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Classifications of Controlled Substances: Insights from 23 Countries

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Abstract

Controlled substances are among the most highly regulated and highly abused medications. The purpose of this study was to describe the classification systems for controlled substances in 23 countries and make comparisons. From this review, recommendations are provided for improving classification systems and their impact on medication use.

Introduction

Prescription and non-prescription drug abuse and overdose is a growing problem in the United States, and is referred to as a public epidemic by the Centers for Disease Control (CDC). Prescription drug overdose death rates have more than tripled since 1990¹. It killed an estimated 37,485 people in 2009 and is the cause of 100 deaths every day in the United States. Every 19 minutes a person dies from a prescription pain killer overdose. The CDC reports that today millions of Americans are addicted to opiates or prescription pain pills and “more than 12 million people reported using prescription painkillers non-medically in 2010—that is, using them without a prescription or for the feeling they cause.”²

The economic costs of prescription drug abuse are substantial; drug and alcohol problems cost the United States an estimated \$276 billion a year.³ Substance abuse results in higher healthcare expenses for injuries and illnesses; lower productivity and performance; an increase in workers’ compensation and disability claims. In 2009, the misuse and abuse of prescription painkillers was responsible for more than 475,000 emergency department visits, which has nearly doubled in five years.⁴

Methods

The World Health Organization (WHO) website was used for identifying controlled substances regulations and the regulatory authorities responsible for medicines in each country. In addition, leaders in the pharmaceutical industry were contacted by email and mail in order to identify information about classification systems for controlled

substances in countries world-wide. Information was gathered, sorted, and translated into English, when applicable. Information for 23 countries was identified. These countries were grouped into regions that had similar socioeconomic characteristics: North American, Western Europe, the Middle East, and Asia.

Findings

NORTH AMERICA

United States

In the United States, there are 5 categories of controlled substances. Schedule 1 drugs, substances, or chemicals are defined as drugs with no current medical use and a high potential for abuse. Such drugs include heroin, marijuana, and ecstasy, among many others.

Schedule 2 drugs, substances, or chemicals are defined as drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. Such drugs include amphetamines, fentanyl, and oxycodone. Schedule 2 drugs allow no refills. A new prescription must be brought into the pharmacy each month. New to this category was the recent rescheduling of hydrocodone (Vicodin) which moved from schedule 4 to schedule 2.

Schedule 3 drugs, substances, or chemicals are defined as drugs with a moderate to low potential for physical and psychological dependence. Some examples are Tylenol with Codeine and Buprenorphine.

Schedule 4 drugs are defined as drugs with a low potential for abuse and a low risk of dependence. Some examples include Xanax (Alprazolam), Soma (Carisoprodol), and Valium (Diazepam).

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Schedule 5 drugs are defined as drugs with lower potential for abuse than schedule 4 and consist of preparations containing limited quantities of certain narcotics. Some drugs include, Lomotil (Diphenoxylate and Atropine) and Phenergan with Codeine (Promethazine with Codeine).

Schedule 3-5 drugs are allowed up to 5 refills and the prescription expires in 6 months.

Canada

In Canada, drugs and associated substances are regulated under the Controlled Drugs and Substances Act (CDSA). There are 8 categories listed as Schedules I to VIII. Schedule I includes the drugs that are commonly thought of as the most “dangerous”, e.g., cocaine and methamphetamine. Schedule II lists cannabis and its derivatives, while Schedule III includes amphetamines and lysergic acid diethylamide (LSD) and schedule IV includes barbiturates.

The Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) is an on-going survey that includes Canadians aged 15 years or older using illicit drugs and alcohol. Prescription opioids are included in Schedule I, and a recent analysis of 2009 CADUMS data revealed that 4.8% of Canadians aged 15 and older reported non-medical prescription opioid use during the past year; 0.4% of Canadians aged 15 and older reported the use of pain relievers to get high during the previous 12 months.⁶

From 2005–2006 to 2010–2011, there was an almost 250% increase in the number of emergency room (ER) visits in Ontario related to narcotics withdrawal, overdose, intoxication, psychosis, harmful use and other related diagnoses.⁷ Rates of ER visits for opioid-related mental and behavioral disorders also increased in Ontario between 2008-2009 and 2010-2011.⁸ Table I depicts ER visits in Ontario by region.

