The Drug Market Intervention Approach to Overt Drug Markets

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Purpose:
The purpose of this research was to assess the impact of a strategic intervention intended to eliminate overt drug markets and their associated crime and disorder and to improve relationships between the police and local neighborhood residents.

Design/Methodology/Approach:
The study included a process assessment of the nature of the intervention as well as an impact assessment based on trends in crime, calls-for-police-service and interviews with residents. The research occurred in the U.S. and examined a pilot program in High Point, North Carolina and subsequent implementation in Rockford, Illinois and Nashville, Tennessee.

Findings:
The paper presents a description of the intervention. Additionally, outcome data indicate that the intervention was related to reductions in crime and calls-for-police-service in all three communities. Raw declines were observed for violent, property and drug offenses with the declines consistently being statistically significant for drug offenses. Additionally, local residents described improved quality of neighborhood life and increased satisfaction with the police.

Research limitations/implications:
The results suggest that the so-called High Point Drug Market Intervention holds significant promise for addressing overt drug markets. However, the analysis is limited in that the comparison group is the citywide trend in crime as opposed to true comparison sites. Future studies utilizing quasi-experimental or experimental designs are needed to rule out potential rival explanations.

Practical implications:
The Drug Market Intervention appears to be a promising practice offering police officials a strategy for longer term impact on neighborhood safety and quality of life than has been the case with traditional crackdowns on drug markets.

Originality/Value:
This paper offers the evaluation results from three sites on a drug market intervention that has gained considerable attention, at least within the U.S.

UDC: 343.3/.7
1 INTRODUCTION

Research has consistently shown that illegal drug markets result in higher levels of neighborhood crime, signs of disorder and fear of crime. Street drug markets both directly and indirectly facilitate property (Rengert, 1996), serious, and violent crime (Berg & Rengifo, 2009; Blumstein & Rosenfeld, 1998; Jacobs & Wright, 2006; Wright & Decker, 1997). The very nature of illicit markets creates vulnerability not only to police enforcement, but also to rip-offs, robberies, and disputes among dealers and buyers with the consequence of force being used as the predominant mechanism to resolve disputes. Within the U.S., involvement in drug selling is associated with high levels of gun carrying (Allen & Lo, 2010; Black & Ricardo, 1994; Blumstein, 1995), thus increasing the risk of violence. In a study of street drug dealers who had been direct victims of robbery, Topalli, Wright and Fornango (2002) found that dealer-victims were often unwilling and unable to rely on a traditional legal justice response (i.e., report victimization to police) and thus often felt compelled to resort to retaliation as a way of redress.

Open air drug markets also have negative impacts on surrounding neighborhoods. Such markets are often associated with other illicit markets such as prostitution (May, Edmunds, & Hough, 1999) and are often associated with other forms of social and physical disorder (Weisburd & Mazerolle, 2000). Drug selling and other forms of disorder relate to a diminished sense of safety (Hough & Edmunds, 1999) and can generate a vicious cycle of fear, disorder, and crime that results in further neighborhood decline (Skogan, 1990). Martinez, Rosenfeld, and Mares (2008) found that drug markets are a disorganizing influence in communities and ultimately the markets themselves are a form of social disorganization. Consistent with Skogan, the authors concluded that once drug markets and high levels of criminal violence characterize a community, they may accelerate disorder and decay (Martinez et al., 2008: 871). In many ways the drug market-community crime relationship becomes reciprocal.

2 PRIOR RESEARCH ON LAW ENFORCEMENT EFFORTS TO ADDRESS ILLEGAL DRUG MARKETS

Several studies have included systematic reviews of the impact of various strategies on illegal drug markets. For example, Mason and Bucke (2002) reviewed studies of law enforcement interventions on local drug markets in England. They found that the most common approaches involved traditional enforcement involving raids, arrests, and prosecutions. Less common, but more effective, were various police-community partnership efforts that they referred to as third-party policing. These strategies included approaches such as civil remedies and nuisance abatement intended to reduce or eliminate problem businesses or properties conducive to
drug selling environments and to increase the level of informal social control within drug selling areas.

