Using drug courts for drug postmarketing surveillance

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Abstract

Purpose – *One of the greatest challenges for drug regulation is valid, comprehensive surveillance of drugs after they reach the pharmaceutical market. The purpose of this paper is to propose a new method of individual and aggregate-level postmarket surveillance using data previously (and continuously) collected by drug courts, which are in operation in nearly every geographic corner of the USA.*

Design/methodology/approach – *To determine the feasibility of such an undertaking, data were obtained from an urban, southern county drug court. Intake data included all participants from September 2012 to November 2013. The final sample included 532 drug court participants.*

Findings – *Intake data were found to include various demographic variables, measures of drug use, and various sociological/criminological variables such as familial and social support, church attendance, and other pertinent variables for studying drug use and crime trends generally.*

Practical implications – *By using intake data from drug courts in a manner similar to Uniform Crime Report or National Incident-Based Reporting System, this could add greatly to the understanding of crime and drug use.*

Social implications – *The authors purport that a data management system of drug court intake data could provide a cost-efficient and generalizable representation of drug use of those within the criminal justice system.*

Originality/value – *Many efforts have been employed in an attempt to better ascertain where high rates of drug use occur. By using drug courts as more than just a system of treatment, postmarketing surveillance could be improved.*

Keywords *Substance abuse, Drug treatment, Abuse liability, Drug courts, Postmarketing surveillance, Therapeutic jurisprudence*

Paper type *General review*

Introduction

Postmarketing surveillance often tracks both prescription and illicit drugs. Generally, surveillance systems have used primary data collection methods that are costly and time consuming. Furthermore, complete datasets are typically not easily accessible to researchers, resulting in a truncated understanding of current drug use. To remedy these issues, secondary data, available through drug court intakes, should be stored, cleaned, and standardized to increase research and understanding of current and lifetime drug use.

Drug courts are specialized courts that consolidate the authority of a court of law with specialized drug treatment. The first drug court was founded in Dade County, Florida in 1989 by a group of justice professionals who were seeking an alternative to the traditional system. Although the structural approach of drug courts was somewhat novel, specialized court dockets for drug cases were actually first developed in Chicago and New York in the 1950s (Belenko, 1998). Drug courts are an example of therapeutic jurisprudence, which was originally defined as an extension of mental health law, and sought to make courts less adversarial and more open to treatment. Essentially, any court that practices therapeutic jurisprudence seeks to bring court personnel

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and other players in this process (such as prosecutors and defense attorneys) together for a common goal of treatment and positive change, instead of the predominant focus of punishment (Hora *et al.*, 1999). In 1998, 275 jurisdictions had drug courts (Belenko, 1998). As of 2014, the USA has somewhere between 2,734 (National Association of Drug Court Professionals, 2014) and 2,968 Operating Drug Courts (National Drug Court Institute, 2014).

While there are some questions regarding the efficacy of drug courts, there is an abundance of evidentiary support that considers and evaluates success in context of the cost-efficiency of drug courts (as compared to incarceration). Separate from issues associated with the efficacy of drug courts; however, is the possibility that these specialized courts can serve an added function – as a diagnostic tool to aid abuse liability assessment and track trends in drug use.

Abuse liability assessment during drug approval

In the USA, the vast majority of time and resources regarding drug regulation are devoted to two sources: the approval of drugs or the criminal justice system's response to people who violate drug laws (Hawthorne, 2005). For drug approval purposes, typically, the Food and Drug Administration (FDA) only considers the safety and efficacy of drugs before allowing these substances onto the pharmaceutical market. Such a process has primarily been conducted by utilizing animal testing (Ator and Griffiths, 2003), which fails to measure the desirability of new drugs for substance users. Certain researchers have argued that more attention needs to be paid to the potential desirability of new drugs by human participants in clinical trials (Brady *et al.*, 2003)[1]. Yet, doing so may provide little guidance because recreational drug users are usually prohibited from drug trials (McColl and Sellers, 2006) and participants are instructed to use drugs as directed, which prevents drug misuse in ways that would be indicative of recreational use (Wright *et al.*, 2006). Such a regulatory climate has led some researchers to argue that recreational drug users and people with substance misuse histories should be more often recruited as participants in order to test the abuse assessment of the liability of new drugs (Balster and Bigelow, 2003; Griffiths *et al.*, 2003). The FDA created new guidelines for the approval of new opiates and other drugs, which the agency believed had a potential for recreational abuse. These guidelines were primarily in response to reports of OxyContin misuse in the USA during the late 1990s and the first decade of the twenty-first century. These guidelines required that before a new drug could gain approval, pharmaceutical companies needed to include "risk-management plans" for these prescription drugs. Additionally, the agency encourages companies to produce drug formulations that are tamper resistant (Griffin and Spillane, 2013).

