Illicit Price of Cocaine in Two Eras: 1908-14 and 1982-89

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Introduction

The legal status of cocaine in the United States passed through three stages: it could be legally obtained by anyone from the time of its introduction in 1884 until about 1900; then, a movement at both state and local levels restricted its availability to a physician's judgment; and lastly, after 1914, severe constraints on access to cocaine were enacted by the federal government. During the middle stage, responsibility for licit cocaine availability was increasingly assigned to physicians and pharmacists. This action during our first wave of cocaine use is similar to recent proposals to turn the cocaine problem over to health professionals and their clinical judgment. The following is a report on licit and illicit prices of cocaine during that middle or "medical stage."

When cocaine became commercially available in the United States in 1884, its purveyors were allowed an open market. Until the early 20th century, regulation of medical and pharmaceutical practice was reserved to the police powers of the states and was not an appropriate arena for federal legislation. As a result, the first legal controls on the distribution of cocaine occurred at the local and state level.

One reason there was no initial restriction on cocaine availability is that it was considered by prominent authorities to be a harmless tonic without any untoward side effects or after effects, if "used in moderation." As demand soared, pharmaceutical manufacturers rapidly increased production. The initial wholesale price for cocaine hydrochloride was $15 per gram, but dropped within two years to a much lower figure, about $0.25, and thereafter generally followed the rate of inflation. The early approval of cocaine gradually changed to concern and eventually to fear of its side effects on the mind and behavior of users. Medical journals and newspapers increasingly reported on persons whose careers and lives had been distorted and damaged by inordinate use of cocaine. In Connecticut, for example, a newspaper report of 1896 stated that cocaine was in more common use than tobacco in a local textile mill. During this rising public concern, the Connecticut State Medical Society established an ad hoc committee in 1896 to consider the problem of cocaine. The committee concluded that the problem of excessive and uncontrolled use arose from self-administration by patients, but that when applied by a physician in low concentration at the time of a surgical procedure, the drug was safe. In 1905 Connecticut enacted a statute restricting cocaine to a physician's prescription but without limitation as to amount or purpose.

New York State legislators also turned to the wisdom of health professionals as a defense against the cocaine problem. In 1907 Alfred E. Smith, then a member of the assembly, led a legislative attack on cocaine. The subsequent Smith anticocaine law restricted cocaine availability to a physician's prescription and required record-keeping. The law placed no restriction on the amount or purpose of the prescriptions.

These steps, however, did not bring cocaine under control to a degree satisfactory to the public or legislature. Some physicians and pharmacists provided cocaine without the professional restraint anticipated by lawmakers. In spite of this liberality, cocaine was still being sold on the streets of New York. One loophole regarding possession without a prescription was addressed by an amendment in 1910. Then, in 1913, after continued frustration over the easy access to cocaine, an even stricter anticocaine law was passed with support from Smith, now speaker of the New York Assembly. This act imposed severe restrictions on the health professions as well as penalties for any "patient" having cocaine without a certificate of authorization provided by a pharmacist or physician.

The final stage of control, limiting the freedom of the health professions in dispensing cocaine and ending any latitude in its possession, had been reached to the extent feasible in New York State. The following year, the federal Harrison Act would bring an unprecedented restriction of cocaine's availability to the entire nation. More than alcohol, even during a national campaign which would lead to Prohibition in 1920, cocaine stood
out as a fearful substance almost universally condemned.

In 1906 the Pure Food and Drug act had required that the existence and amount of cocaine in over-the-counter remedies be revealed on the label, although the amount was unregulated. Then, on 1 March 1915 the Harrison Narcotic Act came into force. It required that records be kept of all opiates and cocaine from the importer or manufacturer down to the patient's prescription. Unlike the Pure Food and Drug Act, it also limited the amount of opiates — while prohibiting any cocaine — in non-prescription remedies. The Act required that physicians prescribe these drugs only “in the course of professional practice” and “in good faith.” Coupled with state anti-cocaine laws, the high water mark of restrictions on cocaine in the first wave of cocaine use had been reached.

Eventually cocaine use faded in the United States. The gap between the beginning of the current wave of cocaine use, about 1970, and the waning years of previous use, the 1930s, was so long that the earlier experience has, for all practical purposes, been forgotten.

The current resurgence of cocaine led to calls for legalization in the 1970s on the basis of its apparent harmlessness, while in recent years legalization proposals have stressed the economic argument to reduce the profits from illegal cocaine sales. Legal cocaine, according to this reasoning, would undercut costs, eliminate turf-wars between rival drug sellers and reduce the economic motivation for enlisting new cocaine users. Some have suggested turning cocaine distribution over to health professionals, an idea that has echoes of the Al Smith law of 1907.

