# The wrong type of decline

Fluctuations in price and value of illegal substances in Cape Town

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This article documents and contextualises fluctuations in the street-level prices and values of selected illegal substances over a 10-year period in Cape Town, South Africa, by drawing on recent empirical research and past reports. The contemporary prices are compared and contrasted with each other, as well as with those previously documented. We show that when adjusted for inflation, the value of these substances has decreased over the last decade, making them more affordable, even though their nominal prices have remained more stable. In beginning to provide explanations for these changes, we outline some of the mechanisms that shape the market and point to the primary structural drivers of substance use in the country.

While illegal drug pricing surveys are conducted routinely elsewhere,<sup>1</sup> in South Africa almost nothing is presently known of how illegal substances are sold, what quantities they are sold in, what prices are paid, how prices vary between areas, what patterns of consumption exist, and how the distribution processes are organised. This is surprising, considering that data from both treatment centres and elsewhere have shown a rapid escalation in the prevalence and (ab)use rates of specific substances in a number of communities, such as methamphetamine and a highly adulterated opiate-based mixture known as 'whoonga'.<sup>2</sup>

Moreover, various studies have shown that an increasing number of African countries now play an important role in the transnational trade in illegal substances,<sup>3</sup> while the production capacity of South Africa and Nigeria to synthesise substances such as methamphetamine has increased.<sup>4</sup> It seems that a) the illegal substance economy has grown in sophistication, and that b) many of the criminal organisations that control the distribution networks are including a broader range of substances and products, such as those derived from poaching activities.<sup>5</sup> The expansion of this illegal economy may have an impact, among others, on the reported arrest rates relating to illegal substances, which in South Africa have increased 181.6% over the last 10 years.<sup>6</sup> However, the country's policy framework is tentatively shifting from punitive regulatory approaches to harm reduction-based strategies.7

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While there may be an ever-growing literature on the multiple and diverse impacts of illegal substances on individuals, communities and South African society as a whole,<sup>8</sup> there is little empirical information on the illegal substance economy itself. What does exist invariably focuses on public health concerns, such as treatment centre data, and does not engage with the criminal economy itself. This is especially true in the instance of polysubstance use/users, an increasingly important cohort of the South African illegal substance economy, not just because they habitually consume more than one illegal substance, but also because they are more vulnerable to disease and are more likely to be arrested.<sup>9</sup>

With these deficits in mind, we present here an analysis of the results drawn from the first phase of a drug-pricing study conducted in Cape Town in 2014 and 2015.

The article's purpose is to a) document the reported prices and units of sale in a systematic way, b) compare these prices and their relative worth (where possible) with previous reports, and c) begin examining their relevance to and meaning for policy and research. While geographically limited, we have systematically compared these data with the findings of the single previous study to have undertaken such a structured review of street-level substance prices in the past, published in 2010.10 In so doing we show that while the nominal prices of many illegal substances have remained relatively resilient, the real value of these products has greatly decreased. Illegal substances, in short, are more easily available and more affordable than ever. By documenting these trends, we tease out some of the implications that they may have for consumption patterns, regulatory frameworks and policing strategies in the city. While many authors have independently reached similar conclusions to our own, the evidence-based data presented here seems to indicate that not only is the regulatory system currently used ineffective, but it may be counter-productive.

#### The study

The nominal prices and real value of the illegal substances presented here are derived from data gathered by a larger mixed-methods, multisite study conducted in Cape Town, South Africa between 2014 and 2015, which specifically focused on polysubstance use/users. Reports by respondents from three socially and economically diverse sites were recorded, all of whom used a combination of the various substances documented in Table 2. The study comprised three phases, the first and third of which utilised semi-structured focus group discussions (FGDs) as a means of gathering information. This article is primarily based on information collected in the first/formative phase, and will not speak to the processes or results of the other two phases unless explicitly stated. It should be noted that results from the larger study (n=374), while still under analysis, *do* indicate that these prices are accurate.