Table I: ER visits in Ontario by region

Region	2008–2009 ER Visits	2010–2011 ER Visits
All of Ontario	2.6 for every 10,000 people	3.7 for every 10,000 people
Northern Ontario only	9.2 for every 10,000 people	22.9 for every 10,000 people
First Nations	12.1 for every 10,000 people	55 for every 10,000 people

While there is no nation-level data on opioid-related mortality rate in Canada, provincial data is available from three jurisdictions: Ontario, Alberta, and British Columbia. In Ontario the Office of the Chief Coroner reported that opioid-related deaths doubled from 1991 to 2004. Another recent study reported that there were 3,271 opioid-related deaths that occurred between 1991 to 2004. In Alberta, deaths attributable to poisoning from narcotics or psychodysleptics (i.e. hallucinogenic drugs) accounted for the second-highest prescription drug-related death rate (3.9 per 100,000) between 2003 to 2006.⁹ The rate of prescription opioid-related overdose deaths in one region of British Columbia was similar to the number of residents killed in motor-vehicle accidents involving alcohol (2-3 per 100,000 persons) in any given year.¹⁰ Between 2005 and 2009, there were 815 deaths related to fentanyl, hydromorphone, morphine, and oxycodone in British Columbia.¹¹

In 2010-2011, 1.5% of Canadian students in grades 6 to 12 reported past-year use of tranquilizers to get high and for non-medical purposes; 2.5% reported such use of sleeping medicine.¹² Among First Nations individuals aged 18 and older living on-reservations in northern First Nations communities across Canada, 5.7% reported past-year use of sedatives or sleeping pills without a prescription in 2008-2010.¹³ In 2010-11 2.2% of Canadian students in grades 6-12 reported the past year use of prescription stimulants for recreational use and not for medical use.¹² There is little data on morbidity and mortality in Canada due to stimulant misuse.

WESTERN EUROPE

Western European countries are part of European Monitoring Centre for Drugs and Drug Addictions (EMCDDA). The following information was provided by the EMCDDA for by each country and drugscience.org.uk, which is an independent scientific committee on drugs.

Norway

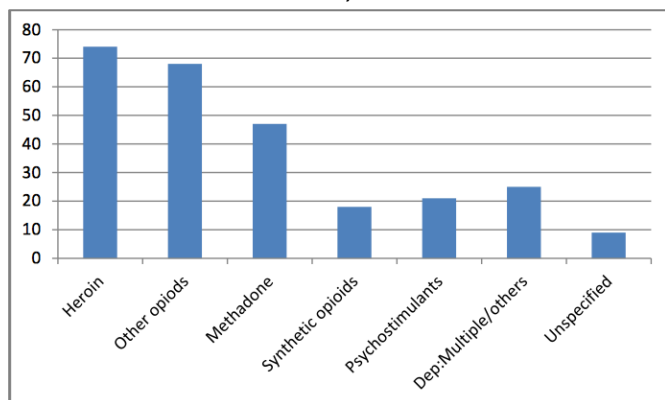
Until recently there was no separate set of laws pertaining only to drugs in Norway. The King was empowered to determine what substances were narcotic drugs. Then The King empowered the Director of Health who made a detailed list of narcotics. On February 14, 2013 new Regulations relating to Narcotics entered into force. Ten groups of substances, seven of them describing cannabinoids, are included on the list of controlled substances.¹⁴

SIRUS and Statistics Norway formed a collaboration to annually survey the national population to measure the use of tobacco/moist snuff, alcohol, drugs, and medicines. The findings on drug use reported use during the last 30 days. A

proportion of 9 per cent reported having used an illegal morphine substance during the past month, 33 per cent cannabis and 42 per cent benzodiazepines. Half of those who reported using benzodiazepines had been prescribed the drug by a doctor. Sixteen per cent reported using stimulants.¹⁴ Norway ranks high on the European statistics for overdoses. As shown in Figure 1, heroin, other opioids, and methadone were the leading causes of drug-related deaths in 2011 in Norway.