Methods

The object of this study is to estimate the illicit price of cocaine during what might be called the “medical” phase of cocaine control, in New York City, from 1907 through 1914 and to compare that price with illicit cocaine prices in the 1980s.

As a comparison for purchasing power, the average industrial hourly wage was chosen. This information was obtained from Department of Commerce records (see Sources).

To establish the lowest wholesale price of a gram of cocaine, information on wholesale prices of an ounce of cocaine hydrochloride was obtained from pharmaceutical journals and price catalogs of various manufacturing chemists (see Sources).

It has been difficult to discover examples of retail cost to consumers of a gram of cocaine purchased from pharmacists in New York City. No record of a retail sale was located and none was present at the Archives of the American Institute of the History of Pharmacy. Of course, there was no standard retail price for the multitude of independent pharmacies.

To estimate the illicit street price of cocaine, the New York Times, Tribune, and Herald for the period 1906 through 1915 were searched. The amounts given in grains were converted to grams. The cocaine, usually described as mixed with an adulterant, was sold routinely on the streets in envelopes or paper packets for 25 cents each.

Data for the range of cocaine prices during the period 1982-1989 were obtained from the Drug Enforcement Administration. The street prices are for a gram offered to the user as cocaine (see Sources). The figures for 1989 are for July-September.

Results

1908-1914:

The wholesale price of cocaine in the earliest period, after a rapid fall from 1884 to 1886, settled down at a fairly steady level. Interestingly, the cost per gram at the wholesale level stayed close to the average hourly wage for industrial workers (Table 1). Also, the price, 25 cents, of the illicit street unit, or “deck,” from 1908 until 1914 approximated the hourly wage.

Table 1

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<thead>
<tr>
<th>Year</th>
<th>Price per Gram in NYC</th>
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<tr>
<td>1884</td>
<td>$10.03</td>
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<tr>
<td>1885</td>
<td>$5.99</td>
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<tr>
<td>1886</td>
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<td>1889</td>
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New York City street market prices for cocaine during the period before 1908 have not been located. Following passage of the Smith anticocaine law, prices began to be reported in the newspapers as arrests were made. The street or illicit price of a “deck” appears to have remained steady over the seven years between the Smith law and the coming into force of the Harrison Act, 1 March 1915.

That the typical street unit was a deck for 25 cents is concluded from newspaper accounts. In one of the early arrests under the Smith act it was reported in the New York Times that a seller provided cocaine at the rate of 26 (sic) cents a package to “any one — man, woman or boy” (3 August 1908). The State Department report of 1910 also gave 25 cents as the typical package. The New York Tribune (2 December 1912) reported in detail the process of making “decks” to sell for 25 cents. The following year (10 November 1913) the Tribune reported that the prices of cocaine during the period 1906 through 1915 were searched. The amounts given in
The amount of cocaine in a deck is estimated in the following way. In the federal government’s report, “Opium Problem,” submitted to Congress in February 1910, the amount of cocaine in an envelope is estimated to be “one to two grains” (65 to 130 mgms). The New York Tribune account of 2 December 1912 estimated the amount of cocaine in a “deck” to be 1.3 grains (85 mgms). This amount has been taken as a reasonable estimate of cocaine in the illicit street unit. The above references are used to estimate the cost of cocaine on the street market from 1908 through 1914 in Tables 1, 2, and 4.

The rate for a gram of cocaine on the street market would be about $2.75, eleven times the unit price and, for the period under analysis, about 10 times the average hourly industrial wage (Table 2).

According to newspaper reports, a well-established illicit pricing scheme as well as profiteering organizations existed during the “medical” phase of control. 11

In 1982 the DEA began compiling statistics based on the sale of cocaine at the street level and also providing estimates of cocaine costs at higher levels of the drug trade.

The prices of bulk and street cocaine have been drifting down since the early 1980s. By now the street unit cost of cocaine — often stated to be between five and 15 dollars — approximates the average industrial hourly wage. The cost per gram on the street has declined from about 10 times to (if we take the lowest price reported by the DEA for 1989) about four times the wage level. The wholesale price of a gram of cocaine has levelled off during the last three years to near the average hourly industrial wage (Table 3).

The street costs of a gram of cocaine can be compared between the two time periods by dividing the hourly wage into the price. Table 4 shows that there is a striking similarity between the two eras with the exception that the cost of cocaine at the street level is now lower, in buying power, than it was on the streets of New York City prior to the Harrison Act and while the legal control of cocaine was vested in the judgment of health professionals.

