

Awareness of Forensic Knowledge among Police Officers: A Prospective Study

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Abstract

Forensic science is a dynamic field of knowledge and skills that can be very useful and helpful in proceeding with criminal investigations. The purpose of the study was to ascertain how police officers of various ranks felt about the use of forensic services in criminal investigations. The sample size included 100 police officers from all categories of departments like Constables, Head constables, Sub-inspectors, Inspectors, Deputy Inspector General of police, Superintendents of police, Director General of Police from the Kerala region, and Police trainers under the Central Academy of Police And Training (CAPT) in the Bhopal region. The data was gathered using a structured questionnaire and a purposeful sampling approach. The outcome of the study reveals that most of the police officers were not aware of the role of forensic services played in criminal investigations. Their level of knowledge depends on their grade and year of experience. First responders like Constables and Sub-Inspectors have limited knowledge of forensic science, whereas officers working at higher levels of the police department, such as the Director General of Police, Deputy Inspector General of Police, Superintendent of Police and Inspectors are able to utilize forensic science during investigations.

Keywords: Forensic Science; Criminal Investigation; Police Officers; Forensic Services; First Responders.

INTRODUCTION

In Several jurisdictions, a specialised group of technicians has been assigned various responsibilities by the police departments. However, crime scene investigation procedures are

not difficult to understand and are undoubtedly within the scope of the typical police officer. Only trained individuals who use police facilities to examine crime scenes and conduct initial forensic examinations can provide some forensic services.^{1,2} The investigation officers must be aware of criminal evidence as well as the methods for gathering and preserving it in accordance with regional laws and international standards, in addition to the procedures for questioning witnesses and filing a law suit. The amount of time spent conducting investigations and obtaining training in forensic evidence collection affects the inquiry officers level of expertise and opinions in this area.^{3,4} Police officers who have undergone forensic training must rapidly assume control of the work being done at the scene when a crime is being investigated. However, there is frequently no chance for crime scene investigators to process the crime scene. In such a

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situation, first responders (such as police officers) must do some fundamental recovery processes in addition to the preservation and documentation tasks. Without a doubt, the police play the primary role in criminal investigations, but other state institutions, such as the DNA lab and forensic lab, also have important roles to work in forensic criminal investigations. Numerous issues are being faced by police officers. The most important factor is forensic training, which is essential for police detectives to conduct investigations into criminal cases.⁵⁻⁸

A Prospective study carried out by Uamfung [2013] found that the length of time engaged in investigative work and receiving forensic evidence collection training affect the level of knowledge and opinions of the inquiry officers in forensic evidence collection. Likewise, it is also affected by the level of performance in the process of collecting evidence and making the investigation file of the inquiry officers in the assault cases⁹ Hintao [2018] studied the problems and obstacles of Thai Police inquiry officers in collecting evidence from the crime scene and found that there was a lack of teams to investigate the crime scene, a lack of supporting factors for collecting evidence, a lack of continuous development of new technology, and a lack of credibility in the operation. Moreover, Thailand's crime scene investigation and evidence collection have legal limitations that make it possible to obtain evidence in many cases, even if it does not infringe on rights or if it comes without official support. The evidence obtained will be depleted. This legal limitation is very sensitive, as it relates to rights and humanity.^{10,11}

Table 1: Technical knowledge on forensic interventions in crime investigations

	Collection of evidence	Preservation	Examination	Documentation	Videotaping	Sketching
Yes	41%	40%	36%	65%	64%	58%
No	55%	57%	60%	30%	32%	38%
No Response	4%	3%	4%	5%	4%	4%

Police, it was found that more people had the positions of Constable, Head Constable, and Sub Inspector. The vast majority of police officers [30 police officers] have 21 to 25 years of experience. Five police officers were identified as having five to ten years of experience.

The table shows the survey results pertaining to the technical forensic knowledge of the investigating officers on various approaches to handling crime scenes, such as evidence collection, preservation, analysis of evidence, documentation, videotaping, and sketching the crime scene. The

METHODOLOGY

This study was one of the earliest systematic efforts to link the important function of forensic science to criminal investigation. The sample size was 100 police officers in all categories of Constable, Head Constable, Sub-inspector, Inspector, Superintendent of police, Deputy inspector general, Inspector general of police, Direct general of police in Kerala region, and Police trainers under the Central Academy For Police Training [CAPT] in Bhopal region. Structured questionnaires were used to collect the data with permission from the higher authority of Police officials. A purposive sampling method was used for the data collection. Prior to the survey, the questionnaire was peer reviewed in a blind format. All survey questions were given in English. Both primary and secondary data were used in the investigation. The data was represented graphically, either known data or data that has been gathered. The data is stored securely for future research.

