines over the Internet

This section presents the results of the conducted survey questionnaire. That is, information on the frequency and attitudes of citizens of the Republic of North Macedonia who purchase medicines over the Internet.

The complete sample of the survey consisted of a total of 200 participants from different cities and villages in the Republic of North Macedonia, of which 105 fully responded to the questionnaire. The survey

questionnaires were anonymous and conducted electronically, and the respondents were informed about the objectives of the survey. This is a survey that can serve as a basis for conducting further in-depth research on a representative sample of respondents and drawing more relevant conclusions.

Table 5 provides information on the demographic characteristics of the total number of respondents (N=105).

FEATURES		N	%
Gender	Men	13	12,38
	Women	92	87,62
Age	to 25	2	1,9
	26-30	18	17,1
	31-40	43	40,95
	41-50	28	26,67
	51-60	11	10,48
	above 61	3	2,86
Degree of education	Secondary	40	38,1
	Higher	47	44,76
	Master of Science	17	16,19
	PhD	1	0,95
Area	Urban	82	78,1
	Rural	23	21,9

Source: (author)

Of the total of 105 respondents, most were women (87.62% (n=92) over 31 years old, mostly with higher education (44.76%), living in an urban area (78.1%). (Table 5).

Table 6: Characteristics of respondents regarding health status and internet use (n=105)

FEATURES		N	%
Chronic Disease	Yes	39	37,14
	No	92	62,86
Using the Internet	Daily	84	80
	Weekly	21	20
	Never	0	/
Buying Online	Regularly	17	16,19
	Sometimes	47	44,76

	Never	41	39,05
Knowledge about medicines on the Internet	Yes	75	71,43
	No	30	28,57
Buying Medicines Online	Yes	17	16,19
	No	88	83,81
The most appropriate source of medicines	traditional pharmacies	92	87,62
	Internet - pharmacies	13	12,38

Source:(author)

According to the results in Table 6, 75 (71.43%) of the respondents were aware that medicines can be purchased online, while only 17 (16.19%) had used the Internet at least once to purchase medicines. Based on these results, the attitude towards online purchasing of medicines can be explained by the factor of general online purchasing behavior, which is determined by the time spent on the Internet, which has a strong correspondence with age. That is, the probability that the number of citizens who buy medicines online will increase in the future is present, given that 80% use the Internet daily, and at least once they have bought a product online 60.65 (17 regularly, and 47 respondents sometimes). Moreover, respondents with chronic diseases were 37.14% who still prefer a physical pharmacy for retail sales (87.62%).

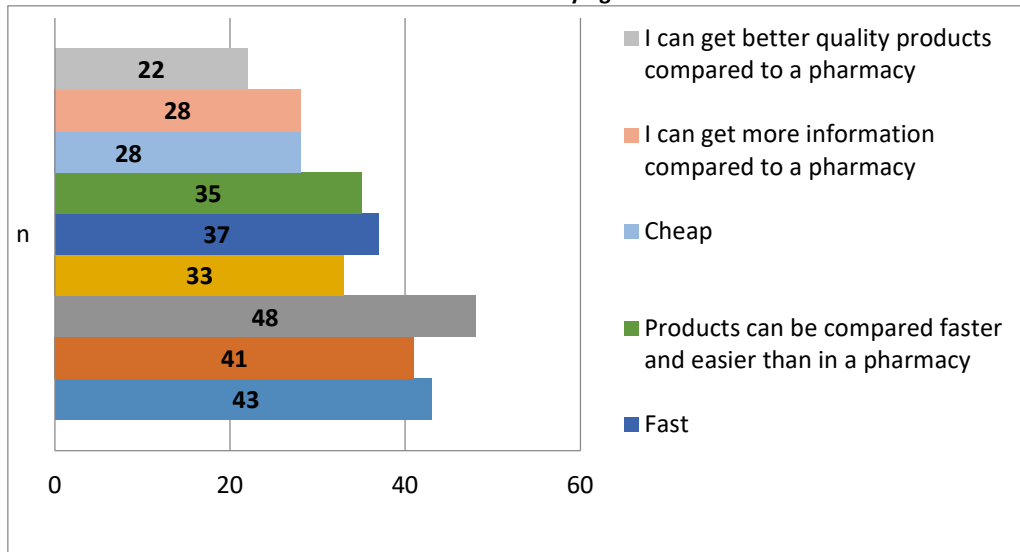
Table 7 further shows the results on the potential benefits of purchasing medicines online.

