Research on the Problems and Countermeasures of Development of Medicine E-commerce

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Abstract: Nowadays, we live in a society of information explosion. All walks of life make full use of their information technology to exploit the market, including the pharmaceutical industry. This way plays an important role in promoting our national economy. Therefore, it is necessary to carry out an in-depth research on it. This paper first introduced the concept of Medicine E-commerce, domestic and foreign medicine e-commerce development situation. With the reference of related knowledge of current rules, regulations and logistics construction, we can find out some problems of this new model in developing progress and then have an analysis. Combined with the general trend of the development at home and abroad, we put forward targeted solutions and countermeasures, hoping to promote this new development model smoothly and vigorously.

Introduction

With the vigorous development of society, various medical problems appears. Medical drugs as an important aspect of people's livelihood has been a great concern. E-commerce break through the traditional flow dilemma with its unique advantages, expand the marketing network and enhance the business efficiency\textsuperscript{[1]}. At present, China's e-commerce service industry has been developing for several decades, and the scale has been very large, especially in recent years, new service formats emerge in endless stream and the market scale keeps expanding steadily.

Medical e-commerce refers to medical institutions, pharmaceutical manufacturers, agents, distributors, pharmaceutical companies, pharmaceutical information providers, third-party institutions to trade on drugs, health care products, equipment and other commodity transactions except for services of various business activities of medical advice for the purpose of making profits with the help of the Internet and mobile Internet. It includes B2B and B2C e-commerce, excluding C2C, that is, online wholesale and retail at the core of medical and pharmaceutical related products\textsuperscript{[2]}. However, this new model of development of pharmaceutical industry is still immature\textsuperscript{[3]}. Medical e-commerce developed rapidly, so it had a lot of problems in new situation. Through literature research and quantitative analysis, this paper analyzed the new challenges and opportunities and the current situation at home and abroad, medical electricity supplier and its development trend, from which, to find out the problems they encountered, and to put forward the following development suggestions.

Development Status of Domestic Medicine E-commerce

Market proportions: large number of participants of medicine e-commerce; fierce market competition\textsuperscript{[4]}

In 2005, Beijing Wei pharmacy got the first medicine e-commerce license. As of 2016, number of companies who have got the trading qualification certificate increase to 23, online pharmacies increased to 10 in 6 years. Therefore, the numbers show that Chinese medicine e-commerce developed slowly. The first network marketing platform in China was established and start to trade in June. On September 2011, happy people online pharmacies monthly sales exceeded 4 million
yuan, which became the highest monthly sales of pharmaceutical business and a benchmark of the industry. Since then, the development of the industry has entered a period of rapid development. As of July 2015, the number of enterprises that obtained the qualification of medical online trading in China was 442, and online pharmacies was 329. At this stage, the number of online trading certificate enterprises and online pharmacies in China has been increasing. After the initial rapid growth, the growth rate has slowed down at this period. At present, there are many participants in the industry, and the market competition is becoming more and more fierce.

![Graph](image)

Table 1. Number of online pharmacies in China in 2009-2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Online Pharmacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>200</td>
</tr>
<tr>
<td>2011</td>
<td>300</td>
</tr>
<tr>
<td>2012</td>
<td>400</td>
</tr>
<tr>
<td>2013</td>
<td>500</td>
</tr>
<tr>
<td>2014</td>
<td>600</td>
</tr>
<tr>
<td>2015</td>
<td>700</td>
</tr>
</tbody>
</table>

Regional pattern: Guangdong medicine e-commerce number ranks first in the country, with superior advantages, followed by Zhejiang, Shandong, Jiangsu, Hebei, Beijing, Shanghai and other cities

![Map](image)

Table 2. China online medical provider qualification distribution.

