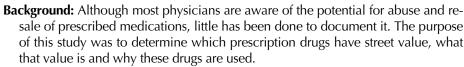
The street value of prescription drugs

Amin Sajan, MD; Trevor Corneil, MD; Stefan Grzybowski, MD, MCISc

Abstract



Methods: A descriptive cross-sectional survey using a semistructured interview technique was carried out on 2 weekdays (Mar. 10 and Apr. 1, 1997) in Vancouver's Downtown Eastside. A total of 58 users and dealers of prescription sedative/hypnotic and narcotic drugs were approached. Information collected included the demographic characteristics of those interviewed, the common street names of the drugs of interest, and their value and method of use.

Results: Thirty-two people agreed to participate in the study (participation rate 55%), 7 of whom were dealers. The range in price of sedative/hypnotic drugs was \$0.10 to \$2. For narcotic drugs the range was much greater, at \$0.25 to \$75. Descriptive analysis identified the minimum and maximum price and the mode for each preparation. Among the weak narcotic drugs the index drug (highest in demand on the street) was Tylenol No. 3 and among the more potent narcotics, MS Contin 30 mg.

Interpretation: A wide variety of prescription sedative/hypnotic and narcotic drugs are available on the street. The mark-up from pharmacy cost can be considerable. Factors influencing pricing include the relative inexperience of the buyer, the availability of illicit narcotics, the current street supply of prescription medications and the time of the month (before or after issue of social assistance cheques).

Résumé

Contexte: Même si la plupart des médecins connaissent les possibilités d'abus et de revente des médicaments prescrits, on n'a pas fait grand chose pour les documenter. Cette étude visait à identifier les médicaments prescrits qui ont une valeur dans la rue, à établir la valeur en question et à déterminer à quelles fins on utilise ces médicaments.

Méthodes : On a réalisé un sondage transversal descriptif au moyen d'entrevues semi-structurées au cours de deux jours de semaine (10 mars et 1^{er} avril 1997) dans l'est du centre-ville de Vancouver. Au total, on a contacté 58 consommateurs et revendeurs de sédatifs et somnifères et de stupéfiants prescrits. Les renseignements recueillis comprenaient les caractéristiques démographiques des personnes interviewées, le nom d'usage courant dans la rue des médicaments en cause, leur valeur et la façon de les utiliser.

Résultats : Trente-deux personnes ont consenti à participer à l'étude (taux de participation de 55 %), dont sept revendeurs. La fourchette des prix des sédatifs et somnifères variait de 0,10 \$ à 2 \$. Dans le cas des stupéfiants, la plage était beaucoup plus étendue et variait de 0,25 \$ à 75 \$. L'analyse descriptive a permis d'établir le prix minimal et maximal et la valeur dominante dans chaque cas. Parmi les stupéfiants faibles, le médicament repère (le plus en demande dans la rue) était le Tylenol No. 3 et parmi les stupéfiants les plus puissants, c'était le MS Contin de 30 mg.

Interprétation : Toutes sortes de médicaments sédatifs, somnifères et stupéfiants prescrits sont disponibles dans la rue. L'augmentation du prix par rapport au coût de la pharmacie peut être considérable. Les facteurs qui jouent sur l'établissement du prix comprennent l'inexpérience relative de l'acheteur, la disponibilité de stupéfiants illicites, l'offre courante de médicaments prescrits dans la rue et la période du mois (avant ou après la distribution des chèques d'aide sociale).



Evidence

Études

From the Department of Family Practice, University of British Columbia, Vancouver, BC

This article has been peer reviewed.

CMAJ 1998;159:139-42

? See related articles pages 149 and 169



Ilicit drug use continues to be a recognized problem in Canada. However, the abuse of prescription drugs is not well documented, and, as a result, patterns of abuse and the problems that arise are difficult to describe. This issue is not restricted to Canada. An estimated 2.6 million people in the United States use prescription drugs (most often sedative/hypnotics and narcotics) for "nonmedical reasons." In fact, according to surveys by the National Institute of Drug Abuse, Bethesda, Md., this number surpasses the estimated number of users of heroin, cocaine and crack cocaine.