Similar findings emerged in Mazerolle, Soole and Rombouts (2007a, b) review of 155 studies of 132 distinct drug law enforcement interventions. The Mazerolle review was broader than that conducted by Mason and Bucke (2002) in that it included international/national interdiction and seizure and individualized interventions, as well as proactive enforcement, reactive enforcement, and problem-solving partnerships. Similar to Mason and Bucke (ibid.), they found that “proactive interventions involving partnerships between the police and third parties and/or community entities appear to be more effective at reducing both drug and nondrug problems in drug problem places than are reactive/directed approaches” (Mazerolle et al., 2007b: 115).

The present study builds upon these reviews and examines a particular type of law enforcement intervention aimed at eliminating open-air drug markets and thereby reducing associated community-level problems of crime and improving neighborhood quality of life. As will be described subsequently, the intervention is consistent with this prior research that indicates that proactive law enforcement that includes partnerships with other agencies and institutions of the community is likely to have more lasting impact than is law enforcement alone.

3 THE NATURE OF THE INTERVENTION

In an effort to more effectively address open-air drug markets, police officials in High Point, North Carolina in the United States embarked in a new problem-solving approach that sought to permanently shut-down illegal drug markets. The strategy, that has come to be known as the “Drug Market Intervention” model, or DMI, borrowed upon the so-called “pulling levers” strategy that had been successfully developed to reduce levels of youth gun violence in Boston (Braga, Kennedy, Waring, & Piehl, 2001) and other communities (e.g., Braga, 2008; McGarrell, Chermak, Wilson, & Corsaro, 2006; Papachristos, Mears, & Fagan, 2007). Specifically, High Point officials sought to incapacitate chronic offenders involved in violence, divert and deter lower level dealers, and build community partnerships to reclaim neighborhoods so that the short-term enforcement gains are accompanied with an increase in collective efficacy and informal social control to prevent the drug market from re-emerging.

The High Point DMI model has been described elsewhere in detail (Kennedy, 2009; Kennedy & Wong, 2009; Hipple & McGarrell, 2009; Corsaro, Brunson, & McGarrell, 2009; Frabutt, Shelton, DiLuca, Harvey, & Hefner, 2009). It begins with a systematic problem analysis to better understand the nature of specific, geographically-defined drug markets. This includes developing an understanding of who is involved in the drug market and their network connections. Having selected a specific drug market, a traditional undercover operation is undertaken. Attempts are made to build cases against all those involved in drug sales within the particular market. Once all the cases are established, a systematic review of all the dealers is conducted to distinguish between those with records of violence and
those with less chronic and severe records of criminal activity. Those deemed too serious to be diverted from prosecution and incarceration are handled through traditional prosecutorial processes. Those considered “redeemable,” that is not showing signs of violence and not having a serious and chronic record of offending, are included in a group who will be diverted from prosecution. These individuals are told to attend a meeting along with family members or other significant people in their life. At the meeting, the evidence developed against them is summarized and they are informed that they could be arrested and prosecuted immediately but that they are being given a second chance. The deal is that the drug market is now permanently closed. Should the market re-emerge or the individual continue their dealing, then they are subject to the original criminal charges as well as any new charges. They are also informed of available social support and legitimate opportunities (e.g., drug treatment, vocational training, housing, mentoring, etc.).

During the time that the undercover operation is wrapping up and the meeting with diverted offenders is being prepared, police meet with local residents, family members, and social service providers. The intent is multiple. First, the police hope to have local residents participate in the meeting and express their concern about the drug dealing and the associated neighborhood problems. They also hope that local residents will communicate a message of care and redemption to the diverted dealers (“you are valued members of the community but the drug dealing must stop”). Second, the police hope that by showing their concern with the problem of drug dealing, as well as their concern with the people involved in drug dealing, that local residents will be more likely to work with the police to “co-produce” order and prevent the drug market from re-emerging. Third, the police seek to identify formal and informal social service providers who can work with the diverted offenders.