The purpose of the formative phase was a) to explore the acceptability and feasibility of the methodology/ survey instruments needed in the second phase and b) to begin building relationships and gathering data from participants. Resultantly, six FGDs (three with men and three with women) were conducted in the three selected communities where polysubstance use was thought to be prevalent. A total of 42 respondents participated in the FGDs, and it is their experiences that underpin the research documented here, and which informed the larger study.

The selected communities are all socio-economically and ethnically disparate, and were targeted to provide as broad a representative sample as possible from a geospatially diverse range of locations (see Table 1). Potential participants were recruited by outreach fieldworkers and invited to take part in the FGDs, having self-identified as polysubstance users. Once identified, they had to pass a verbal test to clarify whether they met the requirements of the study. In order to meet these requirements, they had to have used more than one of the preselected substances in the last seven days, had to have resided in the location for more than one year, and had to agree to the study's ethical requirements. The resulting discussions lasted approximately one hour and were audio recorded. While unintended, the information that emerged from these discussions was sufficiently important and original to be presented separately from the broader study, as is documented here. It should, however, be noted that the figures cited here have been collated from individual responses, and thus not every respondent provided

input on every substance in each area. This being said, all of the prices are based on figures cited by at least three respondents.

Table 1:	Municipal	area by	size	and	income
	(based on	2011 ce	ensus	dat	a)

Municipal area	Population size	Median monthly household income		
Area 1	391 749	R 1 301		
Area 2	152 030	R 1 601		
Area 3	9 301	R18 801		

The study included six illegal substances methamphetamine, heroin, mandrax, cocaine, ecstasy and methcathinone - and excluded alcohol, tobacco and cannabis. Alcohol and tobacco were excluded because they are still legal. Cannabis was excluded because of the large variety of types and forms available (reflected in the prices of individual strains, the price of which can vary drastically, from as little as R10 to R350 per unit) and because of its ubiquity of use – it is not seen or (importantly) policed as a 'hard' drug, which the broader study was more concerned with. The list of substances that were included in the study was derived from reports based on information from the users themselves, with urine-based screening measures for the substances occurring in the second phase of the study.

# Reported prices and method of comparison

The preliminary findings of the study are tabulated in Table 2. While noteworthy in themselves, a comparative analysis with previous results creates an opportunity for a more nuanced assessment of any fluctuations and, as discussed below, offers an opportunity to indirectly assess those forces acting on the market. It is for these reasons that we have contextually situated the prices by juxtaposing them with those reported between 2002 and 2006, as found in Peltzer et al.<sup>11</sup>

In order to provide as accurate a comparison as possible, we aggregated the nominal unit prices per measure of weight, one unit of which equals one gram, as was done in the previous study.<sup>12</sup> Such comparisons are at best generalisations, but even so reveal that there have been movements in the prices and, perhaps, the illegal economy as a whole. As we show, for instance, the streetlevel prices have decreased slightly in nominal price, which may point to an increase in supply, suggesting that past interventions aimed at limiting this have not been successful.<sup>13</sup> These prices are, however, comparatively resilient to their real values, which speaks to broader changes in the economic environment in which they are sold. Indeed, these fluctuations are perhaps more important to consider than the nominal price, as their real value gives an indication of their *affordability*. If illegal substances are more affordable, more people can access them, which appears to be the case in South Africa today.

That the information is contextual and locally limited is revealing of the structural dynamics shaping the illegal substance economy and the way this economy operates. These forces shape the local economy, we believe, to such an extent that it is not possible to accurately generalise the results to the level of a region or continent, as is often done in the literature (as seen, for instance, in the United Nations (UN) World Drug Reports. Considering that illegal substances have become more affordable, and noting that state-level interventions and regulations have been primarily focused on law enforcement, we question their continued utility or purpose. This is supported by much of the contemporary literature, as we discuss below.