Anecdotal evidence from primary care physicians indicates that the drugs most commonly requested by name in the office setting are sedative/hypnotics and weak narcotics.³ In British Columbia 3 of the 10 prescriptions most often written are for medications of these classes, the most common (Tylenol No. 3) being an index drug of abuse (highest in demand) on the street. This huge demand and supply has created a lucrative black market for pharmaceuticals. Incentives for obtaining these medications are vast, ranging from chemical dependence to financial reward through resale. In Vancouver the Downtown Eastside is a well-known haven for abusers of both licit and illicit drugs. Consequently, the prescription drug trade is overt throughout the region, particularly at the intersection of Main Street and Hastings Street, in the heart of Canada's poorest postal code area.5

Although most physicians have an idea of which drugs may have abuse potential, little is known about the street market for these medications. A recent publication of the College of Physicians and Surgeons of British Columbia included a short list of approximate street prices for drugs of abuse and emphasized the need for physicians to be aware of this growing concern. A better understanding of the potential street value of prescription medications may help clinicians deal more appropriately with drug-seeking behaviour. It would also be useful to policy-makers who place controls on the distribution of medications, particularly narcotics.

The purpose of this study was to interview both consumers and dealers of pharmaceuticals at the point of sale to determine which drugs have street value, what that value is and why these drugs are used.

Methods

We created a project proposal and obtained ethics approval from the University of British Columbia's Behavioural Sciences Screening Committee. A MEDLINE search was done and the relevant literature reviewed. We made initial contact with several physicians, pharmacists and agencies of the Ministry of Social Services to determine which medications were most likely to have a street value in the region.

We carried out a pilot survey at local downtown methadone and walk-in clinics, interviewing both physicians and patients to determine estimates of the scope of prescription drug resale and approximate prices. The anecdotal list of medications with a street value was expanded on the basis of the information gathered. We selected the 2 most commonly available drug classes for the survey: sedative/hypnotics and narcotics. We used estimates of the street prices of these medications to ensure that participants approached on the street were not obviously misleading the investigator.

We used a descriptive cross-sectional survey format with a semistructured interview technique. The sample site — the steps of Vancouver's Carnegie Centre, on the corner of Main Street and Hastings Street ("pill corner") — was selected for its popularity and accessibility as a trading location. Buyers and dealers of prescription drugs were approached by a single interviewer (A.S.) with the assistance of the centre's security guard, who had built a rapport with, and could identify, the subjects in question. People who appeared obviously impaired or physically intimidating were not included in the study. The person's sex and role in the drug trade (buyer or dealer) were noted.

Interviews were conducted with the following questions as a guide: "Which sedative/hypnotic/narcotic drugs do you buy/sell?", "What is their monetary value?" and "How/why are they used?" A chart containing photographs from the 1996 edition of the *Compendium of Pharmaceuticals and Specialties* was used to identify the pills and the generic name of the medications. Additional information, such as drug street name, desired effect and route of administration, was obtained. The medication that was highest in demand on the street in each class was noted and defined as the index drug. All interviews were conducted during daylight hours on 2 days: Mar. 10 and Apr. 1, 1997.

For comparison purposes, we obtained prescription costs at a local pharmacy. The values per tablet were based on the cost of 30 tablets at government-approved acquisition prices of the generic brand (where available) as of October 1997.

Results

A total of 58 people were approached and asked to participate in the study. Thirty-two agreed, for a participation rate of 55%. Most of the subjects approached were male (36 [62%]), and they had a higher participation rate (61%) than the female subjects (45%). Eleven (19%) of the people approached were dealers, of whom 7 (64%) agreed to participate. Only one of the dealers was female; she agreed to participate.



The street values of the sedative/hypnotic drugs varied within a narrow range between \$0.10 and \$2 per pill, with the index drug being Valium 10 mg. The values per pill were compared to the pharmacy prices for the generic brand (Table 1). The street values of the narcotic drugs varied on a much larger scale, the weak opioids commanding prices as low as \$0.25 per pill and the potent opioids selling as high as \$75 per pill (Table 2). The index drug for the weak narcotics was Tylenol No. 3 and for the more potent narcotics, MS Contin 30 mg. Prices varied according to buyer experience, supply and time of the month (before or after the day of issue of social assistance cheques).

