
The PNP CODIS of the Forensic Service: Basis for An Enhanced DNA Laboratory*Justinian Y. Filoteo*

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Abstract - The Philippine National Police (PNP) has established the Combined DNA Index System (CODIS) as a cornerstone of its forensic service. This system represents a pivotal advancement in the field of criminal investigation, providing law enforcement agencies with a robust tool for solving crimes and bringing perpetrators to justice. From a macro to micro level perspective, the implementation of the CODIS serves as the foundation for the development and enhancement of DNA laboratories across the country, revolutionizing the way forensic evidence is analyzed and utilized in criminal investigations. This research described the CODIS of the forensic science service as basis for an enhanced DNA laboratory. It utilized the exploratory sequential research design. The setting was at Camp Crame in Quezon City. The source of data are three years records of PNP reported cases which utilized the CODIS. Twenty-five (25) active CODIS personnel participated in the study. The difficulties encountered in the implementation of CODIS were identified through interview method. Results revealed the different forensic science services essential for gathering and analyzing evidence, identifying suspects, and ensuring the proper administration of justice in the Philippines which contribute to the overall effectiveness of law enforcement and criminal investigations. Cases which utilized CODIS in the last 3 years were analyzed. Five difficulties encountered in the implementation of CODIS were identified: data privacy & legal issues; resource constraints, data quality assurance, collaboration & coordination, and ethical considerations. To effectively address the difficulties identified in the implementation of CODIS, enhancements to the DNA laboratory was proposed.

Keywords - CODIS, forensic science, DNA, case analysis, enhancement

Introduction

Current crime-solving strategies involve the creation of DNA profiles from crime scenes, which are then directly compared to both known suspects and DNA databases containing information on identified individuals and other unresolved cases. Forensic science plays a crucial role in this kind of criminal investigations and justice systems globally, aiding in the collection, analysis, and interpretation of evidence.

In the Philippines, through Republic Act 6975 section 35 NAPOLCOM Resolution 96-0568, the Philippine National Police (PNP) Forensic Group was established in order to enhance the police operational efficiency and effectiveness by providing laboratory examination, evaluation and identification of pieces of physical evidence involved in crimes with emphasis on the medical, chemical, biological and physical nature.

As per the PNP Forensic 2022 (2nd Edition) Group Citizen's Charter, there are different forensic science services, namely: 1) DNA Examination (Non-Criminal), 2) Physical Identification, 3) Fingerprint Identification, 4) Questioned Document Examination, 5) Firearms Identification, 6) Medico-Legal, 7) Chemistry, and 8) Polygraph.

Part of the Service Pledge of the PNP Forensic Group is to maintain the integrity of examinations and result and the documentation to support analytical data. It is the vision of the PNP Forensic Group to be a highly competent and trusted forensic laboratory in the effective delivery of justice. To achieve this vision, its mission is to provide scientific investigation and other technical support to the PNP offices, other investigative agencies and the public through forensic examination, field work, scene of the crime operation (SOCO), training and research.

As per the above guidance from the vision and mission of the PNP Forensic Group, it is their pledge to provide quality services to the public and the criminal justice system with integrity, honesty, thoroughness, openness, and timeliness.

Materials and Methods

The setting of the study is at Camp Crame, Quezon city participated by twenty-five (25) active PNP CODIS personnel. Exploratory sequential research design was utilized. Documentary analysis was conducted to analyze the different forensic science services of the PNP and the cases in the last 3 years which utilized the PNP Combined DNA Index System (CODIS) Forensic Science Service, while, interview method was used to identify the difficulties encountered in the implementation of Combined DNA Index System (CODIS).

Results and Discussion

1. The Different Forensic Science Services of the Philippine National Police (PNP)

The Philippine National Police (PNP) offers various forensic science services to support law enforcement and the justice system in the Philippines. These services play a crucial role in investigating and solving crimes. The key forensic science services provided by the PNP under Republic Act No. 6975 dated December 13, 1990 include: Scene Of Crime Operations (SOCO), Fingerprint Analysis, Ballistics Analysis, Toxicology and Drug Analysis, DNA Analysis, Document Examination, Digital Forensics, Forensic Photography and Imaging, Serology and Blood Analysis. Polygraph (Lie Detector) Testing, Forensic Pathology, Firearms and Toolmark Examination.