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<th>Table 3</th>
<th>Cocaine Prices in the US</th>
<th>The National Range</th>
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<td>Wholesale Prices</td>
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Discussion

Stable Illicit Market before 1914

Whether there was an illicit market for cocaine prior to the earliest state laws has not been determined. The prices in New York City found for the period 1907-14 were reported as a result of police arrests of illegal distributors, but prior to 1907 there were accounts of voluntary restrictions by local pharmacists and physicians. 12 Further research may clarify the question as to when an illicit market could be sustained because of the creation of voluntary restriction and the beginning of popular condemnation.

The question of a previous “street market” for cocaine is significant because, if the assumptions about the cost and content of a “deck” are valid, there does not seem to
have been a period of adjustment to market demand after the 1907 Smith law. The post-law market apparently maintained a fairly steady price for a "deck" of cocaine for nearly eight years.

The existence of this illicit market while the regulation of cocaine was turned over to the judgment of physicians and pharmacists suggests that this measure did not affect the supply or the availability of cocaine outside professional distribution. A gram of cocaine continued to cost on the street about ten times the average industrial hourly wage, a multiple as high or higher than cocaine has cost on the street since 1982. In this regard, it is not unreasonable to conclude that syndicates which provided illicit cocaine before the Harrison Act had profit margins comparable to our own day.

One of the most interesting comparisons between the pre-World War I unit price on the street, 25 cents, and the more recent street unit prices, five to 15 dollars, is their coincidental similarity to the hourly wage. Perhaps the wages for an hour's work is a natural market rate for the street unit. Until the Harrison Act, the United States had no national uniform law for the legal distribution of cocaine. That the street price in New York City could be maintained at such a high level before the Harrison Act is further evidence that reliance on health professions failed to eliminate an illicit market.

The reasons for this failure are several. Visits to a physician were assumed to keep access to cocaine under the watchful eye of a professional who could, if needed, treat a patient's cocaine problem. This requirement, however, would add the cost of a physician's visit to the cost of cocaine from a pharmacist. Also, drug users may have had a disinclination to become involved with formal and official suppliers then as now. Whatever reasons one might want to assign, the hurdle presented by professional contact and record-keeping was apparently sufficient to maintain a stable illicit market in cocaine. Significantly, this illicit market was sustained in the face of some health professionals who prescribed and dispensed illicitly, literally selling prescriptions to all comers.

There is evidence that the price of cocaine after World War I was much higher, even taking inflation into account, than in the era before the Harrison Act. An important component of this rise in price and gradual decline in demand is the prolonged length of time required for the shift in consumption pattern. If we assume the time required now for a change in popular demand for cocaine may be roughly similar to the time taken for the previous episode, the curve in the cocaine price has been the opposite in each era. The shape of the price curve over the earlier wave of cocaine use resembled the shape of a "J" (extending the price curve into the apparent rise after World War I), and, while the current price curve is incomplete, we know that the recent curve has been the very reverse of that before 1915, starting high in the early 1970s and going lower. It will be interesting to see whether we are in a trough which will begin to rise and form a "U" shape, or whether the decline of cocaine prices will continue. If the condemnation and reaction against cocaine continues, it is possible the price will rise as a reflection of domestic restrictions, both social and legal, as it did after the anticocaine consensus established 70 to 80 years ago.

**The Timing of Anticocaine Laws**

Unlike our current cocaine episode which began about 1970, laws were not in place during the earlier "epidemic" until the public and legislators demanded controls. Escalating legal severity after 1907 in New York State and the rest of the nation paralleled popular opinion. A report that President Taft transmitted to Congress in 1910 described cocaine as "more appalling in its effects than any other habit-forming drug used in the United States." A further reflection of fear of cocaine is that the section of the Harrison Act of 1914 that permitted some opiates, even heroin, in over-the-counter remedies, allowed no cocaine.

The contrast between attempts to control cocaine in the two waves of use is striking. Even after the substantial decline of cocaine use by World War II, increasingly harsh penalties for cocaine use were placed on the statute books. These laws created a dramatic disparity between the fairly relaxed attitude toward cocaine in the mid-1970s and the severe penalties. The conflict between severe laws and widespread toleration of cocaine use meant that we experienced about 15 years of additional controversy over cocaine and controls until a consensus was once again established against the use of cocaine in the mid-1980s.

In this second cocaine era we have had anticocaine laws from the beginning of its renewed popularity and availability, whereas cocaine use during last century began in the absence of laws restricting it. After 1884, only as cocaine use continued and its damage was seen, did laws against the drug begin to be enacted and gradually strengthened. Since 1970, in contrast, the extended controversy over controls on cocaine — the prolonged disharmony between anticocaine laws on the books and more tolerant public attitudes — may be reflected in the frustration that has led to calls for drastic measures on opposite sides: those who propose legalizing cocaine believe it is time we all admitted to 20 years of failure in controlling it, while others call for draconian penalties which aim sharply and quickly to curtail drug use through punishment. The quest for a simple answer to the drug problem does not take into account the gradual fall in demand for cocaine that, at least in the past, followed the establishment of a popular anticocaine attitude. The decline phase may last 15 to 20 years. Reasonable policies might not appear effective as quickly as the public wishes, but impatiently rejecting these measures for extreme criminal justice measures will flood courts and jails, sponsor extravagant interdiction methods, and lead to a psychology of scapegoating foreign nations and domestic groups, such as the inhabitants of the inner...
cities — all without substantially affecting the rate of decline in cocaine use.