Most common street names differed from the generic or brand names of the medications and were based on physical appearance of the pill or variations on the brand name. The route of administration for the sedative/hypnotics was strictly oral, whereas most of the potent narcotics were crushed, diluted and then injected intravenously. Most users reported that they relied on the sedative/hypnotics to manage withdrawal symptoms associated with cocaine or heroin use. Some also used this class of medications to enhance the "high" of other substances (most often alcohol, cocaine or heroin). The narcotics were usually used to create a "buzz" in and of themselves. Some users said they resorted to using prescription narcotics when their preferred illicit narcotics were unavailable or when they did not have enough money to purchase these substances. Still others regarded prescription medications as their drugs of choice.

| Table 1: Street value of selected | prescription | sedative/hypnotic | drugs in | Vancouver's |
|-----------------------------------|--------------|-------------------|----------|-------------|
| Downtown Eastside | | , . | , i | |

| | | Pharmacy cost per tablet, \$ | Street price per tablet, \$ | | |
|------------------|-------------|------------------------------------|-----------------------------|---------|---------|
| Drug | Street name | | Mode | Minimum | Maximum |
| Valium 5 mg | Yellow Vs | 0.01 | 0.25 | 0.25 | 0.75 |
| Valium 10 mg | Blue Vs | 0.01 | 0.50 | 0.50 | 1.50 |
| Halcion 0.125 mg | Halcions | 0.06 | 0.50 | 0.25 | 1.00 |
| Halcion 0.25 mg | Halcions | 0.07 | 1.00 | 0.50 | 2.00 |
| Rivotril 0.5 mg | Rivotrils | 0.12 | 0.25 | 0.10 | 1.00 |
| Rivotril 2 mg | Rivotrils | 0.30 | 0.75 | 0.25 | 1.50 |
| Imovane 7.5 mg | Blue ovals | 0.47 | 0.10 | 0.10 | 1.00 |
| Ativan 1 mg | Ativan 1s | 0.05 | 0.25 | 0.10 | 1.00 |
| Ativan 2 mg | Ativan 2s | 0.08 | 0.50 | 0.25 | 1.50 |
| Serax 15 mg | Serax | 0.01 | 0.25 | 0.25 | 1.00 |
| Serax 30 mg | Serax | 0.01 | 0.50 | 0.50 | 2.00 |
| Xanax 0.25 mg | Xanax | 0.08 | 0.50 | 0.10 | 1.00 |
| Xanax 0.5 mg | Xanax | 0.10 | 0.75 | 0.25 | 1.50 |

Table 2: Street value of selected prescription narcotic drugs in Vancouver's Downtown Eastside

| | | Pharmacy | Street price per tablet, \$ | | |
|------------------|----------------|------------------------|-----------------------------|---------|---------|
| Drug | Street name | cost per tablet, \$ | Mode | Minimum | Maximum |
| Tylenol No. 2 | T2s | 0.03 | 0.25 | 0.25 | 0.50 |
| Tylenol No. 3 | T3s | 0.03 | 0.50 | 0.50 | 1.50 |
| Tylenol No. 4 | T4s | 0.14 | 1.50 | 0.75 | 3.00 |
| Leritine | Leritines | 0.35 | 3.00 | 2.00 | 5.00 |
| Percocet | Percs | 0.11 | 4.00 | 3.00 | 6.00 |
| Percodan | Percs | 0.13 | 4.00 | 3.00 | 6.00 |
| Demerol | Demerol | 0.11 | 4.00 | 2.50 | 6.00 |
| Talwin + Ritalin | Ts 'n Rs | 0.70 | 25.00 | 15.00 | 30.00 |
| Dilaudid 2mg | Red dids | 0.22 | 15.00 | 5.00 | 20.00 |
| Dilaudid 4 mg | Yellow dids | 0.32 | 25.00 | 12.00 | 32.00 |
| Fiorinal C ¼ | White caps | 0.24 | 20.00 | 15.00 | 35.00 |
| Fiorinal C ½ | Blue caps | 0.33 | 35.00 | 20.00 | 40.00 |
| MS Contin 15 mg | Green peelers | 0.64 | 20.00 | 15.00 | 30.00 |
| MS Contin 30 mg | Purple peelers | 0.96 | 25.00 | 20.00 | 40.00 |
| MS Contin 60 mg | Orange peelers | 1.70 | 35.00 | 25.00 | 50.00 |
| MS Contin 100 mg | Grey peelers | 2.59 | 40.00 | 35.00 | 60.00 |
| MS Contin 200 mg | Red peelers | 4.90 | 60.00 | 45.00 | 75.00 |



Interpretation

Our results are in keeping with the intuition of most physicians that prescription sedative/hypnotic and narcotic drugs have a significant street value. The wide selection within each category was of interest, as was the familiarity of the buyers and dealers with the products and their pharmacologic characteristics.