These forensic science services are essential for gathering and analyzing evidence, identifying suspects, and ensuring the proper administration of justice in the Philippines. They contribute to the overall effectiveness of law enforcement and criminal investigations.

2. Cases that Utilized PNP Combined DNA Index System (CODIS) Forensic Science Service

- Murder Investigation
 - Case A: The Septic Tank Lady Case

In the case of Lea Angeles-Ng's murder, the utilization of CODIS (Combined DNA Index System) forensic science played a pivotal role in solving the crime. Initially reported missing by her husband, Tommy Ng, on January 23, 2012, the investigation led to the discovery of her decomposing body in a septic tank in San Pedro, Laguna, three months later. The AKG (Anti-Kidnapping Group) conducted a thorough investigation, identifying Reginel Regidor Santiago, a former policeman known as "Tagoy," as a key suspect. Santiago's arrest was prompted by ransom demands, and crucially, extrajudicial confessions obtained with his own counsel implicated him, PSUPT. Rommel Miranda, and two other police officers, PO1 Jifford Signap and PO1 Otello Santos Jr. Amidst the complexities of the case, the CODIS forensic science service played a crucial role. The investigators relied on CODIS to analyze and match DNA samples, aiding in the identification and apprehension of the perpetrators. The use of CODIS technology provided a concrete link between the suspects and the crime scene, strengthening the evidentiary basis for the charges filed against Miranda, Santiago, Signap, Santos, and compound caretaker/guard Elmer Paiste. This advanced forensic tool not only facilitated the identification of the decomposing cadaver but also played a crucial role in the verification process, overcoming limitations in the PNP CODIS capability. The effective application of CODIS in this case highlights the significance of forensic science in modern criminal investigations, enhancing accuracy and reliability in solving complex cases like Lea Angeles-Ng's tragic murder.

- Cold Case Breakthrough
 - Case B: Student killed, chopped up in Tondo

The apprehension of Dante Reyes Silva, accused of murdering and mutilating a 19-year-old male student, showcased the pivotal role of CODIS (Combined DNA Index System) in the investigation led by Moriones Police Station 2 (MPS 2) and Manila Police District (MDP) homicide section. Silva, residing in Barangay 261, Tondo, was taken into custody after the victim's father reported him missing. Silva was last seen parking his motorcycle on Severino Reyes St. before visiting Silva's rented house. The examination of CCTV footage disclosed Silva carrying two large white sacks, loaded into a taxi at 11:50 p.m. on Dec. 29. The next day, Bacoor City Police Station found the victim's dismembered body in two sacks in Barangay Niog 3, Bacoor, Cavite, confirmed by the victim's brother. The collaborative efforts of MPS2 and MPD homicide section resulted in Silva's arrest in Barangay 20, Tondo. The application of PNP CODIS played a crucial role in confirming that DNA evidence (blood, hair) from the victim matched Silva. However, concerns arose about the alleged illegal acquisition of DNA samples from the perpetrator, prompting scrutiny of the results. Silva's arrest, coupled with the use of CODIS, highlights the indispensable role of advanced forensic tools in contemporary

criminal investigations, establishing definitive connections between suspects and crime scenes to ensure justice and accountability.

- Sexual Assault Case Resolution
Case C: Stepfather nabbed for rape-slay of 2 minors in DavSur town

In the recent arrest related to a double homicide and rape case in Sta. Cruz, Davao del Sur, the deployment of CODIS (Combined DNA Index System) emerged as a critical factor in the investigation. The police discovered the crime scene after a neighbor, initially ignoring screams for help, eventually investigated and found the lifeless bodies of two minors. The victims were living with their stepfather, Jessie Bon Palomo, who became the prime suspect. With Palomo untraceable, the police initiated a pursuit operation, alerting counterparts in Soccsksargen as he was a resident of Cotabato City. Hours after the crime discovery, Palomo was apprehended in Banisilan town, North Cotabato, with an improvised shotgun and suspected shabu. The motive behind the crime and the method of the killings are still under investigation by the PNP forensic laboratory personnel. Notably, concerns have been raised about the alleged illegal acquisition of DNA samples from the suspect, casting doubt on the reliability of the results. This case highlights the significant role of advanced forensic tools like CODIS in unraveling complex criminal cases, ensuring thorough investigations and contributing to justice.

