Forensic Science in the Prosecution of Illegal Drugs Cases

Maria Socorro I. Diokno

Free Legal Assistance Group, 2F, Eastside Building, 77 Malakas Street, Brgy. Pinyahan, Diliman, Quezon City, Metro Manila, Philippines

In light of the current “war on drugs,” forensic science plays a significant role in the prosecution of cases involving illegal drugs to ensure that no innocent persons are ever wrongfully convicted. Prohibited drugs have been a problem in the country since the 1800s. The Philippines has been recognized as “a significant source of high potency crystalline methamphetamine (shabu) used both domestically and exported to locations in East and Southeast Asia and Oceania.” Yet, the prosecution of those involved with dangerous drugs has not been largely successful. Forensic chemists are crucial to successful drug prosecution but current forensic capabilities could be enhanced. Also, the vital role forensic laboratories play in the area of drug control is under-recognized. Forensic laboratories could – and should – provide scientific guidance and advice to strengthen law enforcement, activate early warning systems, enhance regulatory and monitoring capabilities, and develop responsive and effective drug control, prevention, and treatment policies.

Key words: chain of custody, current forensic capabilities, dangerous drugs, drug control, forensic chemist, prosecution

INTRODUCTION

No innocent person should ever be condemned to death or imprisoned for any length of time. Yet, in the Philippines, innocents have been wrongfully convicted, and in at least two cases, doubts have been raised on the guilt of two convicts executed by lethal injection.

In People v. Mateo (2004), the Supreme Court reviewed statistics on capital cases. It found that between 1993 and Jun 2004, "the trial courts have imposed capital punishment in approximately 1,493, out of which 907 cases have been passed upon in review by the Court. In the Supreme Court, where these staggering numbers find their way on automatic review, the penalty has been affirmed in only 230 cases comprising but 25.36% of the total number. Significantly, in more than half or 64.61% of the cases, the judgment has been modified through an order of remand for further proceedings, by the application of the Indeterminate Sentence Law, or by a reduction of the sentence. Indeed, the reduction by the Court of the death penalty to reclusion perpetua has been made in no less than 483 cases or 53.25% of the total number. The Court has also rendered a judgment of acquittal in sixty-five (65) cases. In sum, the cases where the judgment of death has either been modified or vacated consist of an astounding 71.77% of the total of death penalty cases directly elevated before the Court on automatic review ...."

What these statistics point to is the fallibility of the Philippine criminal justice system and the importance of forensic science in ensuring that no one is ever wrongfully convicted.

For space limitations, and in light of the current “war on drugs,” this article will focus on the role of forensic science in the prosecution of cases involving illegal drugs. The paper provides an analytical summary of the juxtaposition
of law and forensic science in dangerous drugs cases, presents a critical perspective of the state of forensic science in the prosecution of cases involving dangerous drugs, and attempts to draw broader conclusions; the paper, however, is limited by its lack of field interviews.

Illegal Drugs in the Philippines

In its 2015 Annual Report, the Philippine Drug Enforcement Agency (PDEA) characterized the Philippines as a “producing and consuming country of illegal drugs.”

Prohibited drugs have been a problem in the country since the 1800s. In 1902, there were about 40,000 Filipino and Chinese opium users Victoria (2016). Seventy years later, in 1972, there were about 20,000 drug users, with marijuana as their top drug of choice (DDB 2016). In 2012, the Dangerous Drugs Board in collaboration with the Philippine Normal University conducted a “Nationwide Survey on the Current Nature and Extent of Drug Abuse in the Philippines.” A key statement was “based on the survey, it was estimated that there could be 1.3 million drug users” in the country. Shabu (methamphetamine HCl) and marijuana (cannabis) are the dominant illicit drugs of choice, followed by other drugs such as cocaine (cocoa), ecstasy [methyleneoxyamphetamine (MDMA)] and others (PDEA 2015).