Figure 1: Drug-related deaths in 2011 broken down by substance in Norway

Source: SIRUS and Statistics Norway



Denmark

The main Danish law regulating narcotic drugs is the Euphorants Act of 1955. Substances that are defined as Euphorants under the Act are included in 5 lists in an annex to an Executive Order. The annex to the Executive Order no. 749 of 1 July 2008 on euphoriant substances lists 5 schedules, A, B, C, D and E. Schedule A includes substances such as: cannabis, heroin, prepared opium, etc. Schedule B includes substances such as: cocaine, MDMA, amphetamines, and methadone. Schedule C includes substances such as codeine, while schedule D contains barbiturates and schedule E contains tranquillisers.¹⁵

Sweden

The main Swedish law regulating narcotic drugs is the Narcotic Drugs Punishments Act (1968:64). The term "narcotic drugs" is defined in Section 8 of the Narcotic Drugs Punishments Act (1968:64). Under this provision, narcotic drugs are considered to be medicines or substances hazardous to health with addictive properties, or inducing a state of euphoria, which the Government has declared to be 'narcotic drugs' within the meaning of the Act. In Sweden, no distinction is made between narcotic preparations as such and psychotropic substances.¹⁵

Belgium

The list of controlled substances was established by Royal Decree of 31 December 1930 regarding soporific and narcotic drugs and by the Royal Decree of 22 January 1998 regarding certain psychotropic substances. They are both constantly revised in order to stay up to date with new substances. Soporific and narcotic substances include opium, heroin, cocaine, morphine, methadone, cannabis and cannabis resin. Psychotropic substances include amphetamines, hallucinogens, pipradol and MDMA. A directive of April 1998, replaced by that of 16 May 2003, instructed judicial authorities to make a distinction between personal consumption of cannabis derivatives and other drugs, based on the health risks the drug use provoke. This was embedded in the change of law in May 2003 with separate penalties specified for non-problematic use of small amounts of cannabis products.¹⁵

Luxembourg

Three Grand Ducal Decrees of March 1974 cover narcotic drugs (such as cannabis, cocaine, heroin, methadone), psychotropic substances (LSD, MDMA) and toxic substances (amphetamine) respectively.

(<http://www.emcdda.europa.eu/html.cfm/index146601EN.html>)

Slovenia

Controlled substances are classified into three groups:

- Group I: plants and substances which are very dangerous to human health due to the severe consequences which can result from their abuse and which are not used in medicine (heroin, cocaine, opium poppy concentrate, cannabis/THC, PCP, MDMA, MDA, MDE, khat, mescaline, psilocybin, etc);
- Group II: plants and substances considered highly dangerous, due to the severe consequences which can result from their abuse, and which can be used in medicine (cocaine, amphetamine, methamphetamine, opium, morphine, codeine, methadone, buprenorphine, etc.);
- Group III: plants and substances of medium danger, due to the consequences which can result from their abuse, and which can be used in medicine (mostly barbiturate and non-barbiturate hypnotics and anti-epileptics, benzodiazepine anxiolytics and hypnotics, and stimulants and anorectics /arylalkylamin and others/ such as: GHB and 2 C-B).¹⁵

Netherlands

The 'main' drug law in the Netherlands is the Opium Act. Illegal substances are annexed to the Opium Act and divided in two schedules: substances presenting unacceptable risks and other substances: Schedule I, 'drugs presenting unacceptable risks', is subdivided in a, b, and c:

- Ia: including among others opiates, cocaine, cannabis oil;
- Ib: Codeine;
- Ic: amphetamines and LSD.

Schedule II is subdivided in a and b:

- IIa: includes tranquilizers and barbiturates;
- IIb: includes cannabis (without the qualification of unacceptability).