- Child Abduction Case
Case D: 16 abused children freed in Philippines after man's arrest in Sydney

In a significant operation conducted by the Philippine National Police (PNP) and Australian authorities, 16 abused children were rescued, marking a substantial cross-border effort against child exploitation. Acting on warrants, the PNP rescued the children in Taguig and Nueva Vizcaya, with the youngest victim being only 10 years old. This operation is considered one of the most substantial rescues of child abuse victims in a single effort. The collaborative effort was initiated after Australian police arrested a 56-year-old man with child abuse material, detailing his intent to exploit children in the Philippines. The Australian Federal Police (AFP) provided intelligence to the Philippine Internet Crimes Against Children Centre (PICACC), leading to further investigations by the PNP with AFP support. The rescued children are now under the care of the Department of Social Welfare and Development, while ongoing investigations aim to locate other potentially abused children identified during the operation. To ensure accurate verification before reuniting the minors with their families, the abducted children underwent DNA processing. However, due to necessary coordination with government agencies like DSWD and DOJ, coupled with the limited capability of PNP CODIS, the verification process may take some time. This case underscores the importance of international collaboration and advanced forensic tools like CODIS in combating child exploitation and ensuring the welfare of victims.

- Identification of Unidentified Human Remains
Case E: DNA of parents, dead boy in Nueva Ecija don't match – PNP

In September 2017, the Philippine National Police (PNP) raised doubts about the identity of a boy found stabbed multiple times in Gapan, Nueva Ecija, initially believed to be Reynaldo "Kulot" de Guzman, who was last seen with the slain teenager Carl Arnaiz. A DNA test conducted on the child's remains, compared with the samples from the parents, Lina and Eddie Gabriel, resulted in a negative match, challenging the Gabriels' positive identification of the 14-year-old as their son. Deputy Director General Fernando Mendez suggested that the body's bloated state when recovered from the creek may have altered its features, leading to a misidentification. Chief Inspector Lorna Santos of the PNP DNA Laboratory clarified that while the boy might be De Guzman, he could be an adopted child with a different DNA profile.

The police refrained from speculating on the child's relationship with the Gabriels but emphasized the need for a matching DNA profile from both parents for a reliable paternity test. The unidentified boy found in Nueva Ecija had his head covered with packaging tape and displayed at least 30 stab wounds. Despite the discrepancies, the police were uncertain about the body's identity and expressed intentions to search for a missing boy of the same age in other locations. Public Attorney's Office chief Persida Acosta contested the PNP's claim, asserting that the boy found was Reynaldo de Guzman, citing the reliability of DNA only with proper specimen handling. Acosta argued that the Gabriel couple positively identified their son based on clothing, facial features, and body markings. The case

highlighted the complexities and challenges in forensic identification, with DNA testing playing a crucial role in verifying the authenticity of the child's identity.

3. Difficulties Encountered In The Implementation Of Combined DNA Index System (CODIS)

The common challenges or difficulties that are encountered in the implementation of the Combined DNA Index System (CODIS) include:

Data Privacy and Legal Issues. Managing the privacy and security of sensitive DNA data while ensuring compliance with legal and regulatory requirements can be a significant challenge. Adhering to strict protocols to protect individual privacy rights and prevent unauthorized access is critical.

Resource Constraints. Limited financial resources and budgetary constraints can hinder the effective implementation and maintenance of CODIS. This may include limitations in acquiring state-of-the-art equipment, providing specialized training for staff, and supporting ongoing operational costs.

Data Quality Assurance. Ensuring the accuracy, reliability, and consistency of data entered into the system is vital for the effectiveness of CODIS. Establishing robust quality assurance protocols and standardized procedures for data collection, analysis, and interpretation is crucial.

Collaboration and Coordination. Achieving seamless coordination and collaboration between different law enforcement agencies and laboratories can be challenging, particularly when integrating CODIS into a comprehensive national or international database system.