Statements	N	%
a. Convenient	43	40,95
b. People who cannot get to a pharmacy can buy products online	41	39,05
c. I can buy medicines after business hours	48	45,71
d. I can access products that are otherwise unavailable to me	33	31,43
e. Fast	37	35,24
f. Products can be compared faster and easier than in a pharmacy	35	33,33
h. Cheap	28	26,67
h. I can get more information compared to a pharmacy	28	26,67
i. I can get products of better quality compared to a pharmacy	22	20,95

Source: (author)

A comparative evaluation of the potential benefits and disadvantages of online drugs purchasing shows that there are several factors that positively influence respondents' attitude towards online drug purchasing (e.g., convenience, for individuals who cannot get to a pharmacy they can purchase products, the possibility of purchasing drugs after business hours) (Table 7 and Figure 1).

Chart 1: Potential benefits of buying medicines online



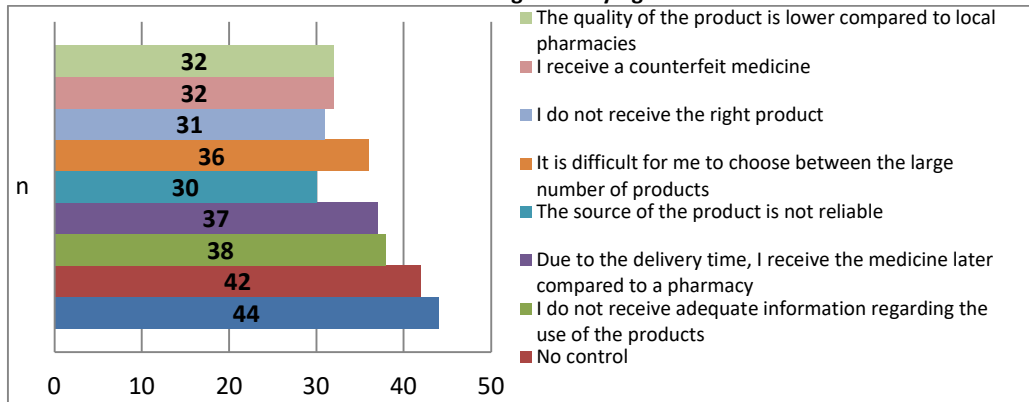
Source: (author)

Table 8: Potential disadvantages from purchasing medicines online

Statement	n	%
a. It is easier to abuse the drugs	44	41,9
b. There is no control, so I can get products that	42	22,9
c. I don't get proper information about the use of the products	38	36,2
d. Due to the delivery time, I get the medicine later compared to a pharmacy	37	35,2
e. The source of the product is not reliable	30	28,6
f. It is difficult for me to choose between the large number of products	36	34,3
g. I don't get the right product	31	29,5
h. I get a counterfeit medicine	32	30,5
i. The quality of the product is lower compared to local pharmacies	32	30,5

Source: (author)

Despite the potential benefits of purchasing medicines online, certain disadvantages should also be highlighted. The results in Table 8 and Figure 2 show that respondents highlight the possibility of easier abuse of referrals, including the purchase of medicines they do not need or that will worsen their condition given the lack of control, among the risks and disadvantages of purchasing medicines online.

Chart 2: Potential disadvantages of buying medicines online

Source: (author)

Conclusions

Many patients will buy medicines online in the future. In fact, those who use the Internet and buy goods online will be more likely to buy medicines online. Furthermore, youth and education will determine the behavior of buying medicines. This conclusion was further strengthened by the results of the conducted research. Overall, the results confirm that the use of the Internet for buying medicines is present. Despite the weak, but still significant tendency towards rejecting online pharmacies was identified, a reasonable number of patients planned to buy medicines online in the future.

Based on the literature review and the results of the conducted research, it is difficult to profile consumers who turn to the online pharmacy market because users are likely to be as diverse as the treatments they seek. However, after evaluating the potential attitude towards buying medicines online, we came to the conclusion that respondents who use the Internet more often to buy online will be more likely to buy medicines online. Furthermore, age and education will have additional importance in determining drug purchasing behavior.

Currently, there is an increased risk of patients purchasing products from illegal sites as they dominate the global online pharmacy market. Consequently, improved patient-provider communication and promotion campaigns are needed to inform the public about the safe use of online pharmacies, as these initiatives can directly prevent threats to patient safety. Therefore, future research should focus on investigating the adverse effects resulting from drugs purchased online.

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