The division in schedules has a real impact in the prosecution of illegal offences: penalties for offences with regard to Schedule II are considerably lower than those for Schedules I.¹⁵

Germany

The Germany Narcotic Act divides the controlled substances into Schedule I, II, and III:

- Schedule I includes: "non-marketable narcotics"; these are illicit narcotics without current evidence-based medical benefit, e.g. heroin and all Ecstasy-type drugs.
- Schedule II includes: "licit narcotic drugs, but not available as such on special prescription", e.g. narcotics which are used commercially for the manufacture of other products, particularly pharmaceuticals. These include, inter alia, delta-9-tetrahydrocannabinol (THC) and dexamphetamine.
- Schedule III includes: "marketable narcotic drugs available on special prescription", these are all narcotic drugs which may be prescribed by physicians, dental surgeons and veterinary surgeons for medical purposes (e.g. opium, morphine and methadone).¹⁶

France

Controlled substances are annexed to the Decree Law of 22 February 1990, included in 4 lists:

- List I: narcotic substances such as heroin, cocaine, cannabis, methadone, opium, etc.;
- List II: substances like codeine, propiram, etc.; (Lists I and II correspond to those in the Single Convention of 1961)

- List III: psychotropic substances of the 1971 Vienna Convention, such as: amphetamines, ecstasy (MDMA), LSD, etc; and
- List IV: substances not controlled at the international level, such as: MBDB, 4-MTA, Ketamine, Nabilone, THC, etc.

Precursors are listed and controlled under Decree Law n°96-1060 of 5 December 1996.¹⁵

Spain

Under Spanish law there is not a specific definition of narcotic drugs or psychotropic substances, nor specific lists or schedules where the controlled drugs are classified. Therefore, judicial authorities refer directly - for the interpretation and application of the laws in accordance with article 2 of law 17/1967 and art. 1 of the Royal Decree 2829/1977 - to the schedules of narcotics drugs and psychotropic substances included, respectively, in the 1961 Single Convention on Narcotics Drugs and in the 1971 Convention on Psychotropic Substances.¹⁵

Portugal

Controlled substances are annexed to the main drug Decree Law 15/93 included in 6 schedules, regularly updated by decree laws.

- List 1 is divided into opiates; coca derivatives; Cannabis and derivatives.
- List 2 is divided into Hallucinogenic; Amphetamines; Barbiturates.
- List 3 contains preparations with controlled substances.
- List 4 tranquilizers and analgesics.
- Lists 5 and 6 contain precursors.

The difference between lists has an impact on the punishment of drug related crimes.¹⁵

Italy

Controlled substances in Italy are classified in six lists attached to the Decree 4 March 1992 and amendments.

- List I includes opiates and cocaine derivatives
- List II cannabis
- List III highly addictive barbiturates
- List IV medical substances
- List V special preparation containing drugs
- List VI stimulants.¹⁵

Austria

All controlled substances as defined by law are listed in eight schedules introduced by three decrees covering respectively:

- narcotics (5 schedules);
- psychotropic substances (1 schedule);
- precursors (2 schedules).

Any substance to be officially designated as a controlled drug must be included in one of the relevant decrees. Following this classification, and with regard to possible sanctions and penalties, a distinction is made according to the nature of the substance when prosecuting drugs offences.¹⁵

United Kingdoms

The Misuse of Drugs Act divides drugs into 5 Schedules and controlled substances into 3 classes (A, B, C):

- Drugs in Schedule 1 have no acknowledged therapeutic use and are the most tightly regulated, while those in the other four Schedules have medical uses and are subject to lesser regulation with those in Schedule 4 and 5 being least regulated. The fifth Schedule applies to low concentration preparations of the drugs which are not for injection.
- Controlled drugs are included in Schedule 2 broken down into 3 classes:
 - Class A being the most dangerous, such as heroin. Methadone
 - Class B, such as amphetamines
 - Class C drugs, such as cannabis and temazepam

Hungary

The list of controlled substances is found in three major laws:

- 4/1980. (VI. 24.) Decree of the Minister of Health and the Minister of Internal Affairs on the production, trafficking, import, export, storage and use of psychotropic substances (including national psychotropic lists). Annex I. lists psychotropic substances that can only be used for scientific purposes; Annexes II.-III.-IV. list substances that can be used for medicinal purposes.
- 1/1968. (V. 12.) Decree of the Minister of Internal Affairs and the Minister of Health on the production, trafficking, import, export, storage and use of narcotic substances (including national lists of narcotic drugs). Annex I lists the narcotic substances contained in the UN Single Convention on Narcotic Drugs (New York, 1961); Annex II lists those substances that are not listed in the Convention but are regarded controlled substances in Hungary; Annex III Lists licit narcotic substances and medicines containing narcotic drugs.