Public Perception and Awareness. Building public trust and understanding about the benefits and ethical considerations of CODIS can be a significant hurdle. Educating the public about how DNA databases are used in criminal investigations and addressing concerns about privacy and misuse of data is essential.

Ethical Considerations. Balancing the potential benefits of using DNA technology in criminal investigations with ethical considerations related to privacy, consent, and potential misuse of data presents a complex challenge that requires careful navigation.

Addressing these challenges is crucial for the successful implementation and operation of CODIS, ensuring that the system effectively supports law enforcement efforts while upholding legal and ethical standards.

4. Proposed DNA Laboratory Enhancement

To effectively address the difficulties related to the implementation of the Combined DNA Index System (CODIS) as described, the following are the proposed enhancement to the DNA Laboratory:

| Difficulty | Proposed Enhancements |
|--------------------------------|--|
| Data Quality Assurance | 1. Develop and enforce strict quality control measures, including regular audits and validation checks, to ensure the accuracy and reliability of data entered into CODIS. |
| | 2. Provide ongoing training programs and certification courses for laboratory personnel to enhance their skills in DNA analysis techniques and data interpretation. |
| | 3. Implement a feedback loop system where errors or discrepancies in data are identified, addressed, and used to refine laboratory protocols and procedures, ensuring continuous improvement in data quality assurance. |
| Collaboration and Coordination | 1. Develop standardized protocols and communication channels for sharing DNA data and information between different agencies and laboratories, ensuring timely and secure exchange of relevant information. |
| | 2. Invest in the development of interoperable software solutions and data integration platforms that enable seamless communication and data sharing between CODIS and other forensic databases, promoting greater collaboration and coordination in criminal investigations. |

| Difficulty | Proposed Enhancements |
|---------------------------------|---|
| | 3. Establish multidisciplinary task forces and working groups comprising representatives from law enforcement agencies, forensic laboratories, legal experts, and policymakers to promote collaboration, information sharing, and joint initiatives aimed at addressing common challenges and achieving shared goals. |
| Public Perception and Awareness | 1. Launch public awareness campaigns and educational initiatives to inform the public about the purpose, benefits, and ethical considerations of CODIS, emphasizing its role in enhancing public safety and facilitating justice. |
| | 2. Engage with community groups, advocacy organizations, and media outlets to address public concerns and misconceptions about the privacy and security of DNA data, providing transparent information and reassurance about the safeguards in place to protect individual rights and privacy. |
| | 3. Establish public oversight mechanisms and transparency measures to ensure accountability in the use of CODIS and other DNA databases, allowing for public scrutiny and participation in decision-making processes related to their operation and utilization. |
| Ethical Considerations | 1. Develop and adhere to ethical guidelines and principles governing the collection, storage, and use of DNA data, ensuring compliance with legal and regulatory requirements and respecting individual rights and privacy. |
| | 2. Implement transparent consent procedures and provide clear information to individuals about the purposes and potential risks associated with the collection and use of their DNA data, empowering them to make informed decisions about their participation in DNA databases. |
| | 3. Facilitate open forums, consultations, and dialogues with stakeholders, including community representatives, ethicists, legal experts, and policymakers, to discuss ethical considerations, dilemmas, and implications of using DNA technology in criminal investigations, promoting greater awareness, understanding, and accountability. |

The proposed enhancements to DNA laboratories are essential steps toward overcoming the identified difficulties encountered in the implementation of the Combined DNA Index System (CODIS). By addressing key challenges such as data privacy and legal issues, technical hurdles, resource constraints, data quality assurance, collaboration and coordination, public perception and awareness, and ethical considerations, these enhancements aim to strengthen the effectiveness, efficiency, and integrity of forensic DNA analysis and criminal investigations.

Through the establishment of robust protocols, training programs, and quality control measures, DNA laboratories can ensure the accuracy, reliability, and consistency of data entered into CODIS, thereby enhancing the system's utility and trustworthiness. Moreover, fostering collaboration, information sharing, and partnerships among stakeholders in the criminal justice system can facilitate seamless coordination and cooperation, leading to more effective crime-solving outcomes.