RESULTS AND DISCUSSIONS

Sample Profile of the Study Respondents

The majority of study participants were men with school-level education. Female respondents had completed only their high school education. In comparison to other designations like Inspectors, Sub Inspectors, Deputy Inspector General of Police, Superintendent of Police, and Director General of

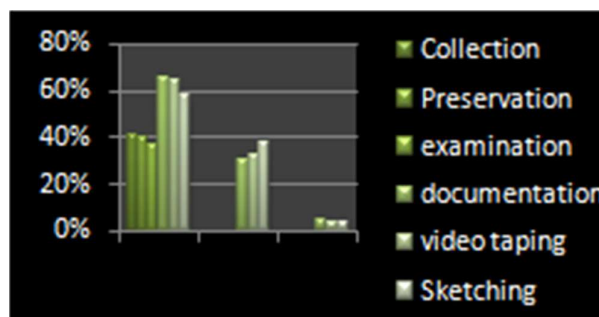


Fig. 1: Technical Investigation Knowledge

majority of survey participants stated they had little experience in the collection and examination of evidence [41%, 36%], and 40% of police officers reported that they had no idea how to preserve

Table 2. Forensic knowledge of Police officers in investigation

Designation	Average level of knowledge
Director General of Police	20%
Inspector General of Police	20%
Deputy Inspector General of police	20%
Superintendent of police	15%
Inspector	10%
Sub inspector	5%
Head Constable	5%
Constable	5%
Total -100%	

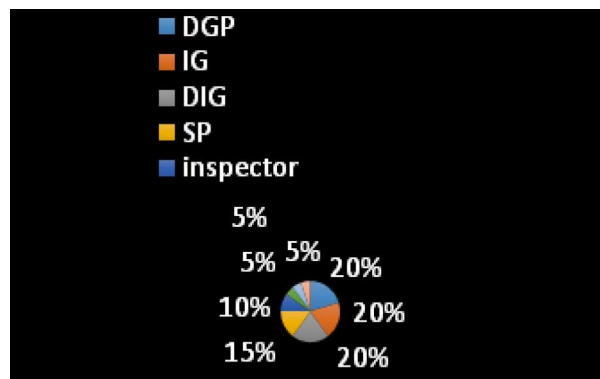


Fig. 2: Forensic Knowledge of Investigators

evidence at a crime scene. The technical proficiency at photographing the crime scene, recording it on video, and sketching it was found to be 65%, 64%, and 58%, respectively.

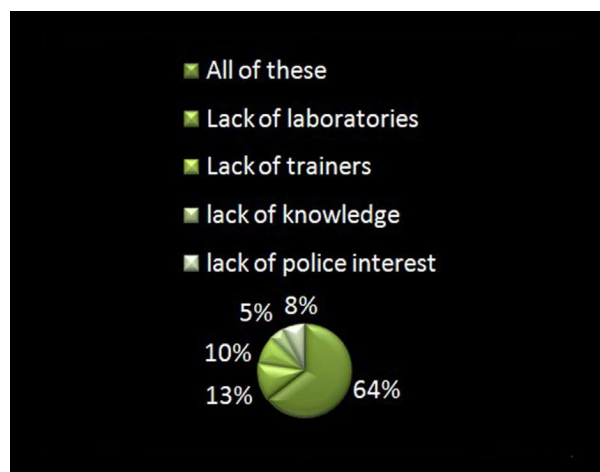


Fig. 3: The reasons why the police officers is not adequately developed in forensic science

The forensic knowledge of the police officers differs according to their rank and years of experience. From the table, it is clear that the utilization of forensic services in the field of criminal investigation was not well known among police personnel. It is obvious that officers working at higher hierarchy levels, such as the Director General of Police, Inspector General of Police, Deputy Inspector General of Police, Superintendent of Police, and Inspectors, have greater access to forensic science than first responders, such as Constables, Head Constables, and Sub Inspectors.

The factors behind the police is not aware about the development in forensic science such as lack of laboratories [13%], lack of trainers [10%], lack of police interest [8%], lack of knowledge [5%] and all of the above factors [64%].