Abuse liability assessment after drug approval

Abuse liability does not end after a drug has been approved. Many issues are unknown until after a drug is released on the market. Despite the claim that the USA approval process for new drugs is somewhat rigorous, there is little surveillance of drugs postmarket. Any degree of postmarketing surveillance is relatively novel. Among the most cited examples of postmarketing surveillance are several federally funded surveillance systems: Drug Abuse Warning Network, Monitoring the Future, the National Household Survey on Drug Abuse, Arrestee Drug Abuse Monitoring (ADAM) program, System to Retrieve Identified Drug Evidence, National Forensic Laboratory Information System, Treatment Episode DataSet, and Toxic Exposure Surveillance System . Although these surveillance systems certainly provide important information, many researchers have noted limitations (Arfken and Cicero, 2003). Cicero *et al.* (2007) provided an excellent summary of these complaints. "The problem with all these databases is that they are passive, retrospective, and often anecdotal, and the data are not analyzed or published for 18-24 months, thus hampering recognition of rapidly emerging problems" (Cicero *et al.*, 2007, p. 158). Furthermore, brand-specific drugs are often omitted from these surveys, and oftentimes, measures regarding a specific drug are only included within a questionnaire after there is some evidence of suspicion that a substance is being abused. Additionally, there is ample criticism of existing surveillance efforts regarding their excessive focus on urban areas and not accounting for a variety of rural areas, some of which experienced serious problems with OxyContin misuse and diversion (Griffin and Spillane, 2013).

Perhaps the first effort to specifically monitor any drug for signs of misuse postmarket was solicited by Ortho McNeil Pharmaceutical, Inc. for their drug Ultram (tramadol hydrochloride). Available in Europe since the 1970s, there were no signs of major misuse or diversion. Thus, Ortho McNeil wanted to sell Ultram without placing it in any schedule of the Controlled Substances Act. The FDA agreed to the request, so long as the company conducted aggressive postmarketing surveillance. In one study, researchers added Ultram to the list of screened substances among a group of healthcare professionals with substance misuse, mental health, and physical disorders (Knisely *et al.*, 2002). In another study, researchers developed a "key informant network" of 110 researchers who had received National Institute of Drug Abuse research grants and 145 other drug abuse experts. Interviews from this "key informant network" were compared to the MedWatch reporting system maintained by the FDA, which allows people to report "adverse events" regarding drugs (Cicero *et al.*, 1999). Additional studies have surveyed drug abuse treatment centers to ascertain how many admitted patients reported use of sibutramine and phentermine (Arfken *et al.*, 2003), as well as hypnotic sedative drugs (Jaffe *et al.*, 2004). Perhaps the most comprehensive postmarketing surveillance system is the Researched Abuse, Diversion and Addition-Related Surveillance (RADARS) system. In response to a profusion of reports concerning OxyContin misuse and diversion, Purdue Pharma (the manufacturer of OxyContin) assembled a group of expert drug researchers to create a more comprehensive system of drug surveillance within the USA. Their aim was to develop a system that could provide more timely data, as well as more "geographically sensitive methods," that accounted for both rural and urban areas. The system collected data from three primary sources: drug abuse researchers who were knowledgeable about prescription drug misuse, surveys of law enforcement agencies that had an abundance of incidents of prescription drug use/misuse, and poison control centers (Cicero *et al.*, 2007).