Furthermore, by engaging in transparent communication, public education, and ethical dialogue, DNA laboratories can address public concerns and misconceptions about the use of DNA databases, promoting greater understanding, trust, and acceptance of CODIS within the community.

Conclusion

In conclusion, the findings highlight the critical role of forensic science services provided by the PNP under Republic Act No. 6975 in gathering and analyzing evidence, identifying suspects, and ensuring justice administration in the Philippines, contributing significantly to law enforcement and criminal investigations. Various case studies discussed in the chapter underscore the diverse applications of forensic science in solving crimes, ranging from murder investigations to the identification of unidentified human remains, showcasing its importance in addressing complex criminal cases. However, challenges encountered in the implementation of the Combined DNA Index System (CODIS) such as data privacy, resource constraints, collaboration, and ethical considerations necessitate careful attention. The proposed enhancements to DNA laboratories offer essential steps toward overcoming these difficulties,

aiming to strengthen the effectiveness and integrity of forensic DNA analysis and criminal investigations in the Philippines.

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Abstract - The private security industry in the Philippines is subject to regulation and oversight. Assigned government agencies oversee licensing, training standards, and compliance with regulatory laws is a crucial aspect for private security agencies (PSA) to ensure their operations are legal, ethical, and effective. Therefore, PSAs must dedicate resources to staying up to date with relevant laws and ensure their operations align with these regulations. The Department Order (DO) No. 150 series 2016 of the Department of Labor and Employment (DOLE) known as “Revised Guidelines Governing the Employment and Working Conditions of Security Guards and other Private Security Personnel in the Private Security Industry” is one regulatory law for PSA to abide to. Ensuring the welfare of security personnel is not only a moral responsibility but also essential for the overall effectiveness of private security operations. The DO ensures compliance with mandated employment benefits and working conditions for security guards and other private security personnel, hence, the purpose for the conduct of this study. The results underline that both agencies offer comprehensive work benefits. Adherence to the DO ensures good working conditions for security personnel. Both agencies exhibit a strong commitment to adhering to standard employment practices in terms of employment status. It was also determined that security personnel face challenges in their immediate work environments, including inadequate breaks and potential environmental hazards, with staffing levels directly influencing their workload and stress levels. A holistic Welfare Enhancement Program was formulated to tackle the various challenges encountered by security personnel.

Keywords - private security agencies, security personnel, welfare

Introduction

Private security agencies (PSA) have risen from being mere ancillary players to becoming pivotal contributors to global security landscapes. No place can operate without security services these days. Be it schools, offices, malls, banks, and even religious places (Durgan 2023). Their ability to offer specialized services, integrate advanced technology, and provide adaptable solutions has positioned them as valuable partners for businesses, individuals, and governments. As these agencies continue to evolve and innovate, their global success is likely to persist, shaping the future of security in an increasingly complex world. The phenomenon of PSA global success is not limited to developed nations alone; it is also making waves in emerging economies like the Philippines. In recent years, the Philippines has witnessed a remarkable growth in the private security industry, which has become an integral part of the country’s security landscape. Several factors contribute to the burgeoning success of private security agencies in the Philippines.

To maintain high standards and uphold professionalism, the private security industry in the Philippines is subject to regulation and oversight. Government agencies oversee licensing, training standards, and compliance with regulatory laws is a crucial aspect for private security agencies to ensure their operations are legal, ethical, and effective. As in many other countries, private security agencies must adhere to various regulatory laws to maintain their licenses and provide security services responsibly. Failure to comply with this law can result in fines, penalties, or the suspension of licenses. Therefore, private security agencies must dedicate resources to staying up to date with relevant laws and ensuring their operations align with these regulations.

Republic Act (RA) 11917 known as “An Act Strengthening the Regulation Of The Private Security Services Industry, Repealing For The Purpose, Republic Act No. 5487, entitled “Ac Act To Regulate The Organization And Operation Of Private Detective Watchmen Or Security Guard Agencies”, As Amended” lapsed into law last July 30, 2022. RA 11917 strengthens the regulation among security agencies wherein owners will now be required to be one of the