- Government Decree No. 272/2001.(XII.21.) on precursors (including the list of precursors).
- Finally, under s.282/B, an adult encouraging a minor to use a substance that has a narcotic effect but is not classified as a narcotic drug is punishable by up to 3 years' imprisonment.

Poland

The Act of 29 July 2005 on counteracting drug addiction includes two appendices. The first one covers the list of narcotic substances that are divided into following four groups: I-N, II-N, III-N and IV-N. The second one covers the list of psychotropic substances that are divided into following groups: I-P, II-P, III-P and IV-P. All the lists and relevant groups follow the pattern used in international agreements. The previously attached list of precursors has been removed following accession of Poland to the EU. Currently the Act refers directly to the Regulation 273/2004/EC as regards precursors.

Finland

In Finland there are ten classes that classify controlled substances.

Narcotics

- I heroin, cannabis, methadone, morphine, etc.
- II propiram, codeine, etc.
- III preparations containing drugs
- IV drugs in Class I with no medical uses

Psychotropic substances

- I MDA, LSD, MDMA, etc.
- II amphetamines, THC, etc.
- III barbiturates
- IV benzodiazepines etc.

Precursors

- I ephedrine, lysergic acid
- II acetone, piperidine.

MIDDLE EASTIsrael

In Israel there are two major medication categories, those that can be sold in an authorized store, the authorization not being what store but that the medication must be placed at a level where minors cannot reach them, and the second category pharmacy only medications.

The former are GSL (General Sales List medications) and they are sold in small packs, and generally at higher prices than in a pharmacy and are very restricted in number. Examples are

Paracetamol (Acetaminophen), some nose drops and diclofenac gel. The sales of these are very small and 99% of the population does not buy them.

The latter groups are sold only in pharmacies and only a pharmacist can hand out medications. These medications sold in the pharmacy fall into three categories:

- 1 OTC medications
- 2 Prescription only medicines
- 3 Regular medications with reasonable safety profiles (labelled P)
- li Separanda (meaning to be kept apart from other medicines(to reduce mistakes the pharmacist is thus reminded by the place of the medicine that it requires greater attention when selling (Labelled S)
- lii Toxica – those medications with a small therapeutic window requiring extra special attention with dosing and advice (E.G. Digoxin) (Labelled T)
- The Toxica category is also divided into Narcotic (additionally labelled This preparation can cause dependence) and non- narcotic categories
- A prescription renewal for P Medications is required each month and the patient may receive three such prescriptions when visiting the physician
- A prescription for S and non- narcotic T Medications is required each month and the patient may receive three such prescriptions when visiting the physician.
- A prescription for a narcotic can only be written for 10 days unless the physician stipulates why the patient should receive more EG "Patient is not mobile enough to get the medications easily and has no home help". In this case they could receive one month's supply, but never above that amount without a new prescription. The full instructions must be written so the wording " as directed" is not acceptable.
- The physician is encouraged by the pharmacist (pending an incoming law) to write the disease or reason for prescribing the medication particularly if it is a narcotic.
- All prescriptions must be written in Capital Letters or printed.
- Electronic Rx are now quite common so new Rxs can be received without much problem for the patient and thus reducing the number of forgeries.

Medicinal Marijuana is at present distributed on Rx by specialized physicians through specialized dispensaries. This is shortly to be changed to pharmacy only distribution for specially trained pharmacists.