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Online Pharmacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangdong</td>
<td>200</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>150</td>
</tr>
<tr>
<td>Shandong</td>
<td>100</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>50</td>
</tr>
<tr>
<td>Hebei</td>
<td>25</td>
</tr>
<tr>
<td>Beijing</td>
<td>20</td>
</tr>
<tr>
<td>Shanghai</td>
<td>15</td>
</tr>
</tbody>
</table>

Market pattern: B2B is China's pharmaceutical e-commerce supplier trading body, and affected by the state regulation greatly[5]

Chinese pharmaceutical business of B2B business reached its peak in 2009, sales exceeded one hundred billion. Subsequently, the bidding platform is built, the government formally involved in the development of B2B business, which lead the benefits chain of pharmaceutical companies of B2B business (production enterprises - Enterprises - medical institutions) be cut off. The market development is limited to a non mainstream pharmaceutical market (small retail pharmacies, non public medical institutions). B2C market scale declined. China's pharmaceutical business of B2C pattern market size from the beginning of 2009 was in explosive growth. The growth rate in 2012 gradually slowed down, and showed a steady growth trend. In 2015, the scale of the medicine e-commerce of B2C pattern market close to 15 billion yuan.
## Development Status of Foreign Medicine E-commerce

### Development status of American medicine e-commerce

First, American pharmaceutical giants are generally developed by chain pharmacies that own physical stores\(^6\). If they set up shops online, their network marketing platform is an extension of the physical stores, which is not only with a high professional quality, but also in a larger scale. They can make full use of the country's developed information technology, so its size is far more than China. Secondly, in view of the United States' pharmaceutical e-commerce services, large pharmacies in the country will develop their own online sales platform, which will not only promote sales, that is, promote the circulation of drugs, but also enhance the competitiveness and vitality of enterprises; in this process, they not only carry out drug sales service, but also provide services according to the different needs of different consumers, such as disease consultation, prescription configuration and other diversified services, which not only meet the needs of more consumers. More importantly, it promotes the industry to develop in a healthy and sustainable way. The success of positive measures not only due to the major stores, but also depends on the government's crackdown measures. The government has closely monitored the sale of counterfeit drugs online, which created a favorable environment for the development of medicine e-commerce.

### Development status of UK medicine e-commerce

In addition to the United States, Europe has also developed advanced medicine e-commerce, the UK is one of the best examples. Britain's online sales model has been greatly improved, not only because of its unique policy advantages, but also because of the country's well-developed information technology. In recent years, online shopping has been sweeping the world at a rapid pace, bringing huge impacts on the traditional real economy. Take the UK as an example, according to relevant authoritative data statistics, the share of online shopping in UK accounted for 1/10 of the total, far exceeding the rest of the world, which means that the country has a great potential to develop. The pharmaceutical e-commerce as a small branch of e-commerce has attracted the attention of the government, and the government has also taken a series of measures to support the industry. It helps the popularity of the network, so that more people can realize online shopping. Besides, the government make strict supervision and regulation measures for creating a better developing environment.

## Problems of Medicine E-commerce Development

### The conflict between hospital administration and state system

In China's pharmaceutical industry policy system and institutional constraints, it is difficult to achieve online sales of prescription drugs over a long period of time. In the past,
"drug-maintaining-medicine" is already an open secret in the medical industry. Many pharmaceutical retail pharmacies are usually mastered by the hospital. Driven by interest, hospitals and doctors try their best to prevent the outflow of prescriptions, so as to avoid corresponding loss of interests. At the same time, health insurance coverage has not yet extended to the pharmaceutical e-commerce industry. Patients who buy drugs on offline, such as hospital are unable to enjoy the reimbursement offered by "new rural cooperative medical service", "medical insurance" and so on. While buying medicine online but only take all their own money, which often make the patient to give up purchasing medicines online in consideration of maximization of their benefits. China's "prescription management method" clearly prohibit the behavior of that hospital to prevent the outflow of prescription, and regulate the specific issue of the prescription process clearly. However, the ordinance is not well implemented. The violations still occur in the hospital. For the medicine e-commerce industry, China's current lack of systematic and comprehensive system of its constraints, which led to the emergence of multiple links in the industry chaos, and cannot be a good guarantee of the interests of stakeholders.