#### Limitations

To what extent individuals can afford illegal substances is not only dependent on their economic position but is also relative to their spending patterns, the most essential of which would be on basic foodstuffs. Basic food prices have fluctuated guite widely in the last decade, such as that in March 2008 wheat prices increased by some 93% year-on-year.<sup>14</sup> Energy prices have also consistently increased, affecting public transport costs. The overall impact on the use of illegal substances is very difficult to determine, a) because these fluctuations have not been consistent, and b) because individuals will not be consistently affected by these. Some of the respondents in this study, for instance, lived in formal housing, some were homeless, some begged for money, some had semi-formal forms of

employment, and so on. One can, once more, only use such information to provide a general reflection of trends, which are more accurate at the level of communities rather than individuals.

It should also be noted that the comparisons with information reported in Peltzer et al. are made because it is the only other study to have previously documented the individual prices of illegal substances in a systematic and comparative way.<sup>15</sup> This study did not, however, draw on empirical data, but rather collated and presented the results from a number of individual studies published between 2002 and 2006.<sup>16</sup> Moreover, and with the exception of Plüddemann et al.,<sup>17</sup> not much attention is given to the methodological tools and methods used in producing the quoted figures, and thus they may be the product of data sourced from different areas of the country, and/or bi-products of epidemiological research.

The studies cited by Peltzer et al. were also not all conducted at precisely the same time, and therefore small pricing discrepancies were already likely to have existed in the market.<sup>18</sup> To the best of our knowledge, however, it remains the only previous study to systematically document the street prices of illegal substances in the peer-reviewed literature, and thus the sole reference point when trying to conduct an accurate comparison of figures.<sup>19</sup> Despite these constraints, the comparisons presented here indicate that state responses to drug use have not limited the affordability or availability of illegal substances in Cape Town.

#### Comparisons and relevance

In the following section we compare the nominal prices of the individual substances, as reported by the participants in the different sites in our study, with those from Peltzer et al.,<sup>20</sup> which are positioned as national averages but are based on sporadic primary data. These are presented in Table 2. In an attempt to formulate as accurate a comparison as possible, we have aggregated the data in this study to create an inclusive, single total figure for each substance. This aggregation is done for comparative purposes, although the limitations noted above should be kept in mind. While the comparisons are at best estimations, they do serve to tentatively illustrate the primary congruencies/disparities that exist between

the present-day nominal prices of the substances, and, importantly, their relative value to consumers in the context in which they are bought. We have focused on affordability rather than just nominal price, because while South Africa's macroeconomic changes have fluctuated, the rand has weakened and inflation increased more consistently. Determining what is *affordable* to consumers may thus more accurately reflect the present *impact* that substance use may have on their lives.<sup>21</sup>

In Table 2, columns 1 and 2 detail the names of the substances, columns 3 and 4 the reported prices by unit of sale and site, and column 6 reproduces the prices detailed in the Peltzer et al. study.<sup>22</sup> In column 5 we provide two separate prices for the individual substances. The first is the aggregated present-day nominal price at street level, as reported by respondents (formatted in *italics*). The second (formatted in **bold**) presents the nominal figures reported in Peltzer et al.,<sup>23</sup> but adjusted so as to take into account the annual cumulative Consumer Price Index (CPI) inflation rate reported between 2004 and 2014 (calculated between 1 January 2004 and 1 January 2014).<sup>24</sup> Using these rates, the year-on-year annual CPI increase stands at an average of 5.8%, with the cumulative CPI increase at a total of 75.7% over the 10 years.25

Even though the street prices of illegal substances are not themselves subject to formal economic regulations, review or taxation, their retail price would still be influenced by the purchasing power and income increases of users. The CPI is thus an illustrative means of calculating the real value of illegal substances historically, as it determines their affordability relative to nominal price. In summary, then, in column 5 of Table 2, the first price (in *italics*) is the user-reported nominal price of the individual substances in 2014–2015, the second (in **bold**) the real value of the substances reported if adjusted for the CPI fluctuations over the past 10 years, while in column 6, the original nominal prices reported in Peltzer at al. are reported.<sup>26</sup>