On the other hand, this study suggests that anything less than open access to cocaine, even the apparently liberal public health position of turning over responsibility to the flexible judgment of physicians and pharmacists, will support an illicit market with prices comparable to those in our own day.

The Cocaine Quandary

The public faces the quandary of fearing cocaine too much to allow open access, but being outraged by the corruption and profits that are products of the illicit trade in drugs. In the previous wave of drug use this cocaine impasse was resolved by an almost total elimination of the demand for cocaine through public experience with the drug and its users. In spite of profiteering in the illicit market, cocaine eventually faded away in the United States. This awareness of cocaine's danger was not effectively passed on to later generations — although severe penalties did persist — and by 1970 cocaine reappeared in the United States as fresh and exciting, an apparently useful tonic, stimulant, or ideal recreational substance.

The period of cocaine's availability after the mid-1880s and before action began to be taken against it, about 20 years, and the stage of increasing control, about 10 more years, followed finally by about two more decades while the problem subsided, suggests that cocaine use is not quickly corrected by simple, dramatic actions. Neither reverting to free access, the very condition that brought the problem subsided, suggests that cocaine use is not effectively passed on to later generations — although severe penalties did persist — and by 1970 cocaine reappeared in the United States as fresh and exciting, an apparently useful tonic, stimulant, or ideal recreational substance.

The Medical Record 22 November 1884, p. 578: price of cocaine up to $.50 per grain.

1885: the price quoted represents the average of the prices reported in the Chemist and Druggist of 15 April 1885, p. 221 ($0.30-$0.50 per grain).

1886-1887: the price quoted represents the average of the prices reported in the Proceedings of the American Pharmaceutical Association 35:397 (1887).

1889: price is quoted from the Annual Catalogue (1889-90) of the Meyer Brothers Drug Company of St. Louis (Collection of Mr. William Helfand, New York, NY).

891-1915: except for 1886, 1898, and 1906, are quoted from the following issues of Merck's (Monthly) Report (courtesy of Mr. Jeffrey Sturchio, corporate archivist, Merck & Co., Rahway, NJ): December issue of 1891, June issues of 1892-1894, April issue of 1895, June issues of 1896-1915. The quotation for 1896 is from the catalogue of the Cooke, Everette and Pennell company of Portland, Maine (collection of Mr. William Helfand).

1888, 1890, 1893, 1897, 1899, 1900 — these quotations are taken from the catalogue of Peter Van Schaak & Sons, Chicago (courtesy Dr. Gregory J. Higby, The American Institute of the History of Pharmacy, Madison, WI).


Prices for 1898 and 1906 have not been located.

II. 1982-1989: The Illicit Drug Wholesale and Retail Price Report. United States Department of Justice, Drug Enforcement Administration, Strategic Intelligence Section of the Office of Intelligence. The data in these reports derive from DEA case studies, DEA Quarterly Progress Reports or Field Management Reports and "street studies" supported by the DEA and the National Institute on Drug Abuse or "liaison with Field Intelligence Groups." Prices reported from all areas are used to determine the national average, but selected cities are also available to represent the price range. "Wholesale" prices are those paid by both high and mid-level dealers, while "retail" refers to the price at which a street dealer sold the drug.

III. Average Industrial Hourly Wages:

1890-1926: these figures are quoted from Historical Statistics of the United States: Colonial Times to 1975, p. 168, Series D 766.

1965-1987: these figures are quoted from the Statistical Abstracts of the United States published in the following years:


1975, p. 366: no. 594 (Manufacturing)

1977, p. 413: no. 668

1980, p. 421: no. 699

1982-83, p. 401: no. 665

1985, p. 417: no. 694

1988, p. 392: no. 646

1989, p. 404: no. 661

Preliminary

REFERENCES


7. Laws of New York, 1910, Chapter 131, "An Act to amend the penal law, in relation to the sale of cocaine and eucaine."

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8. Laws of New York, 1913, Chapter 470, "An Act to amend the penal law, in relation to the sale or possession of cocaine or eucaine."


13. For example, New York Tribune, 28 July 1921 ($1.50/deck) and New York Times, 4 January 1923 ($2.00/deck).