The index drugs, Valium 10 mg for the sedative/ hypnotics and Tylenol No. 3 for the narcotics, carried the same street value of \$0.50 per pill, with mark-ups of 5000% and 1667% respectively. The effectiveness of the triplicate prescription program in British Columbia was highlighted, as narcotics covered by this program were more difficult to obtain on the street and therefore much more expensive. For example, a prescription of 30 MS Contin 60-mg tablets worth approximately \$51 carried a mark-up of 2059%, fetching about \$1050 on the street (around \$35 per tablet). A single "hit" or injection of heroin or cocaine (usually around 0.1 g) sells for \$10 to \$20. Because most heroin and cocaine addicts use 0.5 g to 1 g per day, the sale of such a prescription would support a 7- to 10-day illicit drug habit. The data obtained in this study suggest a lower street value for medications than has previously been documented.6

On the basis of anecdotal information provided by the interviewees, we learned that prices of medications on the street are not static. The perceived inexperience of the buyer from the seller's perspective, the availability of illicit narcotics, the current supply of prescription medications and even the time of month were all felt to influence the street value. If a dealer believed that he or she could swindle a buyer who was unknown to the local drug-abusing community, the dealer would certainly quote inflated prices. An abundance of illicit narcotics tended to decrease the price of medications, since many purchasers preferred heroin or cocaine over prescription drugs. Similarly, a glut of prescription drugs on the street, often noted after a recent robbery of a pharmacy, would decrease the cost of those drugs, since the suppliers would usually favour a quick turnover of their stolen goods. Prices were also said to fluctuate within a 1-month period in relation to the day social assistance cheques were issued ("Welfare Wednesday"). They were higher before issue day, when cheaper pharmaceutical drugs were all that users could afford, and lower when there was cash to pay for the higher-priced illicit drugs. In our survey the 2 interview days were at different times of the month, one 2 weeks before issue day and the other 6 days after.

Limitations of our study include the single sample site, the time of day and the method of subject selection, all of which risk systematic bias. These were, however, difficult to avoid in light of the need to maintain the safety of the interviewer.

The use of fraudulent prescriptions to obtain drugs creates another avenue for future research. For example, a review of all the sedative/hypnotic and narcotic prescriptions filled over 1 year under the name of a British Columbia physician (one of us [S.G.]) showed that 12 of the 230 prescriptions had been phoned in by someone assuming the physician's identity, including scripts for 120 Valium 10-mg tablets and 100 Tylenol No. 3 tablets. Further study is also needed to look at the street value and sale of other classes of medications, including costly HIV antiretroviral drugs provided free to residents of British Columbia.

This information may lead physicians, pharmacists and policy-makers to develop better measures to control and monitor the dispensing of prescription drugs. Our results may also help sensitize clinicians to the potential resale value of some of the prescriptions they write.

We thank Dr. Stephanie Moffat for editing advice, Dr. Jonathan Berkowitz for his statistical expertise, and Valarie Harding, BScPharm (pharmacist) and Constable Steve Gibson (community police officer) for their ideas and assistance.

References

- Canadian Community Epidemiology Network on Drug Use. Canadian profile: alcohol, tobacco and other drugs [discussion paper]. Ottawa: Canadian Centre on Substance Abuse; 1995.
- Weikel D. Prescription fraud: abusing the system. The Los Angeles Times [home edition] 1996 Aug 18; part A: col 1.
- 3. Finch J. Prescription drug abuse [review]. Prim Care 1993;20(1):231-9.
- Economics and Data Analysis Committee. Pharmacare. Top products. Victoria: The Committee; 1994.
- British Columbia Ministry of Social Services. Annual report 1992/1993. Victoria: The Ministry; 1995.
- 6. Street value [editorial]. Coll Physicians Surg B C Q 1997;spring:16.
- Canadian Pharmaceutical Association. Compendium of pharmaceuticals and specialties. 31st ed. Ottawa: The Association; 1996.

Reprint requests to: Dr. Stefan Grzybowski, Downtown South Community Health Clinic, 1065 Seymour St., Vancouver BC V6B 3M3; fax 604 875-3435; sgrzybow@unixg.ubc.ca