Legal Measures to Curb Fraudulent Online Pharmacies in COVID-19 Period

Fatimah Abdulraheem Ali Abo Thahab

*Al-Mustaqbal University College,
Hillah, Babil, Iraq*

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Abstract: In this paper, we will explain the problem of Fraudulent Online Pharmacies in the period of the spread of the Covid-19 virus, the fraudulent use of Email spam to sell fake and damaged medicines and medical products. We will explain the economic and health damage caused by this crime and the legal measures to deter fraudsters.

Keywords: Online pharmacies, Email spam, COVID-19, online pharmacy laws.

Introduction

After the spread of virus Covid-19 in all countries of the world at the beginning of the year 2020 AD. People's need for the internet has increased dramatically in this period. The tremendous speed of the Internet through optical cable and wireless communication technologies supporting the use of the peoples of the world for Internet service in the period of Covid-19. [1] [9]

The development of deep learning algorithms, social networks, search engines, e-commerce and Security of databases have supported people's use of the Internet during this period. [3] [4] [8]. As well as the development of the Internet of things in education, agricultural technologies, the medical field and early detection of diseases. [7] [17] [18]

All of these areas are supported by technologies to understand people's daily needs when they use the Internet. [2]

In addition, governments use many Internet technologies, for example, the use of traffic police to detect drivers' fatigue, for the purpose of reducing traffic accidents.[5][6]

An online pharmacy is a pharmacy that promotes medical products on the Internet and sends orders to customers via mail or shipping companies, and payment is made via bank cards and bank transfers. [10]

Online pharmacy

As we mentioned before, an online pharmacy is a pharmacy, companies or individuals that promotes medical products on the Internet and sends orders to customers via mail or shipping companies, and payment is made via bank cards and bank transfers. Online pharmacies include pharmacies in the same country of the consumer licensed in the same country of origin and pharmacies outside the country of the consumer.

The third type is illegal or unethical internet pharmacies. The web page for an illegal pharmacy may contain lies about its home country, procedures, or certifications. The "pharmacy" may send outdated (expired shelf life) or counterfeit medications and may not follow standard procedural safeguards. [10]

Counterfeit online pharmacy and illegal has spread massively in the Covid-19 period. Fake online pharmacies have sold large quantities of masks and sterilization alcohol that are unhealthy and ineffective to reduce Covid-19 infections. These fake online pharmacies have used email spam to send their advertisements and promote fake medical items. [11]

Online pharmacies & E-mail spam

When analyzing a dataset of email users. [12].The large quantities of messages contained in the email for each user. As 90% of these messages are spam, unwanted and fraudulent messages. The majority of these messages are for fraudulent online pharmacies. [11] [14]

Economic and health damage to fraudulent online pharmacies

Fake online pharmacies have a direct impact on individuals, governments and companies. The first effect is on individuals, as individuals are exposed to fraud and theft and the purchase of drugs harmful to health and health supplies that do not protect against infectious diseases.

As for the second impact on governments, it is how to combat this crime and the work of the security services to eliminate this type of criminals, in addition to the economic cost that the government bears to eliminate this type of crime.

The third effect that medical supplies companies bear is the impersonation of the company's commercial name and address by criminals, and the marketing of counterfeit medical products in the names of companies. Which affects the company with the quality of its medical products. In addition to the fictitious persons that companies that market medical products may deal with directly.

The framework of Operation Pangea X, which is the largest design and implementation process, and the largest implementation process, which is the largest sale of medical devices in a diversified form on the Internet, around 400 people in the world have been arrested and $ 51 million in potentially harmful health drugs seized from the United States of America. Medicines and counterfeits around the world (25 million drugs). This process also led to the opening of 1 058 investigations and the closure of 3584 websites, and more than 3000 advertisements promoting illegal pharmaceutical products. [13]

Legal countermeasures

To reduce this crime, the laws of the countries of the world are divided into two parts. The first section is legal legislation targeting e-mail spam. The countries of the Middle East and North Africa consider the email spam is a one of computer and internet crime. [16]

The European Union has European Union Directive on Privacy and Electronic Communications. The Canada has Fighting Internet and Wireless Spam law. The Australia has The Spam Act 2003. The United States has CAN-SPAM Act. [11]

The second section is legal legislation targeting fraudulent Internet pharmacies.Table1. [10] [15]

Countries	Online pharmacy laws
USA	21 USC section 844 21 USC, Section 952 21 USC, Section 844 21 USC, Section 301 21 USC sections 331& 355
Bulgaria	All Bulgarian online pharmacies must be registered with the Bulgarian Drug Agency (BDA) and subject to its laws
Pakistan	the Drug Regulatory Authority of Pakistan Act passed In 2015
UK	In 2008, the Royal Pharmaceutical Society of Great Britain (RPSGB) introduced a green cross logo to help identify accredited online pharmacies (from 2010 the internet pharmacy logo scheme is run by the GPhC)
Iraq	Iraq has not enacted a new law and relies on the traditional law (Law of Practicing the Profession of Pharmacy No. 40 of 1970
India	While there are no laws specifically targeting online pharmacies in India, various laws govern online pharmacies indirectly. The Drugs and Cosmetics Act (1940) and the Drugs and Cosmetics Rules (1945)

Table1: online pharmacy laws

As mentioned in Table1. Some countries have enacted laws for pharmacies on the Internet. But most countries of the world do not have a law on online pharmacies. An example of this is as is the case in the countries of India and the Republic of Iraq where traditional laws are applied.