Speaking more broadly, pricing studies of this nature are of relevance to a number of broader concerns, including regulation strategies, governance policies, policing protocols, and in determining prevalence/

Table 2:	Substance	variants by	unit,	quantity	and	price	in	comparison
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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Substance	Street name(s)	Quantities of units of sale	Average reported price per unit (by area)	Mean price/ gram – 2014 (2004 inflation-adjusted price in bold)	Mean price/gram – 2004
Methamphetamine	Tik	≤ 200 mg	1=R30 2=R20-R25 3=R20-R25	D017.50	R225
		≤ 500 mg	1=R150-R170 2=R100-R120 3=R100-R120	R217.50 R395.24	
		1 gram	1=R250-R300 2=R150-R170 3=R150-R170		
		≤ 100 mg	Free (all areas)		R215
Heroin	Whoonga Uunga Nyaope	≤ 250 grams	1=R25-R30 2=R18-R25 3=R22	R119	
		1 gram	1=R100-R150 2=R100-R125 3=R100-R125	R377.67	
		9-10 grams	1=R800-R1 000 (unmentioned in other areas)		
Mandrax	Buttons	125 mg	3=R15 (not available in other areas)		R65
		250 mg	1=R30 2=R25-R30 3=R25-R30	<i>R60</i> <b>R114.18</b>	
		500 mg	1=R60 2=R60 3=R60		
Cocaine	Coke Powder	500 mg	1=R120-R150 (not readily available in other areas)	R275	R250
		1 gram	1=R250-R300 (not readily available in other areas)	R439.16	
Ecstasy/MDMA	E Mandies	±50 mg (sold as half a pill)	1=R35–R50 (not readily available elsewhere)	R95	R60
		±100 mg (sold as a full pill)	1=R70-R120 (not readily available in other areas)	R105.40	
Cathinone	CAT	500 mg	1=R150 (not readily available in other areas)	R300	NA
	CAI	1 gram	1=R300 (not readily available in other areas)	NA	

usage rates. They may also reflect public health concerns insofar as they may have an impact on treatment and prevention strategies.

While we speak specifically to the South African context, it is useful to keep in mind that previous studies have also used pricing data as:

- Indirect indicators of movements and fluctuations in the illicit economy, such as in determining the effects of regulatory interventions and policy prescriptions.<sup>27</sup>
- Markers of supply/demand levels, transnational flows and consumption patterns, such as those

found in the UN's annual World Drug Reports (the latest of which, at the time of writing, is 2015).<sup>28</sup>

- Useful benchmarks for the indirect mapping of structural trends in the illicit economy, such as its growth, decline and broader movements; whether the result of direct intervention or as a function of changing patterns in public health.<sup>29</sup>
- As a barometer of the successes/failures of policing and regulatory efforts, in so far as they may undermine or enable the supply or availability of the substances.<sup>30</sup>

These indirect assessments are strengthened when market indicators, such as street-level prices, are repeatedly sampled at regular intervals over longer periods of time. By temporally and spatially overlaying this information with pre-existing knowledge of the points and periods during which regulatory and/ or operational efforts occurred, the resulting pricing fluctuations can be used as an indirect measurement of these interventions' successes and/or failures.<sup>31</sup> For example, should it be known that policing efforts were focused on production facilities in an area or for a specific substance, price increases at street level may indirectly indicate their success, as limiting supply may drive up prices.<sup>32</sup> While the utility of the research still requires further reflection, the data presented here will be greatly strengthened by iterative sampling strategies.

#### Nominal price fluctuations and variations

In reviewing the information presented in Table 2, we first discuss the individual substances and the pricing variances before highlighting the comparative fluctuations. This information is contextually situated in the next section.