Utilizing drug courts for drug postmarketing surveillance

Prior to RADARS, the two most common complaints of drug postmarketing surveillance were that data were not available in a timely manner, and that the data were not geographically diverse. Thus, it was unfeasible to examine the effects of misuse in a comprehensive, timely manner, and that data had little utility for policymaking and diversion program development or support. A feasible and cost-efficient method to remedy these issues would be to monitor the activity of drug courts. Monitoring the activity of drug courts can satisfy both of these problems. Drug court participants must take regular drug tests and complete an intake process with a member of a drug court staff. The intake process is typically comprehensive and asks a variety of questions that provide relevant information. In most drug courts, a person must plead guilty to any criminal charges against them before entering drug court and if that person does not successfully complete treatment, they will go straight to sentencing for the crime(s) they have already pleaded guilty. Therefore, it seems there is adequate motivation for drug court participants to comply with the intake process and ideally, answer questions truthfully. While there is a significant time lag of data with many existing postmarketing surveillance mechanisms, the only delay in reporting with drug courts is the time between a person being arrested and his/her intake interview.

The second criticism of existing postmarketing surveillance is that it can be highly regionalized and often omit rural areas in favor of more urban centers (Cicero *et al.*, 2007; Griffin and Spillane, 2013). This can potentially be problematic when attempting to ascertain rates of use for other drugs that can have high regionalized rural use (Booth *et al.*, 2006). Examining drug court intake data can address this problem as well. There are currently 2,734 drug courts operating in the USA. Drug courts are present in every state and range from five courts in Connecticut, to 226 courts in California. While these drug courts do not cover every drug-using population in the USA, they certainly cover a wide, diverse population. If the participants' use of drugs from all drug courts in the USA (or even a sample) were aggregated, they would likely provide more generalizable results than have been available in the past. Such a project is not completely without precedent. The Urban Institute conducted a large scale evaluation of multiple drug courts called the Multi-Site Adult Drug Court Evaluation. The project surveyed drug courts in twenty-three different sites to investigate if drug courts reduce recidivism and if these institutions are cost efficient (Rempel *et al.*, 2010).

Crime reporting and drug reporting

While drug use/possession itself is generally a crime, other crimes (such as theft or assault) is often coupled with drug or alcohol use (Goode, 2011). In an effort to determine how best to provide a system that monitors drug use and examine its effects for those involved in the criminal justice system, we reviewed the methods of ADAM, the Uniform Crime Report (UCR) and the National Incident-Based Reporting System (NIBRS). Following this examination, we then assessed the utility of these programs in context of available data (or possibly available data) through drug courts to propose a method of creating a comprehensive reporting system for postmarketing drug surveillance.

UCR

Published through the Federal Bureau of Investigation (FBI), UCR was first established in 1929, and presently remains one of the most comprehensive source on crime in the USA. UCR provides measures of select violent and property crimes. Particularly in the past, UCR has been used as the primary data source to assess the effects of violent and property crime (Chamlin, 1989; Stucky and Ottensmann, 2009). Data collection for UCR is contingent upon police agencies volunteering to submit the data to the FBI. The data operates under the hierarchy rule. When multiple crimes are committed within one incident, only the most serious crime is reported. While the validity of UCR has been questioned due to its reliance on reported incidents of crime, it remains the most comprehensive summary of statistics on crime.

NIBRS

NIBRS, which is also run by the FBI, is an expansion on UCR (Dunn and Zelenock, 1999). NIBRS provides supplemental information to UCR and has no hierarchy rule. Thus, all crimes within an incident are included within reports. First developed in 1987, NIBRS currently covers over 50 percent of 22 states in the USA (Justice Research Statistics Association, 2013). NIBRS data provide information pertaining to the victim, offender, and arrestee, which allows for further analysis than aggregated data. The data contain information about all Index crimes (Group A offenses) as well as arrest records for disorderly crimes (Group B offenses) (Dunn and Zelenock, 1999; Maxfield, 1999). What is unique about NIBRS is that it presents the situation within a crime incident, which allows for better and more detailed analyses. This has made it a popular data source in criminological literature (D'Alessio and Stolzenberg, 2010; Felson and Cundiff, 2012; Madsen *et al.*, 2008). There are a number of limitations that arise when using NIBRS. First, similar to UCR, NIBRS is limited only to incidents of crime which were reported to the police. Therefore, the reporting system has no measure for the dark figure of crime. Furthermore, NIBRS fails to be a nationally comprehensive measure of reported crime within the USA; a number of police agencies and states have refused to participate in the program. While the detail of NIBRS is an obvious strength, it also leads to more discretion from agencies on how to classify various crimes and events, which can lead to erroneous interpretations (Howard *et al.*, 2000; Maxfield, 1999).