ASIA

Australia

Controlled substances are regulated under the Therapeutic Goods Administration Act (TGA). The nine Schedules are published in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).¹⁷

- Schedule 1 (S1)-Not currently in use
- Schedule 2 (S2) - Pharmacy Medicines
- Schedule 3 (S3) - Pharmacist Only Medicines
- Schedule 4 (S4) - Prescription Only Medicines OR Prescription Animal Remedy
- Schedule 5 (S5)- Caution
- Schedule 6 (S6)-Poison
- Schedule 7 (S7)-Dangerous Poison
- Schedule 8 (S8) - Controlled Drugs
- Schedule 9 (S9)-Prohibited Substance

New Zealand

Controlled Drugs are classified under the Misuse of Drugs Act 1975 into 4 Classes. Drugs that have very high risk and addiction potential are listed in Class A, and high risk in Class B, and moderate risk in Class C. Precursors are included in the fourth Class.

- Class A classification is limited to the most serious drugs requiring severe restrictions. The category has been described by Dr. Bob Boyd, Ministry of Health Chief Advisor, as "reserved for substances that one doesn't want to see in the country at all, and to presume that somebody in possession is either going to harm themselves or somebody else quite severely."¹⁹ Currently thirty-seven substances are listed as Class A in the First Schedule to the Act; these include cocaine, heroin, LSD, phencyclidine (PCP), thalidomide, amphetamine substances (MDA, MMDA) and most recently methamphetamine.¹⁸
- Class B drugs, listed in the Second Schedule to the Act, are divided into three parts. Class B Part 1 (B1) drugs are generally processed substances, including opiates with both therapeutic and abuse potential (e.g. morphine), as well as cannabis preparations (resin and oil as refined and concentrated forms of cannabis have a higher potency than the natural plant. Class B Part 2 drugs are mainly stimulants with less dependence potential than B1 substances; these include amphetamine, ecstasy (MDMA) and methylphenidate (Ritalin). Class B Part 3 includes methadone, pethidine and other drugs commonly used for medical purposes. Part 3 may also list drugs not yet used in New Zealand, but classified internationally.¹⁸

- There are seven categories of Class C drugs listed in the Third Schedule.
 - Class C Part 1 substances commonly used illicitly rather than medically, including cannabis leaf, fruit and seed, and coca leaf.
 - Class C Part 2 substances that can be prescribed for therapeutic purposes but have a moderate abuse potential. The list includes codeine powder, codeine linctus and syrup.
 - Class C Part 3 partially exempted drugs, including pholcodine that have less dependence potential than C2 substances.
 - Class C Part 4 includes barbiturates with medical uses.
 - Class C Part 5 substances that have medical uses and less dependence and abuse potential than C4. These include phenobarbital, barbiturates in combination, diazepam (Valium) and nitrazepam (Mogadon).
 - Class C Part 6 exempted drugs such as codeine and paracetamol.
 - Class C Part 7 controlled drug analogues (substances that have similar structures to controlled drugs); including so-called 'designer drugs' such as amphetamine analogues (MDEA) and pethidine analogues.¹⁸
- Schedule 4 lists precursor substances commonly used as ingredients in the manufacture of illicit substances. Part 1 of the schedule includes ephedrine and pseudoephedrine used in the manufacture of methamphetamine. Part 2 includes sulphuric acid and ethyl ether.¹⁸
- 11. Stimulants (Stimulant Control Law).
- 12. Clinical study drugs (investigational products) (GCP).
- 13. Investigational products for post-marketing clinical trials (GCP).
- 14. Biological products (Article 2, Paragraph 9 of the Law)
- 15. Specified biological products (Article 2, Paragraph 10 of the Law)²⁰

Summary of Findings

From this preliminary collection of 23 countries, it was learned that the range of controlled substance schedules goes from 2 to 15. We do not know which system seems to function the best, which is research that should be conducted next. Whenever there are many different methods to solve a universal problem it means that there is no one best way. It is interesting how many different methods there are for a classification system for one universal problem. The European Country with the most liberal drug law is Portugal, which has 6 classification systems.²¹ In 2001, it was the first European country to officially abolish all criminal penalties for personal possession of drugs.²¹ The question everyone is wondering is could such a liberal system work? Just after 5 years after the decriminalization illegal drug use among teens in Portugal declined and rates of new HIV infections caused by sharing dirty needles dropped, while the number of people seeking treatment for drug addiction more than doubled.²¹ Following decriminalization, Portugal had the lowest rate of lifetime marijuana use in people over 15 in the E.U.: 10%. The most comparable figure in America is in people over 12: 39.8%.²¹ Proportionally, more Americans have used cocaine than Portuguese have used marijuana.²¹