#### Individual substance results

Following the table order, the reported street-level price for methamphetamine or 'tik' reveals two important trends. The first is that quantity and unit price are inversely related – the larger the quantity purchased, the less the nominal price per weight unit. This is a familiar marketing strategy, employed in everything from methamphetamine to mobile data deals.<sup>33</sup> Such variations, assumedly, may also indicate

that the larger the quantity of illegal drugs purchased, the more likely that the 'order' will be passed on to distributors at a higher level, thus beginning the process of minimising the number of transactions from producer to consumer.

Secondly, price variances can exist even in areas that are close to one another. Respondents in area 3, for example, reported much higher nominal unit prices than those in areas 1 and 2. These areas are little more than 25km apart, precluding explanations relating to distance or distribution costs. Moreover, the respondents were neither foreign tourists nor naïve youngsters, unfamiliar with the rituals of illegal substance purchasing, but regular users familiar with the local distributors. It is therefore unlikely that the participants would be frequent victims to nefarious pricing tactics or scams. This variance can, however, be explained when placed within the broader socioeconomic and geopolitical differences that structure the city of Cape Town. As a product of attempts to socially engineer the country's major urban areas during apartheid, socio-political disparities between many of the city's suburbs continue to exist. These historical differences remain relevant in many facets of daily life, such as the type/availability of housing, crime levels and employment opportunities that exist in different parts of the city.

Such differences also find realisation economically. For instance, the first site, a peri-urban township, has, according to the 2011 census, a population of 391 749 and a median monthly household income of R1 301. The third site, a middle-class suburb, has a population of 9 301 and a median monthly household income of R18 801. These differences deeply influence the ways in which people understand themselves, others, and indeed drug use. While these are not the only indicators that will affect illegal substance prevalence rates or distribution patterns, they are indicative of the vast disparities between areas in the same city, and that continue to define contemporary Cape Town life.

It is also important to note that the resilience of the nominal prices may indicate that distributors are loath to increase their prices. This could be due to competition or because buyers are likely to bring the exact amount of money they need to each deal so as to hasten the process. Waiting for change when completing an illegal transaction increases the risk of being seen or arrested, and dealers are unlikely to accept bank cards, although some will accept credit if buyers have a familiar relationship with them. To offset small nominal increases in the face of decreasing real value, the most obvious strategy would thus be to further 'cut' or adulterate the products, decreasing the cost to the supplier. Iterative, long-term toxicological analyses would be needed to confirm this.

Speaking to each of the subjects individually, we follow the order found in Table 2. Methamphetamine has previously been reported to be the most widely used drug in the city, and the data confirm that it is available across the sites surveyed. The contemporary nominal price can, however, vary by as much as 100%, for reasons that are still to be understood. At R217.50 per gram, the mean nominal price itself occupies a median position in relation to the cost of other illegal substances. Moreover, and at first glance, a nominal decrease of just R7.50 over the last 10 years does not seem to be particularly extensive. However, when adjusted for CPI, the decrease in real value is some 104.65%. In other words, had a gram of methamphetamine been purchased 10 years ago, using the current value of the rand, the substance would have cost R395.24. As we explore below, such a large decrease in value is not only a function of inflation but may also be driven by a growth in local production capacity, as indirectly indicated by users consistently reporting five different forms of the substance, for which they also showed preferences.

With regards to heroin, present-day nominal prices between the areas were consistent, although, similarly to methamphetamine, bulk sales frequently attracted discounted price rates. The nominal price decrease has, however, been much larger, from R215 in 2004 to R119 in 2014, a reduction of 180.67%. Based on anecdotal evidence this decrease seems to be the result of a shift from the distribution of actual heroin or 'sugars' to that of 'whoonga', which is highly adulterated. By containing so little heroin, the production costs per unit have dramatically decreased. In terms of real value, the result is that the drug has become much more affordable and thus more widely used. Participants also commented on heroin sales being bolstered by the use of 'specials' or 'freebies' by distributors, particularly on Sundays and public holidays. This marketing strategy indicates that distributors are using the physiological characteristics of opiate addiction to their own advantage. Pharmacologically, opiate-based substance users develop a tolerance to the substance's actions, so that the frequency of dosages and their size increase over time. By providing 'specials', distributors ensure increased dosages, which over time may hasten tolerance levels and thus create a form of customer 'loyalty' that ensures repeat custom.

