

Benchmark for Drug Tracking using GPS

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ABSTRACT

The Internet has revolutionized the way in which ordinary people conduct their everyday business. People can bank pays bills, manage investments, order various products, and obtain information on an infinite number of topics online. It is not surprising that such an innovation would provide a vehicle for the layperson to educate them and guide the direction of their health. Nor is it surprising that the healthcare industry would seize this opportunity to modernize a commonplace function-prescription dispensation. Many internet pharmacies offer overnight shipping, allowing customers to avoid the delay of regular mail. Internet pharmacies can offer privacy that is often lacking in a traditional pharmacy. However, there is need to consider critically the ethical principles in the use of cyber medicine. The development of online pharmacies has prompted regulatory and monitoring actions at the federal, state, and professional organization levels. The sale of online medications in the international system is potentially dangerous and requires international regulation. Here is an overview of online pharmacies, their potential benefits, the organizations involved in regulating these sites, and the major controversies surrounding online pharmacies.

Keywords: Drug Tracking, Online Pharmacies, Laws of Pharmacy, Prescription

I. INTRODUCTION

Internet has evolved into a self-organizing media, capable of multiple interactions within. A large number of consumer products including drugs are being advertised and sold over the Internet. [1] Though the marketing of drugs over the Internet is an inevitable outcome of the booming e-economy, it poses unique ethical, legal and quality challenges - the prime cause being the anarchic structure of the Internet. These challenges are important from the consumer, physician and regulator perspectives.

Amongst the many commercial activities that are now flourishing in this environment are Internet Pharmacies (e-Pharmacies, Cyber Pharmacies), providing a variety of products (e.g. health and beauty products) as well as prescription drugs. Some pharmacies only dispense drugs with a valid prescription, some provide online consultations for prescribing and dispensing medicines, and some dispense medications without a prescription. [2] There are a number of reasons that may lead patients to the use of the internet in search of medical care. It acts as a second opinion or second doctor for desperate patients. Also, it gives insight into patient

problems, as well as the drugs that could cure them. [3] More so, the hospital pharmacy is usually located in hospitals (government-owned or private) and provides in-house pharmaceutical care to patients. Hospital pharmacists are those that function within a hospital pharmacy system and are tasked with the dispensing of prescriptions, the purchase of medicines, and the testing of these medicines (World Health Organization, 1994). In the hospital pharmacy, access to medical records make it easy to influence the selection of drugs based on allergies or previous problems encountered. Subsequently, the power to control the process of going into the acquisition of drugs and other pharmaceutical devices, help in ensuring the supply of premium quality drugs. Furthermore, Hospital pharmacies, which are owned by the government, have little or no problems with financing projects due to backing from the government (El Tayeb, n.d.).

Also, the community pharmacies may not have the permission to dispense certain drugs which may be due to the nature of such drugs and the prices of drugs are not as subsidised as those in hospital pharmacies (Postnikoff, n.d.). The proposed system aims to connect and serve as an intermediary between hospital pharmacies and drug manufacturers, through a platform that allows the order of drugs with the click of a button, and simultaneously keeps track of what drugs have been ordered and in what quantity.

It is an android application for online checking availability of medicines at medical stores in order to get the required need of drug within the double quick time. The current trend of research on online pharmacy, online medicines, medicines identifier. Even now, a day's patient prefers to prescribe medicines from medical stores. Online pharmacy takes more than couple of days for delivery. Therefore, this research is to study and to develop algorithms that will solve the problem for patient

who roam for required drug. Here we are introducing the solution to find availability of that medicine in the nearby shops. It is aimed towards saving the time of searching medicine by visiting nearby shop. Global positioning system (GPS) is used to locate the user and accordingly shows the results.

II. LITERATURE REVIEW

A. Laws of Pharmacy

According to Supreme Court statement, except in emergency cases, doctor cannot consult through phone. As far as India is concerned, there are no dedicated e-health and telemedicine laws in India. There are no well-defined dedicated laws for online pharmacies. The laws applicable are:

- Drug and Cosmetics Act 1940,
- Drugs and Cosmetic Rules 1945,
- Pharmacy Act 1948,
- Indian Medical Act 1956 and
- Laws related to e-commerce are defined under the Information Technology Act, 2000.

B. Role of Prescription

Online pharmacies will promote drug abuse, drug misuse, self-medication, etc. Self-medication is a rampant practice in India, and online sale of drugs would only encourage it.

- Any medication taken without the supervision of doctors may be dangerous and even potentially life-threatening.
- A prescription issued by a doctor cannot be re-used randomly. There is a danger that scheduled drugs can be re-ordered and misused by the consumer.
- The D&C Act 1940, and the D&C Rules 1945 has guidelines on the sale of Schedule H and Schedule X drugs. These can be sold only on prescription, and there are specific rules, including for labeling and bar coding.