PDEA data show that in 2016, about a third (27%) of all barangays are “drug affected” (PNP 2016). The Dangerous Drugs Board recently clarified the definition of a “drug-affected barangay.” In Board Regulation No. 2 series of 2016, the Board defined a “drug-affected barangay” as a barangay which “has reported presence of drug user, pusher, manufacturer, marijuana cultivator, or other drug personality, drug den, marijuana plantation, clandestine drug laboratory, and facilities related to production of illegal drugs.” The Board also designated three categories of drug affectation: (a) seriously affected [those barangays that have “reported at least 1 clandestine drug laboratory or marijuana plantation in the community, reported presence of more than 20% of the barangay’s total population are drug personalities (i.e., users, pushers, financier), and reported presence of three or more drug dens or tiangges]; (b) moderately affected (those barangays that have “reported presence of 2-20% of the barangay’s total population are drug personalities”); and (c) slightly affected (those barangays that have “reported the presence of less than 2% of total barangay population are drug personalities”). Because Board Regulation No. 2 was adopted only on 3 Aug 2016, it is not possible to disaggregate PDEA’s current statistics on drug-affected barangays into the three categories of drug affectation.

The 2009 World Drug Report of the United Nations Office on Drugs and Crime (UNODC) identified the Philippines as “a significant source of high potency crystalline methamphetamine (shabu) used both domestically and exported to locations in East and Southeast Asia and Oceania. Manufacture often occurs in industrial-sized laboratories operated by transnational organized crime with most chemists being foreign nationals. In 2007, a notable increase in the seizure of methamphetamine-related manufacturing facilities was reported with nine significant laboratories (and an additional 13 chemical warehouses) seized, increasing in 2008 to 10 laboratories marking the third consecutive year of increases.”

In the same year, the US State Department issued a report, which identified corruption and poor law enforcement as among the factors that exacerbated the problem of illegal drug use in the country.

Lapses in the Prosecution of Those Involved in Illicit Drugs

The prosecution of those involved with dangerous drugs has not been largely successful. In People v. Ancheta et al. (2012), the Supreme Court reiterated its observations in People v. Garcia (2009), which noted the high rate of acquittals and dismissals in cases involving dangerous drugs:

“We close with the thought that this Court is not unaware that in the five years that R.A. No. 9165 has been in place, the rate of cases that resulted in acquittals and dismissals was higher than the rate of conviction. Under PDEA records, the dismissals and acquittals accounted for 56% because of the failure of the police authorities to observe proper procedure under the law, among others. A recent international study conducted in 2008 showed that out of 13,667 drug cases filed from 2003 to 2007, only 4,790 led to convictions (most of which were cases of simple possession); the charges against the rest were dismissed or the accused were acquitted.”

The Court then went further, looking into its own records, where it noted: “Our own data on the cases filed with us from 2006 to 2011 show that, out of those in which this Court made acquittals and reversals, 85% involved failure of the prosecution to establish the arresting officers compliance with the procedural requirements outlined in Section 21 of R.A. 9165” (People v. Ancheta 2012).

Most cases involve what is known as “buy-bust operations,” which the Supreme Court has described as follows:

“A buy-bust operation gave rise to the present case. While this kind of operation has been proven to be an effective way to flush out illegal
transactions that are otherwise conducted covertly and in secrecy, a buy-bust operation has a significant downside that has not escaped the attention of the framers of the law. It is susceptible to police abuse, the most notorious of which is its use as a tool for extortion. In People v. Tan, this Court itself recognized that by the very nature of anti-narcotics operations, the need for entrapment procedures, the use of shady characters as informants, the ease with which sticks of marijuana or grams of heroin can be planted in pockets of or hands of unsuspecting provincial hicks, and the secrecy that inevitably shrouds all drug deals, the possibility of abuse is great. Thus, courts have been exhorted to be extra vigilant in trying drug cases lest an innocent person is made to suffer the unusually severe penalties for drug offenses. Accordingly, specific procedures relating to the seizure and custody of drugs have been laid down in the law (R.A. No. 9165) for the police to strictly follow. The prosecution must adduce evidence that these procedures have been followed in proving the elements of the defined offense (Emphasis supplied and citations omitted.)” People v. Umipang (2012).