**Immature professional pharmaceutical logistics network**

In view of China's restrictions on drug distribution, many third-party logistics is difficult to obtain the qualifications of medical distribution. The relevant regulations “in the quality control regulations for pharmaceutical operations” strictly specify the required bills for drug collection and preservation. Because the drug variety, some fragile drugs need special protection, some require cold chain distribution. Drug distribution system in all sorts of high standards, high requirements, even the industry's leading logistics companies is difficult to obtain the distribution of qualification. Under the circumstance of that unified logistics system of pharmaceutical distribution has not been established, China's medicine e-commerce industry presents some features such as in disorder, dispersion and limited scale. General retail pharmacies have poor capacity to distribute the medicines and its scope range is small, so it is difficult to promote to the online sales model. One of the important reasons for the delay in the development of pharmaceutical logistics in China was that is that the industry’s capital flows and information flows are not well integrated.

**The lack of compound e-commerce talents in pharmaceutical enterprises**

Our country has quite strict system regulation in the medicine information. Each medicine enterprise is difficult to profit from it, so enterprises lack the initiative and enthusiasm of popularizing the online model. However, most companies that have access to online sales and start a pharmaceutical website lack the Internet concept and related professional background, usually focusing on the website drug information release module, without regard to the aesthetic appearance of the site, user experience and interactive community. Many consumers didn’t get good service, so they have to give up this purchase mode. Pharmaceutical marketing module practitioners are divided into marketing module, medical module and empirical module. The first category of marketers have a professional background, but in the field of medicine expertise is lacking. It cannot be a good promotion of academic knowledge; The second type of marketers have a professional background of medicine to promote academic effectively, but it lacks of relevant marketing knowledge; The third type of marketers usually do not have both medical and marketing professional background. Their sales ways is traditional with backward concept. So it is difficult to achieve efficient marketing process. Since the popularization of medicine, the lack of talents has become increasingly prominent, many colleges and universities have not opened relevant professional courses, which also lead to a shortage of complex talents. Correspondingly, it is difficult to meet the current demand for the development of medicine e-commerce.

**Dependence of consumers on traditional routes**

There are many patients who need to buy drugs do not know the B2C e-commerce model. The group that can acquire and accept a large amount of network information shows the characteristics of young and highly educated. However, the groups that need to purchase drugs are usually elderly. Relevant survey shows: from the view of age, the netizens in the young and middle groups are more
than seventy percent; from the academic point of view, compared with non-users groups, netizens education standard are significantly higher. Therefore, the development of medicine e-commerce industry shows two types of constraints: First, low education of non-Internet users usually seek offline purchase way. They are less receptive for online sales and other new things; Second, the elderly as a consumer of the main group, have less chance to accept the network information, they are more difficult to think of e-commerce model when they want to purchase medicines\textsuperscript{[10]}

**Promotion of medicine e-commerce**

As the recent Wei Zexi incident, the promotion model of the medicine industry on the network is obviously in chaos and with high degree of deception. After the incident broke out, the pharmaceutical e-commerce industry will undoubtedly be affected, so that people lose confidence in the promotion of the pharmaceutical on the network, and to some extent, make people be rejected. If you search Baidu for a variety of diseases’ "new therapy" "latest technology" "national patent", false advertising are abound. Of course, the institutions that provide these magical therapies are called "qualified" without exception. They have legal qualifications for cheating.