Schedule X drugs include narcotics and psychotropic substances. Chances of drug abuse and addiction are higher with the Schedule X category. Schedule X drugs require meticulous storage and dispensing records. The prescription has to be in duplicate and one copy of which is to be retained by the licensed pharmacist for 2 years.

C. Comparison of Local Pharmacy And Online Pharmacy

Price: The prices for medications from an online pharmacy are less because there is no particular production unit, there is no physical store for the medications storage and dispensing, and the company has a large network of retailers to draw from, or a combination of factors.

Convenience: Prescription can be submitted at any time, there is no need to rush to the pharmacy during business hours and do not have to wait in any long lines. However, there are also disadvantages. If it is not the same website every time, one may not be aware of any potential drug interactions, it can be difficult to find someone to answer any specific questions about medications.

Local pharmacies are small independently owned business rather than a pharmacy within one of the large chains and they have staff during regular business hours, and many have an online counterpart as well. The large chains do use locals for a large portion of their workforce.

Pharmacist is responsible for dispensing the right medicines and even counselling a patient about side effects and dosage. In the online space, where the medicines are delivered at the patient's home, there is no possibility of an interaction between a patient and a pharmacist.

D. Measures To Be Taken To Avoid The Misuse Of Online Pharmacy

Before preventing the misuse of online pharmacy, patients should stop the nonmedical use of prescription drugs like stimulants, sedatives or opioid pain relievers. Patients can take steps to ensure that they use prescription medications appropriately by:

- Never change a dosing regimen without first discussing it with the doctor
- Never using another person's prescription, and never giving his or her prescription medications to others.
- Storing prescription stimulants, sedatives, and opioids safely patients should properly discard unused or expired medications

Schedule H and schedule X drugs cannot be sold without prescription because it is easy for local pharmacy stores to verify the authenticity of a prescription, as it contains details like registration number of medical practitioner and name of the hospital and there is no such checking by online stores.

- According to the report of high-level government, the physicians should digitally sign committee since doctor's prescription is mandatory for purchasing drugs, online pharmacies will need to mandatorily display the portal link on their homepage for authenticity verification by patients or customers and the prescriptions.
- In certain countries like United States, England, Sweden, Denmark and Finland have accurate, regular, and systematic plans to use electronic prescription system, and health ministry of these countries was responsible for coordinating and leading the electronic health.
- It is suggested to use experiences and programs of the leading countries to design and develop the electronic prescription systems.

III. PROPOSED SYSTEM

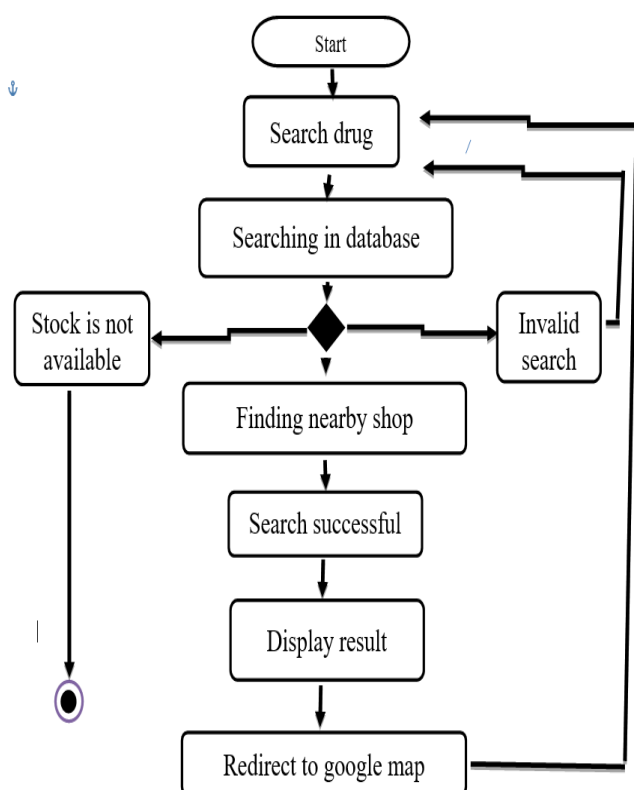


Figure 1. Flowchart for Proposed System

For medicine related work, many online pharmacy stores sell medicine online. In this user/patient have to upload their prescription and have to wait until the product is deliver, which takes at least couple of days and may be more. So, we are improvising above situation and developing an app that find user nearby location using GPS for tracking those Medical stores that have that prescribed medicine available.

GPS is need if we are deal with the locations weather it is nearby location or we find route and many applications using GPS to find different location. That benefits to save more time and efforts. Therefore, we implement GPS for the same reason.

IV. CONCLUSION

Despite the fact that online pharmacy is more subject than nearby pharmacy particularly in remote regions, it ought to be planned to build up standards and direction like transfer of filtered solutions.

Patients ought to know on utilization of doctor prescribed prescriptions. It is great to embrace the plans and projects of driving nations to structure and build up the e-pharmacy framework.

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