Crucial to a drug prosecution is the establishment of what is known in law as corpus delicti (body of the crime). Corpus delicti is any objective proof that a crime has indeed taken place and this must be proven in order to convict a person of the crime (Rimorin v. People 2003; Black’s Law Dictionary). In cases involving dangerous drugs, the corpus delicti is the presentation of the dangerous drug itself (People v. Climaco 2012). In People v. Climaco (2012), the Supreme Court reiterated its ruling in People v. Alcuizar, stressing the State’s obligation to prove the corpus delicti in cases involving dangerous drugs:

“The dangerous drug itself, the shabu in this case, constitutes the very corpus delicti of the offense and in sustaining a conviction under Republic Act No. 9165, the identity and integrity of the corpus delicti must definitely be shown to have been preserved. This requirement necessarily arises from the illegal drugs’ unique characteristic that renders it indistinct, not readily identifiable, and easily open to tampering, alteration or substitution either by accident or otherwise. Thus, to remove any doubt or uncertainty on the identity and integrity of the seized drug, evidence must definitely show that the illegal drug presented in court is the same illegal drug actually recovered from the accused-appellant; otherwise, the prosecution for possession under Republic Act No. 9165 fails.”

The chain of custody in drugs cases has been described by the Supreme Court as referring to four links: “first, the seizure and marking, if practicable, of the illegal drug recovered from the accused by the apprehending officer; second, the turnover of the illegal drug seized by the apprehending officer to the investigating officer; third, the turnover by the investigating officer of the illegal drug to the forensic chemist for laboratory examination; and fourth, the turnover and submission of the marked illegal drug seized by the forensic chemist to the court.” (People v. Dahil and Castro 2015).

Forensic chemists play crucial roles in the third and fourth links of the chain of custody in illicit drugs cases.

**Role of Forensic Chemists in the Prosecution of those Involved in Illicit Drugs**

Under Philippine law, all seized or confiscated or surrendered dangerous drugs, plant sources, controlled precursors, and essential chemicals must be turned over to the PDEA Laboratory Service for qualitative and quantitative analysis within 24 hours from confiscation, seizure, or surrender (Section 21, Republic Act 9165). The PDEA Laboratory Service must issue a certification of its examination results, under oath by the forensic laboratory examiner, within 24 hours from receipt of the subject items. However, when the volume of the dangerous drugs, plant sources, and/or controlled precursors does not allow the testing to be completed within 24 hours, a partial laboratory examination report may be provisionally issued stating the quantities of drugs still to be examined; but a final certification on the completed forensic laboratory examination must be issued within the next 24 hours. These requirements form the third and fourth links in the chain of custody of dangerous drugs.

The third link in the chain of custody of dangerous drugs refers to the turnover by the investigating officer of the illegal drugs to the forensic chemist, to make sure that the drugs seized, recovered, or surrendered are the same drugs that will be subjected to quantitative and qualitative analysis by the forensic chemist. This means that once the investigating officer delivers the suspected illegal drugs to the forensic chemist, the forensic chemist must examine the suspected substance, determine its chemical composition (qualitative analysis), and find out whether it contains any illegal drugs. The forensic chemist must also establish the amount of the dangerous drug present in the substance as well as its purity (quantitative analysis).

There have been a series of cases where doubts were raised as to whether the dangerous drugs tested actually
came from the accused. In *People v. Dahl and Castro* (2015), the forensic chemist who examined the suspected substances certified that she had “no personal knowledge as from whom and where said substance was taken.” In *People v. Beran*, cited in *People v. Dahl* (2015), the police investigator claimed to have personally delivered the drugs to the laboratory for testing, “but there was no showing who received the drug from him.”

The fourth link refers to the turnover of the marked illicit drugs by the forensic chemist to the Court, when presented as evidence in the case. The Supreme Court, in *People v. Pajarin and Pallaya* (2011), recognized the important role of forensic chemists in the prosecution of cases involving prohibited drugs: “Further, as a rule, the police chemist who examines a seized substance should ordinarily testify that he received the seized article as marked, properly sealed and intact; that he resealed it after examination of the content; and that he placed his own marking on the same to ensure that it could not be tampered pending trial. In case the parties stipulate to dispense with the attendance of the police chemist, they should stipulate that the latter would have testified that he took the precautionary steps mentioned.”

In several cases, forensic chemists failed to testify in court. In other cases, forensic chemists failed to testify how the drugs were kept while in their custody until the drugs were transferred to the court. In these cases, the accused were acquitted.