Japan

Drug categories include those that are highly poisonous, which have serious adverse reactions and which are addictive or habit forming. They are classified as follows in related laws such as the Pharmaceutical Affairs Law (the Law) or the Stimulants Control Law²⁰

1. Poisonous substances (Article 44 of the Law).
2. Deleterious substances (Article 44 of the Law).
3. Drugs requiring a prescription (Article 49 of the Law).
4. Habit-forming drugs (Article 50 of the Law).
5. Drugs for specially designated diseases (Article 67- of the Law).
6. Drugs manufactured in pharmacies (Article 22 of the Pharmaceutical Affairs Law)
7. Narcotics (Narcotics and Psychotropics Control Law).
8. Psychotropic drugs (Narcotics and Psychotropics Control Law).
9. Opium and powdered opium (Opium Law).
10. Cannabis (Cannabis Control Law).

The U.S. has long championed a hardline drug policy, supporting only international agreements that enforce drug prohibition and imposing on its citizens some of the world's harshest penalties for drug possession and sales.²¹ Even with the hardline drug policy, America has the highest rates of cocaine and marijuana use in the world.²¹ While most of the E.U. (including Holland) has more liberal drug laws than the U.S., it also has less drug use.²¹

Recommendations

The solution of this problem is the creation of a system that provides hurdles to abusers, but does not add additional barriers to the receipt of scheduled drugs for legitimate users. It was found that there are numerous ways to control abusable substances and it is not clear what the best system is. What is known is that each day 46 people die in this country after overdosing on prescription painkillers.²² Is the American system truly working? In just the past year Tramadol has moved to be a controlled substance and all

hydrocodone products are now narcotic substances. Are tighter regulations in the classification system working? Could the problem not be the system, but rather the doctors not cautiously prescribing these medications? Prescription painkillers are meant for end-of-care life or for short term treatment. The problem may not be the system per say, but instead how America is prescribing these medications. The United States, with about 5 percent of the world's population, is consuming 80 percent of the world's entire oxycodone supply and 99 percent of the world's hydrocodone supply.²²

Here lies the problem, with tighter regulations; the people who are in pain have to suffer because of this epidemic. Bob Twillman of the American Academy of Pain Management suggests that, "If prescription drug abuse is an epidemic, then I think chronic pain may be a pandemic, because the Institute of Medicine tells us that it affects over 100 million people in the United States. So I think what we have to do is to find the kinds of solutions that really address both of these problems and don't wind up giving us what's essentially a zero sum game."

Maybe the key to success is addressing both of the problems. Many people in pain obtain their narcotic prescriptions from their primary care physicians. Often times, doctors don't really evaluate the status of the patient. Utilizing more pain scales and asking more detailed questions may lead to other questions and ultimately see that the patient maybe a drug seeker. If someone is battling chronic pain, that pain should be handled by a group of health care professionals at a pain specialist.

Electronic health records would help tremendously between doctors and pharmacists. The pharmacist has limited access to records about the patient. Thus, allowing the pharmacist to solely base judgment off of what the patient says. Many pharmacists are left to being mini "DEA agents." Trying to crack the code and see if a prescription is legitimate. A system where health care providers could communicate more efficiently and easily would allow more questions to be answered. Doctors can check a patient database before writing any prescriptions. Pharmacists can check the databases to make sure patients haven't been elsewhere. A team based approach would be more effective.

All in all, more pain management training needs to be presented in both pharmacy and medical schools. This is a topic that is brushed upon, but needs to be addressed to the fullest extent. Health care professionals would then be better rounded and more knowledgeable in the area leading to better outcomes.

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