The final stage of the interventions involves an initial display of increased police presence in the neighborhood. This has tended to vary from community to community but typically involves some level of increased police presence and certainty of police response to calls for service. This is intended to convey the message that the police and the community will not tolerate a return of the drug market. Gradually the police withdraw their visible presence and rely on local residents to assert control over public space, similar to the situation in neighborhoods where residents would never tolerate open air drug sales.

3.1 The Theory behind the Intervention

The DMI model is based on several theoretical foundations operating at the individual and community levels. At the individual level of offenders involved in the drug market, the model is based on incapacitation of the most chronic and violent offenders coupled with focused deterrence (Kennedy, 2009). Focused deterrence theory suggests that direct communication of a deterrence message to those most at risk of continued involvement in crime can shift the perceived risk of certainty and severity of punishment. It also seeks to take advantage of network connections among those involved in offending, such as the social
network involved in a drug market, by communicating the deterrence message to a group of offenders. The deterrence “focus” on active and at risk individuals is also suggested by research indicating that crime prone individuals may be particularly susceptible to a deterrent message (Wright, Caspi, Moffitt, & Paternoster, 2004), although Loughran and colleagues’ research indicates heterogeneity in the offending population’s perception of sanction risk (Loughran, Piquero, Fagan, & Mulvey, 2009). The delivery of the deterrence message in a respectful fashion, the inclusion of respected community members in the delivery of the message, and the offer of social support also builds on procedural justice (Tyler, 1990) and reintegrative shaming theory (Braithwaite, 1989).

At the community level, the model attempts to “co-produce” order through increased collective efficacy (Sampson, Raudenbush, & Earls, 1997). A key component of the DMI model involves the police engaging the community to work together to eliminate the drug market and prevent it from re-occurring. This process often involves resolving long-standing conflicts and distrust within the community surrounding decades of aggressive enforcement and/or neglect of resident concerns about open air drug markets (Kennedy, 2009). The goal is to reach a level where local residents will not tolerate open air drug dealing and will call the police upon observing suspected drug activity as well as communicate normative messages that drug dealing is not acceptable. For the police, there is a commitment to respond to community calls for service. The goal is a neighborhood where open-air drug dealing is not tolerated and dealing is likely to result in police response.

4 THE CURRENT STUDY

Given reports of the positive impact of the DMI intervention in the original site of High Point, North Carolina, as well as similar reports from other sites that have implemented the DMI model (Hipple & McGarrell, 2009), the research team approached police officials in three of the “early adopter” U.S. communities about their willingness to provide data that would allow an initial assessment of the impact of DMI. The communities include High Point, North Carolina, Rockford, Illinois, and Nashville, Tennessee. All three police departments agreed to cooperate with the research team. Additionally, a research team in North Carolina conducted interviews with local residents in High Point (Frabutt et al., 2009) and similar interviews were conducted by the authors in Rockford and Nashville.

4.1 Methods

The evaluation relied on analysis of official crime data as well as qualitative interviews with local residents. Although there were minor differences in data availability and coding of offenses across the three sites, the general approach was similar and, as will be described, the basic findings were quite similar across sites. We initially examined the basic pre-post trend in crime and then conducted time series analyses (ARIMA in High Point and HGLM models in Nashville and
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Rockford) to assess the impact of the intervention controlling for pre-existing trends, seasonality, and spatial auto-correlation.\(^1\)

