Editorial

Evaluation of forensic personnel as a resilient future for forensic science laboratories

Reeta Rani Gupta[1]*

[1]Central Forensic Science Laboratory, DFSS MHA, New Delhi, India.

For reprints contact: reprint@ipinnovative.com

The forensic science provides excellent opportunities for the students with backgrounds in physics, chemistry, and biology, allowing application of their skills and critical thinking in analysis of criminal cases. In this field, uncertainty is often arising due to the random occurrence of crimes and the fast-evolving nature of criminal behaviour in our society. The evaluation and continuous development of the forensic personnel is very crucial for Central and State Forensic Science Laboratories. It is the urgent requirement of the present time to enhance capacity-building through relevant and regular training and ensure adoption of modern technologies like Artificial Intelligence (AI) and Digital Forensics.

Forensic Scientist acquired experience by day-to-day forensic work by continuous learning process, itself with various multifaceted analytical works and discovering new areas of technologies. Legal understanding is also developed time to time working with criminal cases and representation before court of law. These experiences and insights also affect the performance of forensic experts and make them more confident in their broader understanding the role of forensics with societal aspects of law, crime and punishment. The forensic scientist provides proof of evidence for particular criminal case through their scientific examination report with objective that helps to identify and taking judicious decisions by the court in any criminal incident.

Keeping in views of the present challenges and emerging threats, building a resilient future requires not only strengthening the forensic personnel but also acknowledging new crime trends and their impact. A resilient forensic system must adapt to the challenges like cybercrime and deep fakes. The role of our forensic experts in producing accurate and reliable reports across diverse domains will remain indispensable. Strengthening our personnel through advanced training and integration of technological innovations will significantly improve the justice delivery system and also reduce risks of human error during analysis. Therefore, the evaluation of forensic personnel is the foundation for resilience in laboratories and is the need of an hour to equip experts with advanced skills to meet the complex demands of modern criminal justiec.

Technically skilled personnel with updated innovative technological expertise, analytical ability, and a strong understanding of scientific principles are essentially required for handling the complex forensic examinations. At the same time, the forensic scientists must uphold their operational integrity to deliver credible testimony within the criminal justice system. The Forensic Science covers a broader, more panoramic approach to solve criminal cases and its impact on society, corrections, and prevention with coordination of criminal justice system to tackles crimes and examines them on a microscopic level in delivering justice. There is no possibility to present proof of evidence in criminal justice system in absence forensic reports with scientific interpretation.

*Corresponding author: Reeta Rani Gupta
Email: reetacbi@gmail.com

Resilience future requires addressing not only present challenges but also a multifaceted approach that includes forensic personnel in solving various criminal cases. The resilient future for forensic science involves for acceptance of new challenges and digitalization of crime including deep fake analysis and artificial intelligence technology. Use of Artificial Intelligence is increased in all area science and technology which also revolutionized technological role in forensic science. With the predictive power and integration of AI, the research and development work in the field of forensic science is now possible to be completed more precisely in a timely manner. AI-driven tools are used in automating data analysis and extracting processes. These tools also help in enhance the accuracy in examination of video and image analysis.

The role Forensic Experts to produce forensic reports in various areas of Forensic Science will always remain valuable. Strengthening forensic scientists in terms of training, knowledge, and facilities as well as updated with technological innovation will definitely strengthen the justice delivery system for ordinary citizens. Eventually all this effort reduced the human error in the analysis and interpretation of evidence also remains a risk, especially under pressure to produce results, which can enhance the accuracy of forensic analysis result which address in a scientific manner. All the Central and State forensic Science Laboratories essentially needs skilled personnel with updated technical expertise, analytical skill, knowledge, unique understanding of scientific principles and ability to tackle the analytical work of forensic examination. Forensic scientists are also required to maintain operational integrity in order to deliver court testimony within the criminal justice system.

Conflict of Interest

None.