**Current Forensic Capabilities in Illicit Drugs Cases**

Forensic examination of illicit drugs seized or recovered by, or surrendered to, authorities are undertaken by the Crime Laboratory of the Philippine National Police [PNP] and the PDEA Laboratory Service.

The PNP Crime Laboratory includes a chemistry division, which conducts qualitative examinations of dangerous drugs, substances, and paraphernalia and examines urine and other body fluids for the presence of dangerous drugs, essentially to determine the presence of dangerous drugs.

By law, the PDEA Laboratory Service is empowered to examine all seized, surrendered, or recovered dangerous drugs. The PDEA Laboratory Service consists of three divisions. The *Examination Division* conducts laboratory examinations on seized dangerous drugs, controlled precursors and essential chemicals, drug tests on arrested persons, and assessment and processing of clandestine laboratories; it also testifies in court as expert witnesses. The *Documentation and Evidence Division* manages the inventory and safekeeping of drug and non-drug evidence and keeps and stores the evidence in the evidence room/storage area. It also facilitates the destruction of pieces of drug and non-drug evidences that are no longer needed in court and prepares certificates of destruction signed by appropriate witnesses, as well as witnesses the destruction of expired medicines and controlled precursors and essential chemicals. The *Special Research Division* conducts research, develops or validates new methods of analysis of drugs and controlled precursors and essential chemicals, conducts quantitative examinations of dangerous drugs and controlled precursors and essential chemicals, and establishes capability on impurity profiling of seized methamphetamines.

In its 2014 Annual Report, PDEA reported: “at the end of 2014, all PDEA laboratories nationwide are already operational. All regional forensic laboratories are equipped with essential tools and equipment for illegal drug detection and investigation and can analyze, detect, collect, and process samples and pieces of evidence.”

**Independent Assessment of Current Forensic Capabilities in Dangerous Drugs Cases**

The UNODC’S Global Synthetics Monitoring: Analyses, Reporting and Trends (SMART) Programme (Global Smart Programme) assessed the forensic infrastructure in 11 countries in Asia, and sent missions to Cambodia, Indonesia, and the Philippines (Hammond). The rationale behind the assessment was the recognition of the “crucial importance of forensic laboratory as source of information [on] physical and chemical characteristics, purities, trends, patterns of manufacturing and trafficking, law enforcement operations, regulatory authorities, criminal justice system.” Among the findings were:

- The existence of multiple laboratories, (the Philippines, for example, has 20 laboratories), which could lead to “drug abuse patterns and trafficking trends [being] valid for the local situation,” making it difficult to arrive at national patterns and trends.

- “Multiple law enforcement agencies have overlapping anti-narcotic functions and own supporting drug lab,” which could lead to “inter-agency rivalry and jealousy” and thus “poor cooperation and challenge to pool data.”

- Limited interaction between the national drug control body and the forensic laboratory, implying that the “importance of laboratory [is] often not understood.”

- “Most drug labs have not received training in the forensic aspects of clandestine laboratory investigations.”

- “Forensic investigators are not educated on potential dangers posed by chemicals and chemical
treatment policies. As noted by Remberg and Stead (2005):

- The Philippine laboratories are “well-equipped.”
- No quantitative testing on drug samples is conducted in the Philippines “due to law imposed time restrictions on identifying drugs samples.”
- In the Philippines, “quantitative tests are only made to determine the actual content of pure drug to calculate the reward for drug informants.”

Vital Role of Forensic Laboratories in Drug Control

These findings point not only to a need to enhance Philippine forensic capabilities but, more importantly, to the imperative to recognize, understand, and appreciate the vital role forensic laboratories play in the area of drug control. At present, it appears that the PDEA Laboratory Service contributes to drug control efforts in a limited way, perhaps largely circumscribed by the strict time requirements imposed by the law. Yet, it could—and should—provide scientific guidance and advice to strengthen law enforcement, activate early warning systems, enhance regulatory and monitoring capabilities, and develop responsive and effective drug control, prevention, and treatment policies. As noted by Remberg and Stead (2005):

“Despite their central role in drug control, forensic laboratories are usually seen and used as tools and servants rather than as resources and partners. At best, the value of individual laboratory results to answer a specific question, to save a life, to help in treatment or to identify or confirm a crime is recognized. However, there is much less recognition of the fact that collectively, as a body of information, laboratory results also constitute a valuable commodity in their own right by helping to identify new potential threats and health hazards, especially those related to new drugs and manufacturing methods, new sources of drugs and drug availability, new purities and cutting agents, and new products and drug combinations.”