In High Point, the DMI intervention was analyzed in its first target neighborhood in 2004. For High Point, crimes were categorized into violent, property, and drug/nuisance offenses. In Rockford, the intervention occurred in its target neighborhood in 2007 and violent and property crimes were examined. In Nashville, the DMI strategy took place in the McFerrin Park neighborhood in 2008. The Nashville data were initially examined in five categories: drug equipment, narcotics, property, violent, and calls for police service. For the impact assessment, these were later collapsed into drug offenses, Part One (violent and serious property), and calls for service. In Nashville, we examined crime trends in the geographic area surrounding the treatment site to look for signs of either crime displacement or diffusion of benefits. Officials in all three cities viewed these neighborhoods as being very unique and did not identify logical comparison sites. Consequently, the trend in crime in the remainder of each city was examined to allow comparison. The purpose was to assess the likelihood that factors other than the DMI strategy were affecting crime trends observed in the treatment neighborhoods. Given the small geographic areas that are the focus of the intervention, and the resulting relatively small number of offenses occurring on a monthly basis, a .10 significance level was used to test the change in level of crime. As noted above, another research team conducted interviews in High Point and we conducted interviews with residents in Rockford and in Nashville.

4.2 Findings

Given the earlier date of implementation in High Point, the pre-post-comparison time is significantly longer. As displayed in Table One, the treatment area experienced a substantial decline in violent and drug related crime and a more modest decline in property offenses. When assessed in terms of the ARIMA time series analysis, both the decline in violent and drug related offenses was statistically significant. This indicates that the decline observed would only be expected to occur by chance in 10 of 100 observations.

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>Monthly Pre-Intervention</th>
<th>Monthly Post-Intervention</th>
<th>Percent Change</th>
<th>Statistical Significance – ARIMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug</td>
<td>1.83</td>
<td>1.27</td>
<td>-30.6</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Property</td>
<td>9.24</td>
<td>8.54</td>
<td>-7.5</td>
<td>NS</td>
</tr>
<tr>
<td>Violent</td>
<td>2.67</td>
<td>1.81</td>
<td>-32.2</td>
<td>&lt;.10</td>
</tr>
</tbody>
</table>

\(^1\) Details on the time series models, are available in a series of papers (Corsaro, Brunson, & McGarrell, 2009; Corsaro, Brunson, & McGarrell, forthcoming).
For Rockford, the data were analyzed for violent and property crime. As observed in Table Two, both types of crime declined. The HGLM model, however, indicated that only the decline in property crime was statistically significant. Thus, the decline in violent crime may have occurred by chance. The remainder of the city did not experience a significant change in crime during this period.

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>Percent Change</th>
<th>Statistical Significance - HGLM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Violent Crime</td>
<td>-24</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Violent Crime</td>
<td>-14</td>
<td>NS</td>
</tr>
</tbody>
</table>

For Nashville, data were available for four crime categories as well as calls for police service. As displayed in Table Three, all crime types declined ranging from a 23 percent decline in violent crime to a 49 percent decline in narcotics violations. For three of these categories, drug equipment, narcotics violations, and property crimes, the declines were statistically significant. For the test of statistical significance, HGLM models were constructed. Given the relatively small number of crimes in the target area for some of these categories, three groups of offenses were examined: drug offenses, Part One offenses, and calls for service. The Part One crimes and calls for service data did not reach significance. As the table also indicates, the surrounding area also experienced significant declines in crime, thus suggesting a displacement of benefits. There was no evidence of displacement to the surrounding area, though it is possible that displacement occurred in other areas of Nashville. Further, although the rest of the city did experience modest declines in most crime types during this period, these were not significant. Thus, it does not appear that the declines observed in the treatment area were the result of some larger factor affecting the entire city.

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>Target Area</th>
<th>Surrounding Area</th>
<th>Rest of City</th>
<th>Statistical Significance - HGLM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Equipment</td>
<td>-39.5</td>
<td>-52.1</td>
<td>-9.3</td>
<td>Drugs &lt;.10</td>
</tr>
<tr>
<td>Narcotics</td>
<td>-49.7</td>
<td>-51.0</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>-28.4</td>
<td>-25.6</td>
<td>-7.0</td>
<td>Part I NS</td>
</tr>
<tr>
<td>Violent</td>
<td>-23.6</td>
<td>-24.0</td>
<td>-7.4</td>
<td></td>
</tr>
<tr>
<td>Calls for Service</td>
<td>-26.1</td>
<td>-6.2</td>
<td>-5.9</td>
<td>CFS NS</td>
</tr>
</tbody>
</table>