Mandrax, from the perspective of pricing, was the most stable of the substances investigated, with little variance between sites. The unit of sale did, however, vary, with the smallest 'quarter' only available in site 1. This is congruent with the socio-economic differences of the sites, with site 1 also having the highest levels of poverty and the least formal structures/resources in place. In this impoverished 'township', the demand for smaller units seems anecdotally linked to consumption patterns. Because of the ease of availability, and the innumerable warrens and coves in which users may seclude themselves, the consumption of smaller quantities of mandrax is easier despite its preparation process being more complex than that of the other substances. Its use also creates large plumes of acrid smoke, easily detectable in developed areas that are more heavily policed. Inversely, its consumption in the other sites may be limited by a lack of suitable places in which to smoke it, and because law enforcement agents might easily detect it. In terms of pricing, a nominal decrease of R5 may be small, but because of the low overall cost it translates into a real value reduction of 108.38%. This supports the anecdotal evidence, itself consistent with recent research.<sup>34</sup>

Cocaine was frequently described by participants as the 'white people's drug', a reflection of its cost and because of their daily experiences in which 'white' people are the predominant purchasers of the substance. Cocaine is simply too expensive and its effects too short lived to be economically attractive to users for whom the use of illegal substances is not recreational. In a country

saddled with racially charged economic conflicts, such distinctions become normative, as much an observation on socio-economic difference as it is on use. The participants did not regularly consume cocaine, although all of them knew how and where to purchase it. In subsequent FGDs, held after the main survey, some reported that they would operate as 'runners', purchasing and delivering illegal substances on behalf of others so as to mitigate the risk taken by the purchaser. This explains why they knew the price of cocaine and could access it. The reported pricing fluctuations seemed to be contingent on individuals' familiarity with distributors. and whether they bought cocaine in tandem with another substance, thus increasing the total amount of the 'order'. A comparison with the information in the Peltzer article is especially difficult.<sup>35</sup> as it does not differentiate between crack cocaine and cocaine hydrochloride, which are priced differently in markets across the world, regulated differently, and consumed differently.

Reported levels of ecstasy use and its price variances were low, possibly as a result of the high levels of methamphetamine use, which is also a stimulant. Indeed, and in contrast to the other substances, it seems to have become much more expensive, with previous research indicating a nominal price of R60 per pill in 2004, and present users reporting a price of R95. Adjusting for CPI indicates that the real value has increased by 63.18%. In conversation with the respondents, it seems that there is comparatively little demand and little local production, and therefore most is imported. The low demand may be explained as a function of its typically being associated with the electronic dance music (EDM) subculture and nightclubs, which in South Africa may be limited to individuals with more disposable income. Only a few of the participants had engaged with the subcultures in which ecstasy use has been prevalent.<sup>36</sup> They did, however, know of the substance, many had previously used it, and could still obtain it.

Cathinone (CAT), finally, has seen rapid increases in use in Europe and North America.<sup>37</sup> In exploring whether this is the case in Cape Town, especially considering the city's large tourism industry, the substance was included in the study. However, participants did not report frequent use of the substance, with some respondents not even being familiar with it. Its novelty also prevents any comparison with the past study. Broadly, and retrospectively, it seems that knowledge of and experience with the substance tended to follow urban development patterns – those in the city centre knew more about the substance than those in outlying areas. This, again, is consistent with reports in the literature from elsewhere, which have found its use to be propagated by specific youth subcultures that are mostly economically inaccessible to the majority of participants in this study.

#### Comparative/contextual placement

As was noted above, the street-level prices presented here are limited to the time and places that they were documented in. While further research would be needed to paint a broader picture of the production, distribution and use of illegal substances in the country, the results do have implications for policy and practice. It is hoped that they may also act as an evidence-based baseline for further research.