What has been done must leave traces, and I believe that even if someone controls the information portal, it is impossible for them to erase all the evidence. Ms. Xi Qiao once commented: Baidu commanded the entrance of the information age to ordinary people, yet the signs were turn to this evil and deceive world. It makes people lose confidence in the Internet world and lose the respect for technology. The use of this era of the most advanced knowledge, access to information when the fear. Exacerbated the possession of information and even intellectual inequality. This evil for the disadvantaged groups over the years, is the deepest evil. In this age, people are fear of using the most advanced knowledge when they access to information. This exacerbated the possession of information and even intellectual inequality. This hurt for the disadvantaged groups over the years, is the deepest evil. The problem of medicine promotion is still grim.

**Medicine E-commerce Problem Solving Program**

**Standardize the prescription outflow system and strengthen the legal system construction**

First of all, resolutely maintain the circulation of prescription, and promote the coverage of medical insurance extended to the pharmaceutical e-commerce industry. The practice of long-term prevention of prescription outflow of hospitals conflicts with the national policy system, and the reform of the policy should go to every corner of the pharmaceutical industry, and be guided by the government. To gradually promote the prescription outflow system; Secondly, establish a scientific and perfect system to regulate the development of the pharmaceutical e-commerce industry\textsuperscript{[11]}. For example, to implement the website credit rating and network real name system and other measures, which can increase the transparency of information on the network, strengthen the supervision of the drug website. So as to effectively reduce the occurrence of criminal behavior, purify network environment, enhance the trust of the people for the pharmaceutical e-commerce.

**Vigorously develop the third party logistics**

Third party logistics occupies half of the current logistics mode in China. Many ordinary pharmaceutical enterprises focus on the promotion and sale of drugs. In order to achieve specialization, they outsource the drug distribution to the third party logistics. The third party logistics has a large information network, and it can quickly connect suppliers with consumers. The delivery process is professional and efficient. At the same time, the lack of norms, the system of distribution processes and related standards are important reasons for the current medical logistics chaos. The government and the pharmaceutical sector should improve the system to drug product name, packaging and coding and other strict rules, so as to enhance the accuracy and professionalism of drug distribution\textsuperscript{[12]}.
Strengthen the construction of infrastructure and improve the mode of personnel training in parallel

Pharmaceutical enterprises should actively promote online sales model, establish their own medical e-commerce website and supporting facilities. The medical and commercial system should be integrated with the release of drug information, marketing channels and after-sales service and other procurement process of multiple functions, broaden the sales channels. To value consumers’ demands and provide them with better services. Only in this way, we can obtain greater benefits. Relevant data show that: many domestic pharmaceutical e-commerce enterprises do not attach importance to website construction. They do not have the user interface design, product managers and other positions of professionals. Besides, platform product promotion and marketing ability are weak. We should learn from foreign medical and electrical business development experience. China's medical and electrical companies should use internal and external combination of personnel training model, access to more professionals, strengthen the site construction, enhance the strength of enterprises, as well as establish a good image of the medical business brand.

Providing professional services

At present, the pharmaceutical industry has embarked on the B2C e-commerce model, but also should adhere to the original intention of enterprise development for providing consumers with professional medical services. First of all, we should set up professional marketing, customer service and other personnel for consumers to guide the process of self-help drugs, and provide medical advisory services, and strive to promote their e-commerce knowledge and business services. So that we can enhance consumer confidence and connections. Secondly, we should make use of the membership system to enhance the users’ loyalty, and pay attention to the construction of the website community. To strengthen communications with consumers and actively integrate all kinds of resources of online and offline. What’s more, to value and help consumers achieve their desire for disease prevention, treatment and health care.

In conclusion, with the rapid progress of the domestic economy and the gradual maturity of the medical insurance and social security system, the policy restrictions on the pharmaceutical industry are relatively relaxed, which promote the overall development of the industry. There are many constraints in the promotion of pharmaceutical business. The government and enterprises should have the courage to overcome difficulties with the foresight and analysis of the internal and external reasons. At the same time, to solve problems with comprehensive views for the purpose of maintaining the pharmaceutical business development. Through the study of the current situation and trends of the medical e-commerce, we find the current development resistance, and give our own development proposals.

References