ADAM

Within the criminal justice system, ADAM has provided the most representative understanding of drug use by arrestees. First entitled the Drug Use Forecasting Program (1987-1997), it was renamed ADAM in 1998, and employed more sound methodology that resulted in a more representative sample of arrestees within metropolitan areas (Katz *et al.*, 2005; Martin *et al.*, 2001; National Institute of Justice, 2014). By 1998, through the National Institute of Justice, ADAM was collecting data from approximately 35 counties; specifically, self-report data on drug use and the process of obtaining drugs, as well as urinalysis (for purposes of assessing the accuracy of the self-reported data). Furthermore, ADAM collected data on sociodemographics and behaviors (Katz *et al.*, 2005). After substantial cuts, ADAM was terminated in 2003, and eventually replaced with ADAM II (in 2007), through the Office of National Drug Control Policy. Due to funding cuts, ADAM II collected data from only five to ten counties (compared to ADAM's 35) (Kilmer and Caulkins, 2014; ONDCP, 2014). By 2014, ADAM II was terminated due to funding – even though, according to Kilmer and Caulkins, its cost is approximately 20 percent of the

National Survey on Drug use and Health, which has been criticized for its significant underestimation of hard drug use, as it has no methods to ensure inclusion of those who are or have been arrested (Sullum, 2014). Considering ADAM was the most comprehensive data source available on arrestees' drug use, there has been concern over how to develop sound policy without sound data (Kilmer and Caulkins, 2014; Sullum, 2014). ADAM required civilian researchers to collect primary data, which is both costly and time consuming (which also created a lag in data availability). Due to these constraints, it also failed to provide a nationally representative of arrestees.

Creating a data system

Our goal was to propose a system that would provide nationally representative, comprehensive data that also avoids disadvantages of other programs. By using drug court intake data, these data could then be merged through a classified databank that, with time, could avoid many of the problems of other data systems.

Similar to NIBRS, the goal of a drug court databank for postmarketing surveillance would be to provide data individual and aggregate data. This would allow researchers to select their units of analysis: individual, type of drug offense, type of criminal offense, or incident. Unlike NIBRS, data would be less complex, as there are not multiple levels of units of analysis (victims or offenders). While NIBRS and UCR seek to gather data from all police and sheriff departments, a drug court databank would use a sample of drug courts. Lastly, while NIBRS participation is low, considering the copious work involved in imputing data on each case, drug courts will be allowed to provide raw data that will then be computed/standardized by the researchers in order to increase participation and decrease time delays. Like ADAM, we aim to provide comprehensive drug information through both urinalysis and self-report data. Furthermore, we aim to provide a representative sample of arrestees within the USA by using a multistage clustering sampling technique (a stratified random sampling technique to first sample cities/areas by characteristics, and then a sample of drug courts within the area, followed by a possible stratified random sample of participants). Ideally, this would provide a representative sample of both individuals and drug courts by accounting for population, racial composition, and especially, differences in urban and rural communities. Recognizing the vast utility of ADAM, our ultimate goal is to provide a system that models itself after ADAM's strengths, yet is more cost and time efficient, while also providing a nationally representative sample of more comprehensive, individual-level data.

Methods

We partnered with one drug court in hopes of demonstrating how drug court data could provide a superior tracking system. Data were obtained from a county drug court operating in a southern city in the USA with a population over 200,000 people. Intake data were obtained from the drug court in December of 2013, and included all participants from September 2012 to November 2013 ($n = 532$).

Drug court officials used tested survey instruments at intake to maintain records of social and psychological characteristics of each participant. Anywhere from 300 to 500 questions were asked to each drug court participant (depending on answers to contingency questions). In an effort to maintain the accuracy/honesty of participants' answers, only secondary data were used[2]. Thus, the researchers had no contact with any participants within this drug court.