Adjusting for CPI-based value, a comparison of the reported prices with those documented 10 years ago reveals two very important fluctuations. Barring ecstasy - and disregarding cocaine and cathinone because of a lack of comparative data - all of the substances' nominal prices and real values have decreased. In explaining this, these changes may be understood as the product of the decreasing nominal value of the rand, CPI increases, socio-economic/ structural variances in the city, changing consumption patterns, localised production increases, and policing practices. We draw attention to these factors as a result of the analysis and literature survey,<sup>38</sup> but also because they were frequently highlighted by respondents in the descriptions and explanations that they provided of their own experiences.

When comparing the average street-level prices reported by users in each site and the site's broader economic markers, there seems to be a correlation between drug prices and household income. For example, the highest reported nominal prices for cocaine, methamphetamine and heroin per gram were found in the area with the highest average household income of all the sites. In reverse, the lowest reported nominal prices for mandrax per 'button' mirrored the sites with the lowest average household income. Moreover, there may be a correlation between average household income and the availability and cost of individual substances. For instance, users reported that the availability of the smallest unit of sale of mandrax (worth R15) was only available in the poorest area, while cocaine (with a unit price of R250–R300 per gram) was only readily available in the richest area. Correlation is of course not causation, and further research is needed to understand these symmetries.

Changing consumption patterns, as noted in the FGDs and broader literature, were also often used to explain fluctuations, although these were invariably implicit. The dramatic decrease in the price of heroin reported here is probably the result of the users reporting on the price of 'whoonga' (a particularly low-grade and highly adulterated mixture) rather than relatively purer 'sugars'. The decrease in price could partly be a reflection of the decrease in purity, which is consistent with studies based on toxicology tests elsewhere in the country,<sup>39</sup> and mentioned anecdotally by the participants in this study. The price of cocaine per gram has also decreased, tentatively indicating an increase in supply, which is congruent with studies indicating the growing importance of South Africa in the international cocaine economy.<sup>40</sup> Moreover, information derived from extensive interviews with law enforcement officials and the (increasing) discovery of numerous production facilities indicate an increase in the production capacity and the concomitant decrease in distribution costs of methamphetamine in the city.

Economic differences also affect how the illegal economy is policed and the consumption patterns of specific substances. For instance, those substances that require longer preparation times or that can be more easily detected may be less attractive to users in areas where policing is more visible. Wealthier areas are probably patrolled more frequently by both government law enforcement agencies and private security firms, making these drugs harder to use without being noticed. Further research would be required to determine what correlations exist between the operational activities of both private and public security operatives and consumption patterns of specific substances. With reference to, and in support of, the related conclusions reached by a large number of previous studies it is clear that illegal substances are, in total, cheaper, more affordable and more readily available in South Africa now than they were 10 years ago.<sup>41</sup> This conclusion has serious implications for the regulation and policing of the production, distribution, use and users of illegal substances in the country.

#### Implications for policy and research

Over the course of the last decade there have been substantial changes to South Africa's substancerelated policy frameworks and perspectives. Indeed, the most recent National Drug Master Plan (NDMP) (2013–2017) considers numerous public health orientated and community-based options, such as education initiatives, aftercare services and youth development programmes, and includes a somewhat tentative review of harm-reduction approaches.<sup>42</sup> However, there is a rather large dissonance – perhaps even disjuncture - between these more socially reflective policy approaches and the actual regulation of illegal substances and their use, which remains the primary concern and mandate of law-enforcement agencies. While new and revised NDMPs are released every three to four years, the central act by which substances are demarcated as illegal, and which determines how substances and those who come into contact with them are policed, is the Drugs and Drugs Trafficking Act of 1992 (Act 140 of 1992).<sup>43</sup> Barring a single amendment in 2002, this act is now over two decades old and is a product of an internationally sanctioned regulatory discourse that promoted fundamental prohibitionist and exclusionary strategies of control, such as those characterised by the now largely defunct 'War on Drugs'.