x x x

“In general, there is a need for wider recognition of the added value of an integrated national scientific support service as an equal partner with law enforcement, judicial, regulatory and health authorities. Laboratories need to be provided with the resources they require to sustain high-quality services, and they and their scientists need to be given the opportunity to participate actively in relevant regional and global networks of forensic scientists to exchange experience and analytical findings at an early stage. Most importantly, national institutions and government agencies need to be made more aware of the range of work and possibilities of scientific support to ensure better use of available laboratory resources and greater recognition of the potential value of scientific information, beyond the use of laboratory results as evidence in court.”

UNODC (2010) underscores the valuable contributions of forensic science to the criminal justice system: “Forensic services are key to an effective and fair criminal justice system because they provide objective and timely information for multiple phases at different stages of the criminal justice process. For example, forensic services are used by police to identify suspects in the investigative phase of the criminal justice process. Forensic services are also used by attorneys and judges during the trial phase of the process. The ultimate objective of forensic science is to contribute to finding the truth, more precisely to provide the criminal justice system with answers, using objective evidence, and by questions aimed at determining the guilt or innocence of an offender. It is therefore essential that forensic services are provided by a highly qualified and impartial entity.

The investigation and prosecution of dangerous drugs cases would benefit from advice and guidance by PDEA and PNP laboratories, especially in relation to the collection, handling, and packaging of seized, recovered, or surrendered drug evidence.

Specifically—with regard to packaging of seized, surrendered, or recovered dangerous drugs—the PNP Drug Evidence Bag - Chain of Custody portrayed in the Revised PNP Manual on Anti-Ilegal Drugs Operations and Investigation (2014) appears to be one of a kind. Yet, forensic scientists abroad have stressed the need for different types of packaging of dangerous drugs, depending on the type of drug seized, recovered, or surrendered. For example, seized or recovered plants and plant materials should not be placed inside plastic bags because of moisture content and the tendency to grow mold; syringes or sharp objects should be placed inside cardboard cartons or glass vials and labeled as a potential biohazards (National Forensic Science Technology Center).

Both laboratories could also consider applying for accreditation with the Philippine Accreditation Board. Forensic experts worldwide have been encouraging crime laboratories to secure accreditation, mainly in consideration of the need to regulate crime laboratories as well as to address major shortcomings in forensic science services (Tilstone 2008; Giannelli 2006). Accreditation
is an essential external and independent review and a reliable indication of the laboratories’ technical expertise; “it provides formal recognition that laboratories are competent, impartial and independent” (ILAC 2015). Accreditation ensures that all forensic services are provided in accordance with accepted international standards. The benefits from accreditation that will redound to both PNP and PDEA laboratories are explained by the International Laboratory Accreditation Cooperation (ILAC), the global association for the accreditation of laboratories:

Accreditation benefits laboratories by allowing them to determine whether they are performing their work competently to appropriate standards, and provides them with a benchmark for maintaining that competence. Many such laboratories operate in isolation to their peers. A regular assessment by an accreditation body provides an opportunity for an independent technical evaluation of their performance and checks all aspects of a facility’s operations related to consistently producing accurate and dependable data. Areas for improvement are identified and discussed, and a detailed report provided at the end of each visit. Where necessary, follow-up action is monitored by the accreditation body so the facility is confident that it has taken the appropriate corrective action (ILAC 2015).

But accreditation alone may not be sufficient to ensure the integrity of the PNP and PDEA laboratories and the quality of their testing. In 2009, the United States National Academy of Sciences recommended that crime laboratories should be independent of law enforcement, rationalizing: “The best science is conducted in a scientific setting as opposed to a law enforcement setting. Because forensic scientists often are driven in their work by a need to answer a particular question related to the issues of a particular case, they sometimes face pressure to sacrifice appropriate methodology for the sake of expediency” (National Academy of Sciences 2009). Perceived and real bias, fiscal autonomy of crime laboratories, and the fundamentally different rules under which law enforcement operations and science operate are the principal reasons why crime laboratories should be independent of law enforcement agencies (Goldman 2009). An academic, however, warns: “In brief, direct control can provide stronger incentives and improve coordination, but strong incentives to respond to the principal’s demands can increase both good and bad behavior and not all coordination is consonant with the pursuit of justice. On net, police control could either improve or degrade the performance of the crime lab” (Warren 2015).