Since a drug court is designed to provide drug treatment and not necessarily designed for postmarketing surveillance, the majority of the survey instrument is geared toward determining the likelihood of successful treatment for each drug court participant. Much of this information is relevant for postmarketing surveillance, including demographic characteristics and self-reported drug use. When self-reporting drug use, some drug court participants distinguished between recent drug use and lifetime drug use. Other participants merely listed the drugs they used. For this reason, we only reported lifetime drug use for demonstration purposes[3]. Much like several existing drug surveillance systems, we believe that any future surveillance system should provide multiple measures of drug use, such as lifetime, yearly, monthly, and daily use of different substances. These data were then coded as whether the participant had ever used the drug (1 = yes, 0 = no).

Results

In order to provide some idea of information that potentially could be gathered from drug courts, some examples of results are provided[4]. Specifically, we examined demographic information, and lifetime drug use. We reported all specific drugs referenced (see Table II); for purposes of clarity, we organized these by categories, modeled after the classification scheme in ADAM II (Office of National Drug Control Policy, 2014). To assess how other characteristics may relate to lifetime drug use, we examined differences by psychological disorders, social factors, and church attendance. For purposes of clarity, we used the most frequent (5 percent or more) drug types – not categories (e.g. Adderall, not amphetamines) to examine these characteristics (see Table III).

Unit of analysis: drug type

Table I shows some basic demographic information that we believe is relevant for the purpose of describing the relevant background information of the participants who were enrolled in the drug court that was surveyed[5]. On average, participants were about 35 years old, and had two felony convictions. Only 27.8 percent of participants reported that they had less than a high school education. Approximately half of the participants were employed at time of arrest.

Table II shows self-reported lifetime drug use, organized by classifications. The most frequently used drug was tobacco (74.4 percent), followed by marijuana (69.2 percent), cocaine (42.1 percent), and Lortab (24.8 percent). Regarding classifications modeled after ADAM II, the most frequent (with the exception of "other/indeterminate" was hydrocodone (26 percent), followed by opiates (20.9 percent). The least common classification was PCP (one reported user).

Unit of analysis: individual

As can be observed in Table III, 21 percent of those who had tried cocaine also had a psychological disorder, while only 9.6 percent of those who had not used cocaine reported being diagnosed with a psychological disorder. This pattern was observably consistent for all drugs, with the exception of Lortab, in which there was a higher percentage of nonusers who had a psychological disorder (14.9 percent) than users with a psychological disorder (13.6 percent). Regarding social support, when considering that the majority reported high levels of social

Table I Characteristics of drug court sample population

Variable	*Mean*	*Range*	*SD*	*f*	*Percent*
Age	35.7	19-73	10.5	–	–
Felony convictions	2.0	0-19	2.7	–	–
Highest education					
Less than high school				147	27.8
GED				101	19.1
High school graduate				153	28.9
Some college/college degree				103	19.5
Employed at arrest					
Yes				257	51.0
No				247	49.0
Church attendance					
Yes				385	72.9
No				138	27.1
Diagnosed with psychological disorder					
Yes				78	14.9
No				445	85.1
Social support					
None				21	4.0
Some				174	33.0
High				299	56.6