Conclusion & Future work

In this paper we describe the ways in which Fraudulent online pharmacies operate. And how to use e-mail spam to promote and sell its counterfeit and spoofed goods during the outbreak of the Covid-19 virus. We also explained the material losses to individuals, companies, and states, and the laws enacted by states to reduce these crimes.

Future work we suggest that technology be developed to reduce email spam. All countries of the world must legislate the law of online pharmacies to prevent the sale of medicines and medical supplies.

References

[1] Maytham N Meqdad, Hasan Sh Majdi. Enabling Techniques for 10 Gbps Long-Haul Transmission in Non-Coherent OCDMA Systems. IEEE. 2018 9th International Symposium on Telecommunications (IST). 978-1-5386-8274-6.

[2] Maytham N Meqdad, Fardin Abdali-Mohammadi, seifedine kadry. Recognizing emotional state of user based on learning method and conceptual memories. TELKOMNIKA. 2020:18(6). DOI: 10.12928/telkomnika.v18i6.16756.

[3] Maytham N Meqdad, Rawya Al-Akam, seifedine kadry. New Prediction Method for Data Spreading in Social Networks Based on Machine Learning Algorithm. TELKOMNIKA. 2020:18(6). DOI: 10.12928/telkomnika.v18i6.16300.

[4] Kaushik Sekaran, P Chandana, J Rethna Virgil Jeny, Maytham N Meqdad, Seifedine Kadry. Design of optimal search engine using text summarization through artificial intelligence techniques. TELKOMNIKA. 2020:18(3). 1269-1275. DOI:10.12928/TELKOMNIKA.v18i3.14028

[5] B Vijayalaxmi, Kaushik Sekaran, N Neelima, P Chandana, Maytham N Meqdad, Seifedine Kadry. Implementation of face and eye detection on DM6437 board using simulink model. Bulletin of Electrical Engineering and Informatics. Vol.9, No.2, April2020, pp. 785~791ISSN: 2302-9285, DOI: 10.11591/eei.v9i2.1703.

[6] B Vijayalaxmi, Chavali Anuradha, Kaushik Sekaran, Maytham N Meqdad, Seifedine Kadry. Image processing based eye detection methods a theoretical review. Bulletin of Electrical Engineering and InformaticsVol.9, No.3, June 2020, pp. 1189~1197 ISSN: 2302-9285, DOI: 10.11591/eei.v9i3.1783

[7] Sekaran Kaushik, Meqdad Maytham N, Kumar Pardeep, Rajan Soundar, Kadry Seifedine. Smart agriculture management system using Internet of things. TELKOMNIKA. 2020;18(3):1275-1284. DOI:10.12928/TELKOMNIKA.v18i3.14029.

[8] Maytham N Meqdad, Mustafa Habeeb Obaid Al Imari. US Department of Agriculture and Rural Development Dataset in MySQL Database Security:Using Sisense Tool. International Research Journal of Engineering and Technology (IRJET). Volume: 07 Issue: 08. pp 3456- 3462.

[9] AL-Behadili Hasanain, Mohsin Almaliki, Saddam AlWane. A Ray Tracing Model for Wireless Communications. International Association of Online Engineering. Vol. 13, No. 11, 2019. Pp 245-251

[10] "https://en.wikipedia.org/wiki/Online_pharmacy". 25 September 2020.

[11] Mustafa Habeeb Obaid Al Imari, Thamer Ramadhan Ameen. Impact of E-mail Spam on the Economy and Legal countermeasures: Using SocNetV Analysis Tool. International Research Journal of Engineering and Technology (IRJET). Volume: 07 Issue: 09 | Sep 2020

[12] " https://snap.stanford.edu/data/email-EuAll.html". 25 September 2020.

[13] " https://www.interpol.int/ar/1/1/2017/7". 25 September 2020.

[14] "https://en.wikipedia.org/wiki/Email_spam". 7 September 2020.

[15] " http://wiki.dorar-aliraq.net/iraqilaws/law/4248.html". 25 September 2020.

[16] Ammar Abbas Al-Husseini. Book" Computer and Internet crime". Publisher: Zain Legal 2017.Beirut Lebanon. Book language: Arabic. ISBN: 9786144362877. DDC classification: 345.0268.

[17] Zaid A. F. Alhaboobi, Samar T. Yousif, Aymen R. Shawkat. Intelligent Classroom a Conceptual Model for the Effective Use of Internet of Things Technique. IEEE. 2019 2nd Scientific Conference of Computer Sciences (SCCS), University of Technology – Iraq.

[18] Fardin Abdali-Mohammadi, Maytham N Meqdad, Seifedine Kadry. Development of an IoT-based and cloud-based disease prediction and diagnosis system for healthcare using machine learning algorithms. IAES. December 2020.