**The Role and Importance of Forensic Medicine**

**Introduction**

It is now more than 1,000 years since the first ever evidence in a law case was presented in the form of medical testimony by the father of forensic medicine Forunatus Fidelis in 1598 (Advancing The Practice Of Forensic Science In The Us – Updates, 2017). However, the field of forensic medicine would be recognized as an area of speciality in the early years of the 19th century. Forensic medicine, therefore, refers to all means through which samples are collected, stored and analysed scientifically to provide evidence. A forensic medicine expert is a professional in all fields which reflects their importance to the society. Forensic medicine is arguably the most significant intervention strategy in history as far as combating crime is concerned.

**Role and Importance of Forensic medicine in Crime Investigation**

In a court process where a criminal case is involved, the state always has the most prominent burden to prosecute a person for the offence in question (Ribaux, Crispino, Delémont, & Roux, 2016). This is amidst the fact the law assumes that one is innocent until they are proven guilty. The two are contradicting demands that making the course of justice quite a difficult one. As a result, the state, therefore, must ensure that the person they produce for prosecution in the court is guilty and it can prove that beyond any reasonable doubt. On the other hand, the defendant has the right to defend themselves against the charges and get relieved off legal accusations and go back to enjoying their lives again (Kempirova, 2016). As such, the more significant burden is always with the prosecutor, the state. To win the case and have the suspect convicted in a court, the state has to conduct a thorough investigation to provide concrete evidence before the court lest criminals will walk scot free. Traditionally, the prosecutor used non-scientific methods to do the studies and mostly, the most crucial elements were left unaddressed, and the criminals would win.

However, with the incoming of technology, the prosecutors have found a solution. One of the most reliable methods of collecting evidence is forensic medicine. In the US for instance, forensic medicine had served the justice system since 1967 when the publication of police and science technology took place (Kempirova, 2016). This has seen an increased use of physical clues retrieved from crime scenes in a manner that never existed before. Thee forensic laboratories have grown at similar margins as the crime rate has increased.

There are various methods through which use of forensic medicine can retrieve the evidence. For instance, the commonly used form of forensic medicine is the DNA testing (Baechler, & Margot, 2016). DNA testing is used mostly in cases involving disputes of parenthood. Mostly, men try to flee their pregnant female partners, and the ladies would seek court redress over the matter. The court cannot just go straight and make a judgment to hold a man brought before the court by the police responsible for a family that it is not sure it is his. As a result, the matter is usually referred to the forensic laboratories where sample of either blood, saliva or hair pieces of the baby and the alleged father are collected for further studies to establish any traits of similarity between the DNA of the two (Forensic Locksmithing: A Key To Solving Crime., 2013).  If the DNA test turns out positive, the man is arraigned in court and charged with family negligence. The DNA testing results are undisputable since they are the most trusted source, the health facilities through the forensic medicine processes. Picture 2 is a representation of DNA test results in a paternity case.

Secondly, forensic medicine has found its use in the identification of dead bodies, especially from accidents.  The remnants of victims from a greasy road accident or fire outbreaks are not easy to identify through facial or any other physical observation (Forensic Locksmithing: A Key to Solving Crime., 2013). To avoid the eventuality that the people coming to claim the bodies of the victims end up with the wrong persons, forensic medicine experts have to be called upon and carry out DNA tests. Picture 1 in the appendices shows a forensic expert carrying out body identification from a mass grave. A close family member of the victim will have their sample collected in the form of either saliva, blood samples of even sweat and the same are obtained from the body. A DNA test is run to establish the similarity in the genotype of the two persons (Edmond, & Vuille, 2014). That way, the bodies are rightfully identified to avoid the legal complications that may set in should it happen bodies are wrongly claimed. This is the system that was used to determine the bodies of the 9/11 bomb attack in Washington DC.

Further, forensic medicine is used to determine the cause of death of a person (Gabel, 2014). This is especially so if the circumstances surrounding the end of the person are not precise. In such cases, the family members in collaboration with the police department have to establish what killed their person. In other instances, the police might be aware that a weapon hit a person, hence they need for further details to confirm the nature of the weapon used. At other times, a gun might have been used to kill a person. However, for police need further details like the range between the victim and the killer, the angle the bullet penetrated the body from or the kind of gun used (Gabel, 2014). The demand for such leading factors calls for an autopsy of the dead body by the forensic medicine experts. From their analysis, they can find evidence such as a bullet lodged in the flesh or from the nature of a wound, they can tell the weapon used judging by the extent of the damage. There may as well be interest by the government to establish the real reasons that are naturally claiming the lives of people hence the essence of carrying out forensic medical operations on the dead bodies.

Finally, with so much fraud in the insurance sector, the insurance companies have had to invent alternative means to stop the chance a beneficiary will claim benefit for a loss that was not caused by the insured risk (Edmond, & Vuille, 2014). DNA testing can be used to ascertain the relationship between the insured and a beneficiary. Further, in the event that the recipient dies, the forensic medicine experts can be called upon to determine the cause of death for an insurance provider to decide whether or not it matches the insured factor. Further, for people who intentionally cause damage to their property to claim for compensation from the insurer can be detected through the use of forensic medicine (Advancing the Practice of Forensic Science in the US – Updates, 2017).

The field has further witnessed an addition of two other sectors; forensic psychiatry and forensic toxicology. Forensic psychiatry deals with the determination of mental health cases for individuals who are to stand trials while forensic toxicology is used to determine intentional poisoning or regular drug abuse. Forensic medicine has also found its application in the field of industrial and environmental positioning.

**Conclusion**

Though not praised as much, I find the importance of the medicine forensic far more reaching than some of the highly ranked professions. Forensic medicine is arguably the most significant intervention strategy in history as far as combating crime is concerned. In my view, hat the best way to address the increasing crime rate is to have more medicine forensic experts to balance the deficit ratio. This is because the police need leverage concerning technological support which creates a place for forensic expertise. That would be a further channel through which justice can be served in our court system to enhance peace and equity as the broader goal.

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