Table II Frequencies of drugs used by drug court participants

Drug	*f*	*%*	*% rank*
Amphetamines			
Adderall	13	2.4	15
Amphetamine	1	0.2	22
MDMA	39	7.3	8
Methamphetamine	40	7.5	7
Vyvanse	2	0.4	21
Total	95	17.8	
Benzodiazepine			
Benzodiazepine	14	2.6	14
Clonazepam	10	1.9	16
Valium	4	0.8	19
Xanax	78	14.7	5
Total			
Hydrocodone			
Hydrocodone	4	0.8	19
Lortab	132	24.8	4
Tussinex	2	0.4	21
Total	138	26.0	
Opiate			
Codeine	3	0.6	20
Heroin	73	13.7	6
Morphine	6	1.1	18
Opiates	29	5.5	9
Total	111	20.9	
Other/indeterminate			
Demerol	3	0.6	20
Fentanyl	1	0.2	22
GHB	1	0.2	22
Ketamine	1	0.4	21
LSD	15	2.8	13
Mescaline	1	0.2	22
Perphenazine	1	0.2	22
Psilocybin	2	0.4	21
Soma	2	0.4	21
Steroids	1	0.2	22
Opioids	2	0.4	21
Dilaudid	20	3.8	10
Tobacco	396	74.4	1
Total	446	84.2	
Oxycodone			
Oxycodone	18	3.4	12
OxyContin	20	3.8	10
Percocet	13	2.4	15
Percodan	1	0.2	22
Opana	1	0.2	22
Total	53	10	
Methadone	19	3.6	11
PCP	1	0.2	22
Marijuana	368	69.2	2
Cocaine	224	42.1	3
Buprenorphine	7	1.3	17

support (56.6 percent), there seemed to be no real, observable difference in drug use type. While most frequencies appear consistent for church attendance, there are two notable differences. One, while only 23 percent of participants who had never used heroin reported attending church, 46.5 percent of those who did report heroin use also reported attending church. Two, 52.5 percent of methamphetamine users reported attending church, while only 24 percent of those who were non-methamphetamine users reported attending church.

Table III Drug use type by characteristics

	Psychological disorder				Church attendance				Support from family and friends					
	No		Yes		No		Yes		No support		Some support		High support	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Cocaine														
No	272	90.4	29	9.6	69	23.1	230	76.9	12	4.2	93	32.5	181	63.3
Yes	172	78.5	47	21.5	66	30.6	150	69.4	8	4.0	75	37.5	117	58.5
MDMA														
No	413	85.7	69	14.3	126	26.4	351	73.6	19	4.2	154	34.1	279	61.7
Yes	31	81.6	7	18.4	9	23.7	29	76.3	1	2.9	14	41.2	19	55.9
Heroin														
No	390	87.1	58	12.9	102	23.0	342	77.0	19	4.5	143	34.0	258	61.4
Yes	54	75.0	18	25.0	33	46.5	38	53.5	1	1.5	25	37.9	40	60.6
Lortab														
No	330	85.1	58	14.9	100	26.0	284	74.0	16	4.3	123	33.2	231	62.4
Yes	114	86.4	18	13.6	35	26.7	96	73.3	4	3.4	45	38.8	67	57.8
Marijuana														
No	131	82.4	28	17.6	38	23.9	121	76.1	7	4.5	53	34.2	95	61.3
Yes	313	86.7	48	13.3	97	27.2	259	72.8	13	3.9	115	34.7	203	61.3
Methamphetamine														
No	414	86.3	66	13.8	114	24.0	361	76.0	18	4.0	158	35.1	274	60.9
Yes	30	75.0	10	25.0	21	52.5	19	47.5	2	5.6	10	27.8	24	66.7
Opiates														
No	423	86.2	68	13.8	126	25.9	361	74.1	19	4.1	163	35.3	280	60.6
Yes	21	72.4	8	27.6	9	32.1	19	67.9	1	4.2	5	20.8	18	75.0
Tobacco														
No	115	90.6	12	9.4	23	18.3	103	81.7	3	2.5	43	35.2	76	62.3
Yes	324	83.9	62	16.1	111	28.9	273	71.1	17	4.8	122	34.2	218	61.1
Xanax														
No	381	86.0	62	14.0	112	25.6	326	74.4	17	4.0	147	35.0	256	61.0
Yes	63	81.8	14	18.2	23	29.9	54	70.1	3	4.5	21	31.8	42	63.6

Discussion

To avoid overburdening drug courts, we would provide three options for data imputation, as convenience would depend on the data being collected[6]. First, if drug courts are already collecting these data, we would provide a databank to upload the raw data (in any format), which would then be standardized by the researchers. Second, a short, scan-ready paper survey would be offered that would allow for submission of either the surveys or third, they could upload the data from the surveys (depending on the drug courts' resources).