The regulation of illegal substances, using a predominantly punitive model, has repeatedly been shown to be not only ineffective, but in some instances actively counterproductive to the goal of the reduction and/or elimination of illegal substances.<sup>44</sup> In the Western Cape, for example, the total number of substance-related 'crime detection' events recorded by the SAPS in 2004 stood at 30 432. In 2014, the number recorded was 85 463, just shy of a two-thirds increase over the 10 years.<sup>45</sup> While these statistics are not disaggregated

for individual substances, it is clear that there has been a large overall increase in substance-related policing efforts, and from the data presented here, a decreasing trend in nominal price and increase in the affordability of the included substances. If these price decreases are related to increases in supply that have occurred in the context of greater efforts by law enforcement bodies to contain substance-related crimes, these efforts can be characterised as nothing short of a failure.

The 2014/2015 SAPS crime statistics indicate that from 2005 until 2015 the number of drug-related arrests nationally has increased by 181.6%.<sup>46</sup> These increases, while national, mirror almost exactly the real value decreases of both methamphetamine and heroin. Such decreases make these substances more affordable to more people in the country, some of whom will be arrested. It might be tentatively argued, then, that the increases in drug-related arrests are indicative of a growing population of users, rather than lacklustre policing. That this population is growing cannot solely be the responsibility of policing, but is rather symptomatic of a broad range of social ills, as well as the tendency to rely on the criminal justice system to remove, rather than rehabilitate, substance users. Often such removal practices are more akin to a revolving door than structured process.

While the South African media continues to draw on hackneyed and prejudiced understandings of substance use and users - frequently using, for instance, the metaphors of disease, irrationality and moral degeneracy<sup>47</sup> – research both in South Africa and in many other countries has found that there are central *drivers* related to the statistical frequency. potential and depth of substance (ab)use levels in individual communities. These include, but are not limited to, poverty, education levels and economic opportunity. Dealing in illegal substances, for instance, becomes more attractive in environments where access to legitimate forms of income is limited. In South Africa it is increasingly clear that we might add to this list concerns with the geospatial design of major urban areas, high levels of unemployment, frequent (and frequently accepted) instances of violent behaviour. systemically entrenched corruption, political disenfranchisement and social

stigma.<sup>48</sup> As such, and even though policing has not been effective, many of the country's urban areas present ideal environments in which these drivers become potent and meaningful. Indeed, it is these environmental and structural issues described above that policy might look to remedy in the long term in endeavouring to address substance-related issues.

### Conclusion

This article has a) documented the reported streetlevel prices of a number of illegal substances in Cape Town, b) provided a systematic comparison of these prices in relation to those reported some 10 years ago, and c) briefly explored just some of the implications that this comparison has for policy and policing in the country. In short it is clear, at least in the areas that came under analysis in this study, that there are market fluctuations that are not divorced from the context in which they occur. This is congruent with much of the literature on these topics, whether drawn from the domains of public health, criminology or history.

Considering the complexity of the illegal substance economy, the complexity of substance use, and the continuing socio-economic and political disparities in South Africa, it would be premature to suggest an 'answer' or 'path' by which substance (ab)use might be more effectively controlled. If anything, the results reported in this article show that looking for such definitive 'answers' might be unwise when the drivers, changes and dynamics of drug use in the country are still so poorly understood. The prices reported here reveal a brief snapshot of a complex market, which appears to be on the rise.

With this in mind, the formulation and implementation of policies and regulations that are responsive to the illegal economy will require accurate information that is reflective of contemporary trends *in situ*. Pricing data generate a 'snapshot' of that economy, with comparative analyses providing the means by which the results of interventions and regulatory practices can be indirectly monitored and judged. However, to do so requires new information to be contextually situated, economically, politically and socially. Substance use does not occur in isolation from broader society and substance users invariably live within communities. The regulatory system, as it pertains to illegal substances, is thus in dire need of a substantial and systematic review.

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## Notes

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