The qualitative findings were quite similar across all three cities. Local residents reported that they were aware of the initiative and described improved conditions in the neighborhood since the DMI strategy was implemented. Local residents talked about reduced crime and improved public safety in the neighborhood. They stated they were more likely to use public space in the neighborhood. They were significant if the threshold was relaxed to the .15 level.
also reported high levels of satisfaction with the police and an appreciation for police efforts to address the drug dealing in the neighborhood. Residents in Nashville also mentioned the closing of a problematic public housing facility that occurred prior to the DMI intervention as another potential factor generating the improvement in public safety. Yet, even in this situation they had high praise for the police and believed the DMI strategy had a positive impact.

5 SUMMARY AND CONCLUSION

There is at least some evidence in all three sites that the DMI intervention had a positive impact on the local neighborhood. Specifically, the three sites yielded eight tests of the intervention. In all eight tests there was a reduction in crime and in four of the eight tests the reduction was statistically significant (see Table Four).\textsuperscript{3}

The most consistent evidence was for drug offenses where the declines were substantial and significant in the two sites where the data were available (High Point and Nashville). The findings in Rockford suggest an impact on property offenses, although caution is warranted given the lack of statistical significance in High Point. Only in High Point were there statistically significant declines in violent crime. Thus, although there is consistent evidence of a pattern of crime decline across crime types, the divergent findings require consideration.

<table>
<thead>
<tr>
<th>Type of Crime</th>
<th>High Point</th>
<th>Nashville</th>
<th>Rockford</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Crime</td>
<td>-*</td>
<td>-*</td>
<td>NA</td>
</tr>
<tr>
<td>Property Crime</td>
<td>-NS</td>
<td>-NS</td>
<td>-*</td>
</tr>
<tr>
<td>Violent Crime</td>
<td>-*</td>
<td>-NS</td>
<td>-NS</td>
</tr>
</tbody>
</table>

The lack of a statistically significant decline in violent crime, outside of High Point, suggests several possibilities. It may be that the DMI intervention focused on drug dealers and the open-air drug market, will not reduce levels of violent crime. The impact in High Point may reflect that city’s corresponding pulling levers strategies that were focused on violent gangs and groups of offenders. At the same time, it may be that there is an impact on violent crime, consistent with the raw decline in post-intervention violent crime offenses but that the relatively small number of incidents in a small geographic area does not generate sufficient statistical power to observe a significant decline.

The divergence across cities across violent and property crimes may also reflect differences in the local drug market and the surrounding neighborhood. Future research across a larger number of drug markets should consider the base level of crime in each target neighborhood as well as the nature of the market and

\textsuperscript{3} If all five categories in Nashville are included, there were 10 tests. All ten tests witnessed reductions and five of the ten were statistically significant.
of the local neighborhood in order to more carefully predict and test the impact on different types of crime.

Additional needs for future research are revealed in this study. The qualitative findings of impact on the neighborhood and on citizen perceptions of the police and the justice system could be further developed and tested through survey research with representative populations. Similarly, more targeted qualitative data could be collected through ethnographic research focused on those involved in the drug market and subject to police intervention. At the individual level, research issues arise about the impact on individual offenders. Are those diverted from prosecution less likely to remain involved in illegal drug sales and other types of crime? Do they take advantage of services offered? Are they more likely to perceive the system as fair?

Clearly there is a need for more research. At a minimum, however, these results suggest the promise of the DMI intervention to positively respond to neighborhood concerns about open air drug dealing. Further development, implementation and evaluation are warranted. Given the toll that open-air drug dealing takes on local neighborhoods, and the toll that seemingly limitless arrest, prosecution, and incarceration takes on often young, economically deprived, and marginalized citizens, an effective alternative that can increase both the effectiveness and the fairness of the justice system response would be welcome.

REFERENCES


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