Similar to other studies, there are a number of issues which could arise. We propose that such a massive undertaken be approached in stages. First, we would contact drug court professionals to determine what procedure of data collection and processing would be simplest. Likely, there would be variability in these answers and initially, we would provide any three of the aforementioned options (paper survey distribution, direct uploading of raw data or surveys). For purposes of piloting, we would then propose a partnership with 10-20 drug courts that showed initial interest in the project. We would also want to ensure that we were able to travel to any of the drug courts in the pilot sample to ensure efficient remedies when problems arose, as well as to establish a training program for drug court employees regarding the data collection/imputation process. Once established, this could be converted to online training.

Once the sample was established, data collection would commence[7]. Initially, only data on demographics and drug use (lifetime, current, novel drug use, and urinalysis results) would be collected, so that a streamlined process could be established. Drug courts would be asked to submit data every three months to minimize time lags in data availability. For purposes of anonymity and confidentiality, ID codes would initially be used to match drug courts and cities and no identifiable information of any drug court participant would be shared. Once that process

is streamlined (an estimated two years), we would begin to add drug courts (10-20 each year) that would eventually comprise a nationally representative sample. Once established, we would then begin to work with drug courts to collect more social, behavioral, and psychological aspects of each drug court participants (while still maintaining confidentiality and anonymity). We would like these data to be easily accessible to researchers, but to maintain confidentiality and anonymity, we would require an application process (and institutional review board approval).

By requesting data every three months, our goal would be to have data available within no more than six months of the actual time. For instance, to receive data from January through March, we would request these data by mid-April. We would want to standardize and clean all data for research access by the end of June. Thus, the oldest cases would be approximately six months. This would provide a more comprehensive and realistic representation of both lifetime and current/recent drug use. Furthermore, these data would be provided to participating drug courts (and eventually all drug courts), so that they are able to compare their participants to a national sample, as well as areas that are geographically and demographically similar. Knowing how one drug court's participants' drug use are comparable to other drug courts would allow more context for purposes of intake and treatment.

Depending upon the resources, reports could be circulated either annually or biannually. Regarding postmarketing surveillance, including questions about novel drug use on the survey instrument should supplement current drug surveillance, since some surveillance systems do not provide information about novel substances in a timely manner. Given the high number of reported prescription drugs and that some users reported using methadone and buprenorphine, some inquiry must be made into what, if any, drugs are being prescribed to drug court participants.

Conclusion

The creation of a drug court databank for postmarketing surveillance could address two problems in substance abuse research: surveying people who are most likely to misuse drugs through a nationally representative sample. Additionally, such a project would greatly add to existing postmarketing surveillance and our understanding of drug use. This is not to say that the proposed program is without limitations. One major challenge would be insuring data are collected in a consistent way. This will require comprehensive training and checks of data imputation. Furthermore, while urinalysis will be used to assess any current drug use, only self-report data are available to assess lifetime drug use. Lastly, while such a program would increase generalizability, cost and time efficiency, it would still require a great deal of time, effort, and monetary support. While these limitations are certainly prevalent within such a program, we purport that using drug court intake data would provide a real-time, cost and time efficient program that would be beneficial to all stakeholders, including drug court employees, researchers, and policymakers. It would surely be an arduous task, but it seems feasible and ultimately, worthwhile.

Notes

1. While not a part of the FDA approval process, there has been increased outsourcing of clinical trials in developing countries (Kamat, 2014). Putting emphasis on human participants may contribute to this ethically controversial practice.
2. Institutional Review Boards at the University of Alabama at Birmingham and the University of West Georgia universities approved this study.
3. Lifetime drug use was measured by asking participants what drugs they had ever used in the past. This was a guided, open-ended question to allow for participants to make mention of any drug they had used. Ideally, we believe that closed-ended and open ended questions could be used.
4. Only descriptive statistics were conducted as these results are not generalizable to other drug courts.
5. Race and gender information was unavailable at the time of data collection with the partnered drug court. We note this as a limitation of these data and would request such information within a drug court data collection program.

6. While we are in the process of attempting to create such a databank, at time of submission, no grant funding has yet been secured. Thus, we were careful to use conditional language.
7. We would not collect past data; as informed consent would be obtained from every participant.

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