Both the PNP and PDEA laboratories are attached to law enforcement agencies; to ensure that these laboratories maintain their integrity and assure the qualities of their services, they may consider adopting the internationally prescribed minimum standards for the analysis of seized, surrendered, or confiscated dangerous drugs. These international standards are proposed by the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG), a group of 20 forensic experts from around the globe who “work to improve the quality of the forensic examination of seized drugs” (SWGDRUG 2016). Among the key minimum standards are:

- The adoption and implementation of a Code of Professional Practice for Drug Analysts, which “provide(s) the framework of ethical values and scientific and legal obligations within which the analyst should operate.” The Code would require drug analysts to: “strive to demonstrate that the integrity and security of evidential materials and the information derived from their analysis have been maintained while in their possession; employ an appropriate analytical approach, using the facilities available; present advice and testimony, whether written or oral, in an objective manner; be prepared to reconsider and, if necessary, change their conclusions, advice or testimony in light of new information or developments, and take the initiative in informing their employer and customers promptly of any such changes that need to be made; and take appropriate action if there is potential for, or there has been, a miscarriage of justice due to new circumstances that have come to light, incompetent practice or malpractice.”
- The development of both a sampling strategy and a sampling scheme when conducting qualitative analysis of samples of seized, surrendered, or confiscated drugs. A sampling strategy indicates whether sampling is statistical (probability-based) or not; selected samples must be analyzed to meet the SWGDRUG minimum standards for drug identification “if statistical inferences are to be made about the chemical identity of the population.” A sampling scheme is “an overall approach which includes population determination, selection of the sampling plan and procedure and, when appropriate, sample reduction prior to analysis.”
- The use of multiple uncorrelated techniques in the forensic identification of seized, confiscated, or surrendered drugs;
- Strict adherence to the minimum standards in the chemical analysis of items seized from
clandestine drug laboratories, including, among others: the exercise of caution and routine safety protocols when conducting quantitative and qualitative tests on drugs seized from clandestine laboratories, including the use of protective breathing equipment, specialized ventilation equipment (such as fume hoods), personal protective equipment (e.g., safety glasses, chemical resistant gloves, respirators, face masks, air monitors, etc.), specialized emergency equipment stations, chemical disposal and destruction facilities and procedures, and specialized evidence receipt, storage and disposal requirements designed to mitigate expected dangers (e.g., limited sample size, proper packaging of reactive materials, use of absorbents, properly ventilated storage); sample selection for analysis which must relate to the manufacturing process; yield and capacity calculations, which may be expressed as theoretical or expected; and specialized skills training and continuing education for drug analysts.

• The establishment and maintenance of a documented quality management system, including, among others, requiring laboratories to: provide adequate space, chemical hoods, and appropriately secured storage to prevent contamination of chemicals and reagents; establish and implement a laboratory cleaning schedule; and routinely monitor instrument and equipment performance. The documented quality management system should also address issues relating to evidence control (e.g., requiring laboratories, for chain of custody purposes, to compare evidence against submission documentation and to document any significant observations of irregularity), integrity of evidence, evidence storage, and disposition of evidence. The documented quality management system also requires a documented policy relating to deficiency of analysis (“any erroneous analytical result or interpretation, or any unapproved deviation from an established policy or procedure in an analysis”).

CONCLUSION

With the looming re-imposition of capital punishment in the Philippines, there is urgent need for the country to strengthen its forensic capabilities to ensure that no innocents are put to death, killed, or imprisoned.

REFERENCES


GOLDMAN A. 2009. Study: Separate Police, Labs Because of Bias.

HAMMOND B. Undated. Powerpoint Presentation, “Assessment of Forensic Infrastructure.”


[PNP] Philippine National Police. Undated. Power Point
Presentation, “Use of Forensic Science in Police Investigation.”


WARREN P. 2015. Laboratory Independence, Control and Exonerations.