CONCLUSION

A Survey of 100 police officers was done to determine the views and needs of the forensic services. The vast majority of police officials were not aware of the forensic services that have been utilized in criminal investigations. It was clear that first responders like Constables and Sub-Inspectors have only a basic knowledge of forensic science in comparison with officers working at higher levels of the Police hierarchy, such as the Director General of Police, Inspector General of Police, Deputy Inspector General of Police, Superintendent of Police, and Inspectors. Their level of knowledge depends upon the grade and year of experience. The majority of police officers had a moderate level of knowledge and expertise when related to searching for evidence at crime scenes. There was a strong correlation between knowledge and years of investigation experience as well as training in crime scene inspection. The top three knowledge areas of the investigating officers were criminal evidence and crime scene investigation, while their proficiency in forensic science was below average.

The survey's findings indicated that police officers have inadequate training in evidence examination and crime scene preservation. They had advanced technical skills for photographing, videotaping, and sketching the crime scene. One of the main causes is that Kerala has a severe lack of forensic laboratories. In addition, governmental agencies like NADRA, KMC, etc. do not cooperate with the police department. The police investigation

officers also lacked professional attitudes and inadequate training, which ultimately affected how successfully they performed their duties as investigators.

REFERENCES

1. Ali, M., & Akter, S. (2014). Forensic Use of Scientific and Physical Evidence Bangladesh Uttara University Law Journal, 1(1).
2. Supalaknari S, Laoaru nW, Wainip Hithapong C. Knowledge in Seeking Crime Science Evidence of the Inquiry Officers, International Journal of Crime Law and Social Issues. 2021 Jul 1; 8(2).
3. Shanmuga Sundaram G, et al. International Research Journal of Science and Technology, 1(2) (2020), 155-161.
4. Shah SA, Hussain B. Challenges Faced by Police Officers in Forensic Criminal Investigation in Peshawar, Pakistan. Pakistan Journal of Criminology. 2021 Oct 1; 13(4).
5. Uamfung, W. (2013). Knowledge and opinions of Inquiry Officer about Collects Forensic Evidence in Metropolitan Police Division 7 (5) Mater of Forensic Science Silpakorn University.
6. Hintao, K., & Supalaknari, S. (2018). On Professionalism: Investigators and Evidence-Seeking Methods. Silpakorn University Journal, 38(6), 111-135.
7. Baskin D, Sommers I. The influence of forensic evidence on the case outcomes of homicide incidents. Journal of Criminal Justice. 2010 Nov 1; 38(6):1141-9.
8. Tengpongsthor, W. (2017). Factors affecting the effectiveness of police performance in Metropolitan Police Bureau. Kasetsart Journal of Social Sciences, 38(1), 39-44.
9. White JH, Lester D, Gentile M, Rosenbleeth J. The utilization of forensic science and criminal profiling for capturing serial killers. Forensic Science International. 2011 Jun 15; 209(1-3):160-5.
10. Lambert EG, Hogan NL, Nerbonne T, Barton SM, Watson PL, Buss J, Lambert J. Differences in forensic science views and needs of law enforcement: a survey of Michigan law enforcement agencies. Police practice and Research. 2007 Dec 1; 8(5):415-30.
11. Grover, N., & Tyagi, I. (2014). Development of Forensic Science and Criminal Prosecution India. International Journal of Scientific and Research Publications, 4(12).
12. Sopaboon C, Pinkham S, Witchuvanit W. The Study of Evidence Collection Process for Physical Injury Case of Inquiry Officer in Metropolitan Police Division 1. Journal of Criminology and Forensic Science. 2020; 6(2):89-103.
13. Gianmnnelli PC. Crime labs need improvement. Issues in Science and Technology. 2003 Oct 1; 20(1):55-8.
14. Connor JM. Forensic economics: An introduction with special emphasis on price fixing. joclec. 2008 Mar 1; 4(1):31-59.
15. Coetzee T. The evidential value of crime scene investigation in child rape cases (Doctoral dissertation).
16. Tulu AS. Evaluating the application of human rights principles in crime investigation in Ethiopia: a case study of the Addis Ababba city police (Doctoral dissertation).
17. Miller AR. Destruction of forensic evidence caused by blue-on-blue shootings (Doctoral dissertation).
18. Stewart NP. A criminological study of retail robbery (Doctoral dissertation, University of Pretoria).
19. Womack CL. Criminal investigations: The impact of patrol officers on solving crime. University of North Texas; 2007.
20. Platt R. Crime scene: The ultimate guide to forensic science. Dorling Kindersley; 2003 Jun.

